

## Checklist of Austrian neophytes (2nd edition)

Michael Glaser<sup>1,†</sup>, Christian Gilli<sup>2,†</sup>, Norbert Griebl<sup>3</sup>, Michael Hohla<sup>4</sup>, Georg Pflugbeil<sup>5</sup>, Oliver Stöhr<sup>6</sup>, Peter Pilsl<sup>7</sup>, Luise Ehrendorfer-Schratt<sup>8</sup>, Harald Niklfeld<sup>8,†</sup>, Johannes Walter<sup>9</sup>, Konrad Pagitz<sup>10</sup> & Franz Essl<sup>1,\*</sup>

<sup>1</sup>Division of BioInvasions, Global Change & Macroecology, Department of Botany and Biodiversity Research, University of Vienna, Rennweg 14, A-1030 Vienna, Austria; <sup>2</sup>Gaindorf 51, A-3720 Ravelsbach, Austria; <sup>3</sup>Florian-Wippel-Straße 58, A-8510 Stainz, Austria; <sup>4</sup>Therese-Riggle-Straße 16, A-4982 Obernberg am Inn, Austria; <sup>5</sup>Haus der Natur, Museumsplatz 5, A-5020 Salzburg, Austria; <sup>6</sup>Alt-Debant 3c/22, A-9990 Nußdorf-Debant, Austria; <sup>7</sup>Wasserfeldstraße 7, A-5020 Salzburg, Austria; <sup>8</sup>Department of Botany and Biodiversity Research, University of Vienna, Rennweg 14, A-1030 Vienna, Austria; <sup>9</sup>Division of Botany, Natural History Museum Vienna, Burgring 7, A-1010 Vienna, Austria; <sup>10</sup>Department of Botany, University of Innsbruck, Sternwartestraße 15, A-6020 Innsbruck, Austria

\*corresponding author: franz.essl@univie.ac.at

<sup>†</sup>these authors contributed equally to this publication

<sup>†</sup>We dedicate this publication to Harald Niklfeld who passed away during its drafting.

**Abstract:** Twenty-two years after publishing the first edition of the checklist of alien vascular plants introduced to Austria after 1492 (i.e. neophytes), we present a completely revised second edition. For the update presented here, we collected, compiled and standardized data on all known neophytes in Austria with data collection ending September 2022. In addition, we provide information on the regional distribution in the federal states, invasion status, habitat affiliation, the first records, the regions of origin, pathways of introduction and spread, and impacts. The second edition of the Austrian neophyte checklist contains 1,615 taxa – 1,388 species, 7 aggregates, 138 hybrids, 70 subspecies, and 12 lower infraspecific taxa distributed across 135 families. Of these taxa, 548 were newly added in the second edition, which constitutes an increase of 45% of recorded neophyte plant taxa compared to the first edition. A total of 99 taxa included in the first edition of the checklist of neophytes were removed in the edition presented here due to erroneous or doubtful records, or due to being considered native or archaeophytic. The majority of neophytes (1,180) have only casual occurrences in Austria, while 207 taxa are locally established and 226 taxa have become widely established. The habitats showing the highest numbers of neophytes were ruderal (1,420 taxa) and segetal habitats (204 taxa). The most important donor regions for neophytes in Austria are temperate Asia (761 species), followed by Europe (607), North America (389), and Africa (311). While 118 neophytes were known by 1850 in Austria, this number increased to 265 in 1900, 514 in 1950, 1,084 in 2000, and currently 1,615 taxa. Reports of newly introduced taxa show a particularly pronounced increase since the mid-20th century, as 1,056 (65%) were first found after 1950, and 496 (31%) were first recorded after 2000. The most important introduction pathways into Austria are known for 1,016 taxa, with escape (912) and stowaway (118 taxa) being by far the most common pathways. In total, 73 taxa were assessed to have negative impacts in Austria. Specifically, 48 have negative impacts on biodiversity, 26 on agriculture, nine on silviculture, six on human health, three on water management and one taxon negatively impacts animal health. To conclude, the

revised inventory of neophytes in Austria documents the extraordinary dynamics of neophyte accumulation and spread in a botanically well-explored country and provides a wealth of data for research and environmental management.

**Keywords:** alien species, biological invasions, distribution, first records, habitats, impacts, inventory, pathways

## Introduction

The global exchange of alien species (*sensu* Blackburn et al. 2011) is increasing rapidly (Seebens et al. 2017), and their accumulation in regional species pools shows no signs of saturation (Seebens et al. 2021). The rapid pace of alien species accumulation is driven by interacting drivers such as increased mobility of people and goods, causing more frequent introductions and higher propagule pressure (Simberloff 2009), climate change (Walther et al. 2009), and increasing environmental degradation (Hulme 2021). Thus, biological invasions have become an essential component of global change, and have been recognized as an important cause of biodiversity change (Vitousek et al. 1997, Pyšek et al. 2020, IPBES 2023).

The spread of alien vascular plants has received substantial attention during the last decades. Accordingly, since the beginning of the 21st century, the availability of regional checklists of alien species has greatly increased (Pyšek et al. 2012). While initially such checklists were often difficult to compare due to different standards of recording (Pyšek 2003), most recent studies use harmonized approaches that facilitate comparative analyses. Further, regional alien plant species checklists were integrated into alien species inventories of large regions such as continents (e.g. DAISIE 2009) and, subsequently, global alien plant species inventories such as GloNAF (van Kleunen et al. 2015). Regional checklists of alien plant species are a valuable resource for studying invasion dynamics (Peruzzi 2018) and for a wide audience of stakeholders (e.g. conservation managers and policy makers).

For Austria, the first checklist of neophytes was published more than 20 years ago (Walter et al. 2002). As biological invasions are highly dynamic, it can be expected that since then many new additions to the alien flora have been documented, and that neophytes that were already present at the turn of the millennium have become more widespread thereafter. Thus, incorporating published and unpublished data from a wide range of sources, we compiled the second, fully revised and expanded Austrian neophyte checklist. Specifically, we provide (i) updated distribution information of all neophytes in Austria (recorded until summer 2022) and its nine federal states, (ii) a classification of invasion status, introduction pathways, and habitat affiliation, (iii) information on the timing of the first records in Austria, (iv) information on species native ranges, (v) an assessment of impacts caused, and (vi) further information and references. In this publication, we present this data and discuss changes in the neophyte flora of Austria between the first and second editions of the neophyte checklist of Austria.

## Materials and methods

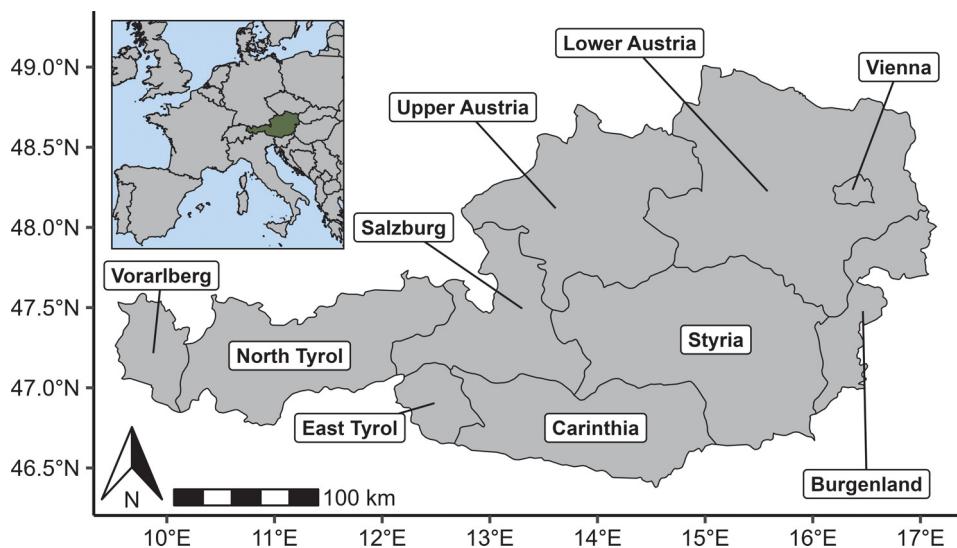
### *Study region*

Austria is a landlocked country in central Europe with an area of 83,858 km<sup>2</sup>. Around two thirds are occupied by mountainous regions of the Alps and the Bohemian Massif in the north with the highest peak being Mount Großglockner (3,798 m a.s.l.). The population of around nine million people is concentrated in the lowlands (particularly in the north, east, and south-east), and in the major valleys of the Austrian Alps (Statistik Austria 2023). The climate is temperate and humid with warm summers and cold winters at low elevations, and increasingly harsher climatic conditions at higher altitudes. Due to climate warming, the mean temperatures have risen already by ~2.0 °C between the 1980s and recent years (Geosphere Austria 2025). The landscape at low to medium altitudes is shaped by a long tradition of human land use, and most transport infrastructure and built-up areas are located there. Administratively, Austria is divided into nine federal states. For the purpose of this study, the federal state of Tyrol, which consists of two distinct regions, was split into North and East Tyrol due to ecological and floristic differences (Fig. 1); for simplicity, we refer to these 10 regions as federal states. Due to its central location in Europe and being part of the European Union since 1995, many major routes of transport cross Austria, facilitating the introduction and spread of alien species (Pyšek et al. 2010).

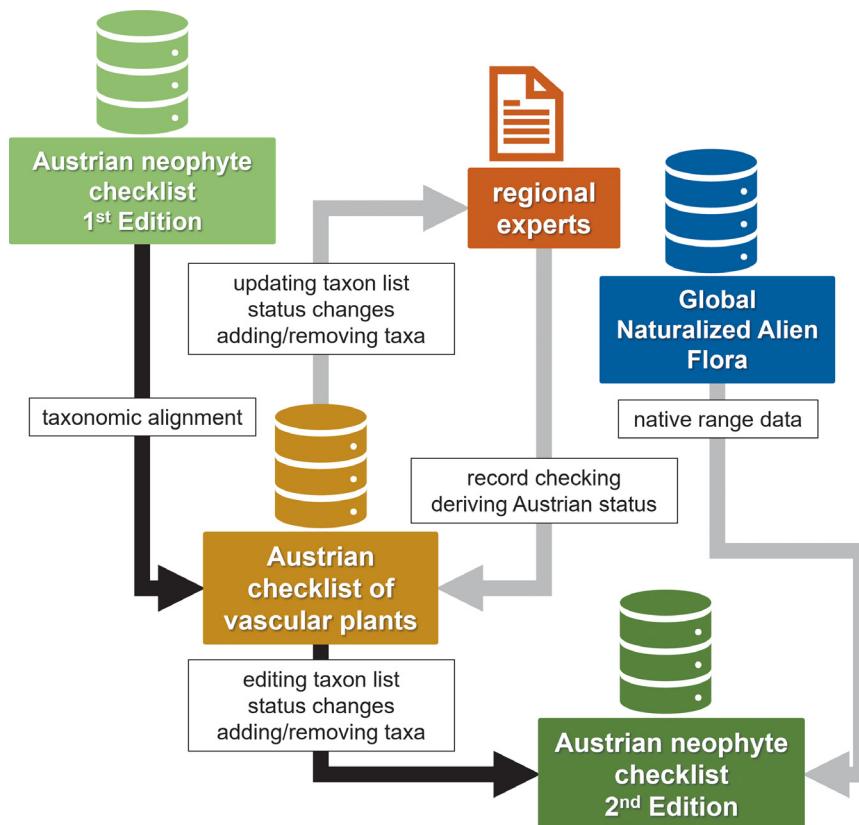
### *Data compilation of neophyte vascular plants (Fig. 2)*

The first edition of the Austrian neophyte checklist (Walter et al. 2002) provided a synthesis of the knowledge of the neophyte flora at the turn of the millennium based on a wide variety of highly dispersed data sources (e.g. floristic publications, local floras, data from the floristic mapping of Austria or unpublished records by experts). For this checklist, only neophytes (i.e. alien vascular plants that were introduced after 1492; Pyšek et al. 2004) were considered, and this criterion was also used for the second edition presented here (see below on how taxa with unclear status were treated). Taxa had to be recorded at least once in the wild – hybrids with at least one neophyte parent species are included in the checklist. Species and subspecies (including neophyte subspecies of native species) are included in the checklist, while lower infraspecific taxa (e.g. horticultural varieties) were excluded, with few exceptions.

After the publication of the first checklist, the underlying database had undergone moderate updates and corrections; it also served as the basis for compiling the second edition of the checklist, for which data compilation was finalized in summer 2022. In a first step, we cross-referenced the Austrian neophyte checklist with the Checklist of Austrian Vascular Plants (Gilli et al. 2019a), which represents the regularly updated consensus checklist of the entire Austrian flora; this national checklist considers both progress in taxonomy and nomenclature and in the national recording of native and alien taxa and their distributions. Thus, the second edition of the checklist presented here closely aligns with the taxonomic and nomenclatural concept used by the Austrian standard flora (Fischer et al. 2008), with some updates reflecting recent nomenclatural and taxonomic progress contained in the Checklist of Austrian Vascular Plants (Gilli et al. 2019a) and the Austrian Red List of Plants (Schratt-Ehrendorfer et al. 2022). Circumscription of families follows the APG IV classification (The Angiosperm Phylogeny Group 2016).



**Fig. 1.** Austria and its federal states. Note that North Tyrol and East Tyrol are treated separately in this study.



**Fig. 2.** The workflow for compiling the second edition of the checklist of neophytes for Austria.

Subsequently, we extracted all taxa in the Checklist of Austrian Vascular Plants that are given with a floristic status category which identified them as potential neophytes in Austria and classified them as follows (adopted from Richardson et al. 2000): (i) casual, i.e. taxa that do not form self-sustaining populations, (ii) locally established, i.e. taxa that form few self-sustaining populations restricted to a small area, and (iii) established, i.e. taxa that form self-sustaining populations and are widespread (Appendix 1). For the status per federal state, we expanded the status categories to include (iv) questionable, i.e. taxa with unclear status, (v) erroneous for taxa recorded in error, (vi) cultivated for taxa only known to occur in cultivation, and (vii) planted in the wild for taxa that were deliberately planted by humans and do not form self-sustaining or casual populations. The classification of taxa as either neophytes or archaeophytes comes with uncertainties in some cases. For example, some taxa cultivated before 1492 may have formed casual populations in the wild before 1492, which would qualify them as archaeophytes. However, reliable documentation from that time is prohibitively scarce. Due to the lack of definitive data, we have chosen to retain these taxa as questionable neophytes in the checklist.

Several taxa previously considered neophytes (Walter et al. 2002) were excluded from the second edition of the checklist (Appendix 2). The reasons for exclusion of a taxon fall into the following categories: (i) its correct identification is doubtful, (ii) its biogeographic status is insufficiently resolved and we consider it likely that it is in fact a native or an archaeophyte in Austria, (iii) it was likely planted in the wild.

Subsequently, we shared this preliminary version of the Austrian neophyte checklist with field botanists who actively collect information on plant distributions in Austria. Colleagues were invited to check and update distributions, floristic status, habitat affiliation and first records, as well as relevant references. Feedback was included in revising and updating the parent checklist. The floristic status was assessed for each Austrian federal state. The national floristic status was derived by assigning the highest floristic status category to the national level. For habitat affiliation, we asked regional experts to assess each taxon's habitat preference according to their knowledge; the following nine habitat types were used: (i) forests including forest plantations, (ii) scrub, (iii) tall forb stands, (iv) grasslands including semi-natural and anthropogenic grasslands, (v) aquatic habitats, (vi) wetlands such as bogs, fens and swamps, (vii) rocks and screes, (viii) ruderal habitats and (ix) vegetal habitats.

To give an overview of alien plants' impacts in Austria, we conducted an expert-based assessment of impacts; severity of impact was assessed in four categories: (i) large impact, (ii) impact, (iii) moderate impact, and (iv) uncertain impact when assessments diverged or impact was not sufficiently known. For this purpose, neophytes' impacts were assigned to three types: (i) environmental impact, (ii) economic impact (subdivided into impacts on agriculture, silviculture and water management), and (iii) health impacts, further divided into human and animal health impacts. Impacts were assessed based on expert knowledge and the available literature. Thus, the assessment given here cannot and is not intended to replace formal impact assessments such as EICAT (Blackburn et al. 2014), SEICAT (Bacher et al. 2018), or assessments carried out to identify species of European Union concern for the EU IAS Regulation (European Commission 2019).

### Compilation of first records

In the second edition of the Austrian neophyte checklist, we newly included the first records in Austria (Seebens et al. 2017). Data on first records were extracted from a wide range of primary sources, including publications, unpublished observations, herbaria, and data from the floristic mapping in Austria. Herbaria were only consulted to a limited extent. While the first records of alien taxa in a region are an amalgam of true spread and of recording history (Seebens et al. 2017), they provide valuable information on the temporal dynamics of biological invasions (e.g. Bucharova & van Kleunen 2009, Seebens et al. 2017, 2021). We note here that Austria has a comparative wealth of older records (e.g. Kramer 1756, Neilreich 1859). For possible archaeophytes and anecophytes with long cultivation histories that we retained in our checklist (see above for explanation), we do not provide the potentially misleading first record information.

### Native ranges

Native ranges were assigned to biogeographically defined continents using the TDWG (Taxonomic Databases Working Group) level 1 classification (Brummitt 2001). To assign native ranges, we used the native range data for the Austrian neophytes from the most comprehensive resource, the GloNAF-database (van Kleunen et al. 2019). First, the plant names were matched to the taxonomy used in GloNAF, which was at that time based on The Plant List (2013), using the R package ‘Taxonstand’ v. 2.2 (Cayuela et al. 2012) and manually checking the matches. GloNAF contains native range data from two sources, i.e. the World Checklist of Selected Plant Families (now superceded by Plants of the World Online; <https://powo.science.kew.org>) and the Germplasm Resources Information Network (<https://www.ars-grin.gov>); here, we accepted native range information as provided by both sources. For anecophytes (sensu Scholz 2008), including hybrids created by humans, no native range was assigned. For hybrids involving neophytes that have emerged in the introduced range (e.g. *Reynoutria ×bohemica*, a hybrid of *R. japonica* and *R. sachalinensis*), we assigned no region.

### Pathways of introduction

The pathways of introduction to a region is a highly relevant characteristic for the study of biological invasions (Essl et al. 2015, Pergl et al. 2017); thus, we include this information, as far as it is known, in our checklist. Pathway definitions were based on the framework proposed by Hulme et al. (2008) and adopted by the IUCN (2018) and are defined as follows: (i) release, i.e. intentional introduction as a commodity, (ii) escape, i.e. intentional introduction as a commodity and unintentional escape, (iii) contaminant, i.e. unintentional introduction with a specific commodity (iv) stowaway, i.e. unintentional introduction with a transport vector and (iv) corridor, i.e. unintentional introduction via human infrastructures linking previously unconnected regions, (v) unaided, i.e. unintentional introduction through natural dispersal of alien species across political borders. We added two more pathways: (vi) hybrid in introduced range, as these taxa are dependent on the pathways of their neophyte parent species, and (vii) unknown, where no other pathway could be identified. This makes it possible for stakeholders (e.g. policy makers) to adopt measures for avoiding introductions (e.g. biosecurity measures, early detection and

rapid response) tailored to introduction pathways, which are, in many cases, also the pathways of spread through Austria. We note that, especially for plants, the differentiation between pathways – particularly escape from release and stowaway from contaminant – is not always clear.

## Results

### *Species numbers and distribution in Austria*

In total, the second edition of the Austrian neophyte checklist contains 1,615 taxa (1,388 species, 7 aggregates, 138 hybrids, 70 subspecies, 12 lower infraspecific taxa; Appendix 1, Supplementary Table S1). Of these, 549 taxa (34%) are new additions compared to the first checklist (Walter et al. 2002); this is an increase of 45% of reported neophytes over 21 years between data collection periods.

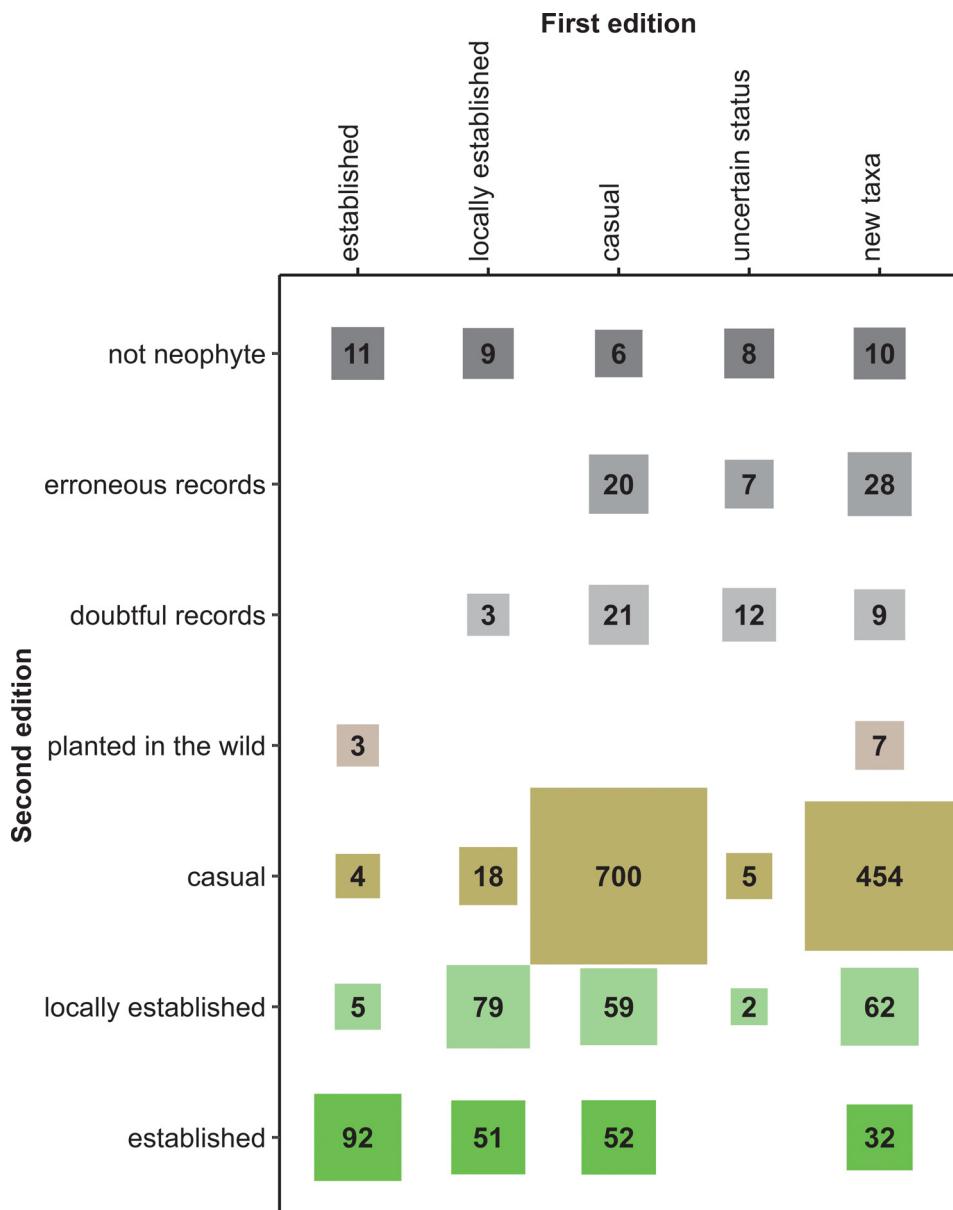
A total of 226 neophytes (14%) are established in Austria, 207 (13%) are locally established, and 1,180 taxa (73%) are casuals. For 196 taxa that were included in the first edition of the checklist, changes in their floristic status have been recorded (Fig. 3). The most common change (59 taxa) was from casual to locally established, followed by change from locally established to established (51 taxa, see Fig. 3). The 548 taxa that were newly added in the second edition of the checklist were most commonly casuals (454 taxa). A total of 99 taxa that were included in the first edition were removed in the second edition of the neophyte checklist (Appendix 2, Supplementary Table S2) due to species no longer being considered neophytes (34 taxa), doubtful records (36 taxa), erroneous records (27 taxa), or species being only planted in the wild (three taxa).

Austria currently has ~3,460 accepted vascular plant species and subspecies (Schratt-Ehrendorfer et al. 2022), excluding apomictic genera such as *Alchemilla*, *Hieracium*, *Pilosella*, *Rubus*, *Taraxacum* as well as the *Ranunculus auricomus*-group. Thus, the 1,458 neophyte species and subspecies make up 42% of Austrian species richness; if only the 412 established and locally established species and subspecies are considered, the increase in species richness is 12%. In total, neophytes have been reported from 135 plant families with an uneven distribution among them. The families with the most neophytes are *Asteraceae* (201 taxa), *Poaceae* (163 taxa), and *Rosaceae* (106 taxa; Fig. 4).

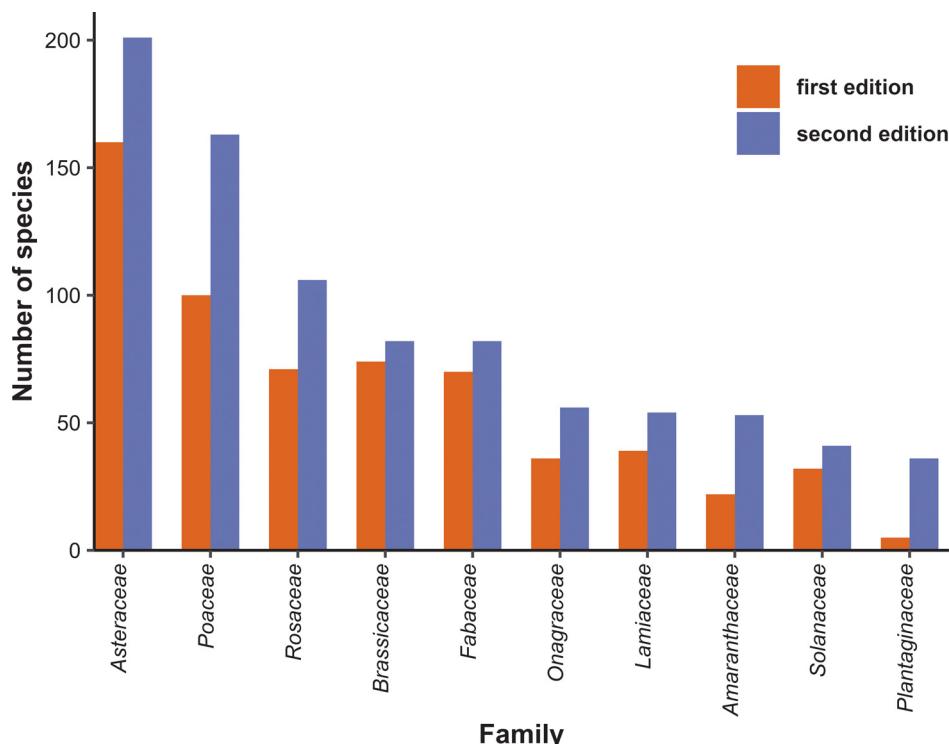
There are substantial differences in neophyte numbers among federal states (Fig. 5). The highest number was recorded in Upper Austria (840 taxa), followed by Lower Austria (839 taxa), Vienna (832 taxa), and Styria (754 taxa); the lowest numbers were recorded in Vorarlberg (434 taxa) and Burgenland (461 taxa).

### *Habitat affiliations*

Habitats in Austria are unevenly invaded by neophytes. The highest number of taxa by far is found in ruderal habitats (1420), followed by segetal habitats (204), and shrublands (189) (Fig. 6). In grasslands (107), tall forb stands (101) and forests (81), considerably fewer neophytes are recorded. The lowest numbers were documented in aquatic habitats (43), rocks & screes (47) and wetlands (49). Almost three quarters (72%) of taxa are affiliated with only one habitat, 333 (21%) show preferences for two habitats, 74 (5%) for three habitats, while 42 taxa (3%) are affiliated with four or more habitats.



**Fig. 3.** Overview of status changes between the first and second editions of the checklist of neophytes of Austria. Size of the squares corresponds to the amount of taxon status changes, with smaller squares increased in size for visibility. For details on the exclusion of taxa contained in the first edition and proposed for the second edition (i.e. the first four rows) see Table S2.



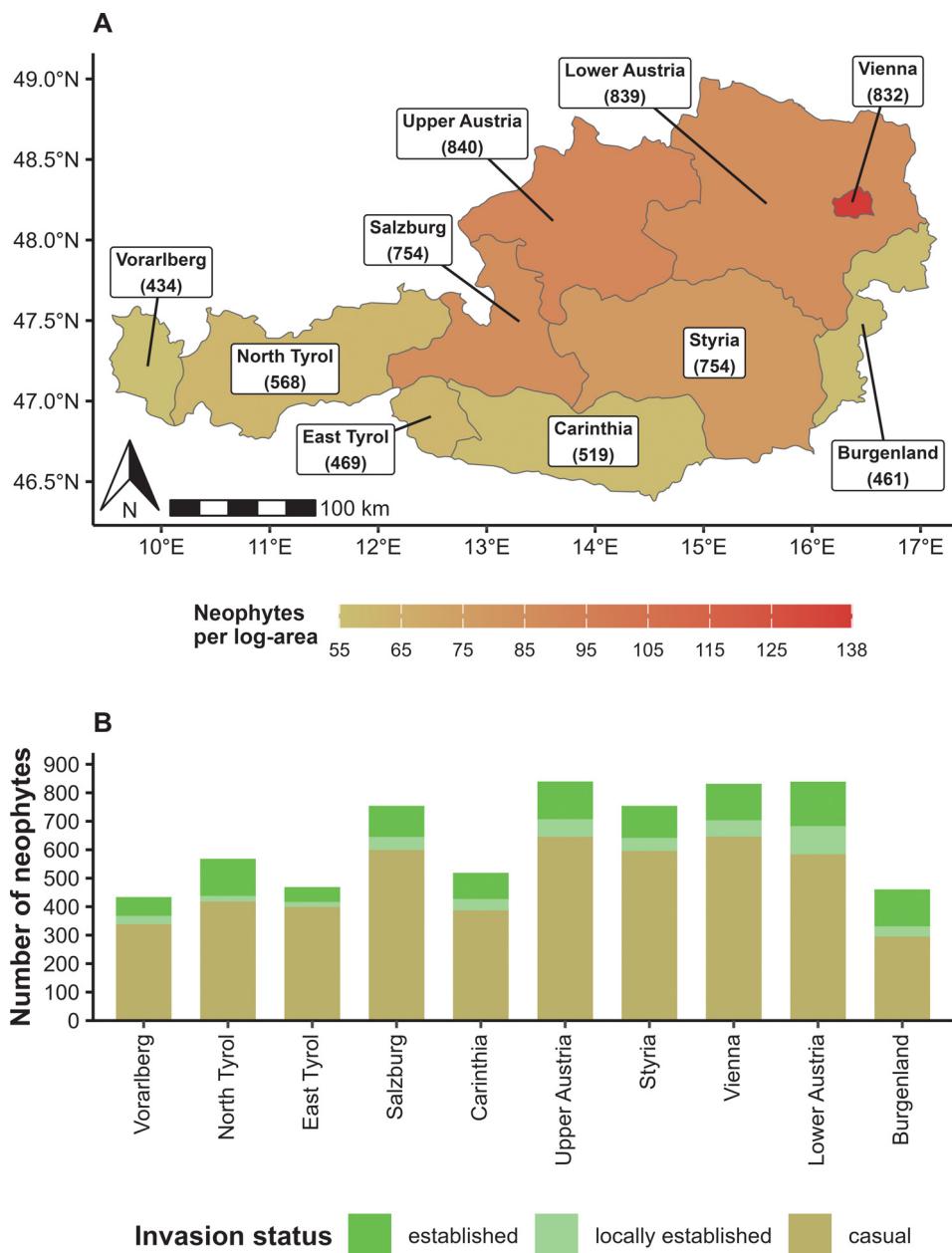
**Fig. 4.** The 10 most common families in the first edition (red) and second edition (blue) of the checklist of neophytes of Austria. We note that some changes may be due to different circumscription of families between the two editions (mainly concerning *Plantaginaceae*, *Scrophulariaceae* and *Amaranthaceae*).

### First records

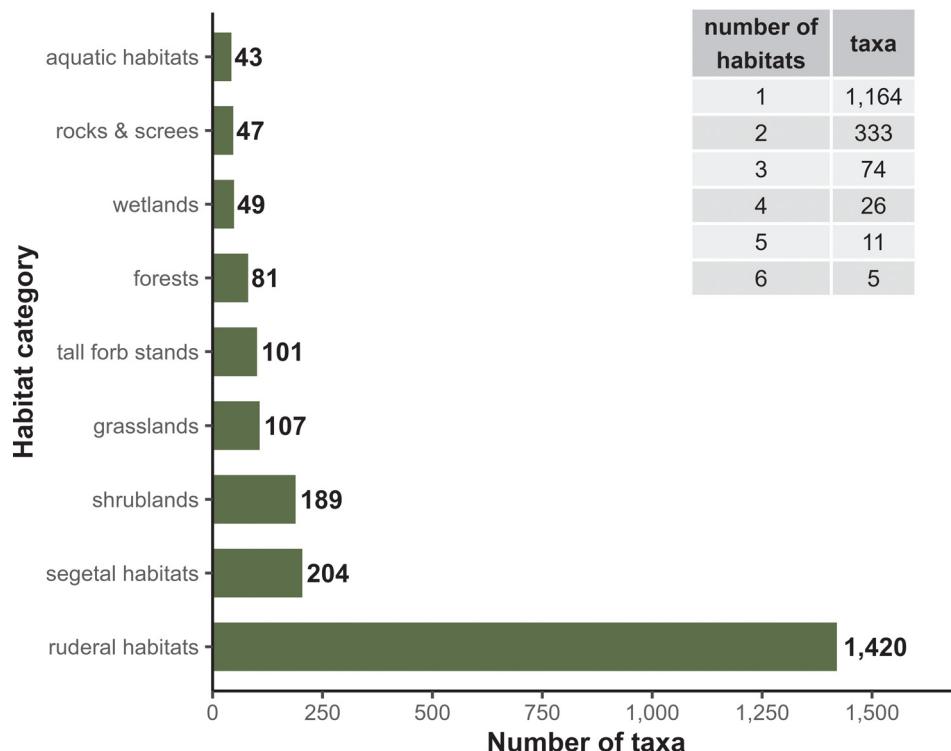
We compiled the first records for all neophytes included in this checklist, with the exception of potential archaeophytes and anecophytes (see Material and methods), resulting in 1,560 first records. For 955 taxa (61%), we identified the year of first record. For the remaining 605 (39%), we identified a time period of introduction and report the estimated earliest and latest year of the first record. Until 1800, the number of neophytes recorded in Austria was low, with a total of 33 recorded (Fig. 7, Appendix 1). Thereafter, the reported accumulation of neophytes gained momentum. While 118 neophytes were known by 1850, this number increased to 265 in 1900, 514 in 1950, 1,084 in 2000, and currently 1,615 taxa. Reports of newly introduced neophytes show a pronounced increase since the mid-20th century, as 1,048 taxa (67%) were first found after 1950, and 478 (31%) were first recorded after 2000.

### Regions of origin

The most important donor-continents (based on the TDWG-scheme, Brummitt 2001) of neophytes in Austria are temperate Asia (760 species), followed by Europe (606), North America (389) and Africa (310). Relatively few taxa are native to predominantly tropical



**Fig. 5.** The distribution of neophytes and their invasion status in the federal states of Austria. (A) Austria and its nine federal states (Tyrol was split into two separate regions, see text), numbers in brackets give the number of alien vascular plants per federal state, different colors correspond to log-relative numbers of neophytes (i.e. number of neophytes divide by log-area). (B) Overview on the invasion status of neophytes among the federal states of Austria.



**Fig. 6.** Habitat affiliation of neophytes in Austria ( $n = 1,613$ ). The insert table shows the number of habitats species are affiliated to. Note that a taxon may be affiliated with more than one habitat.

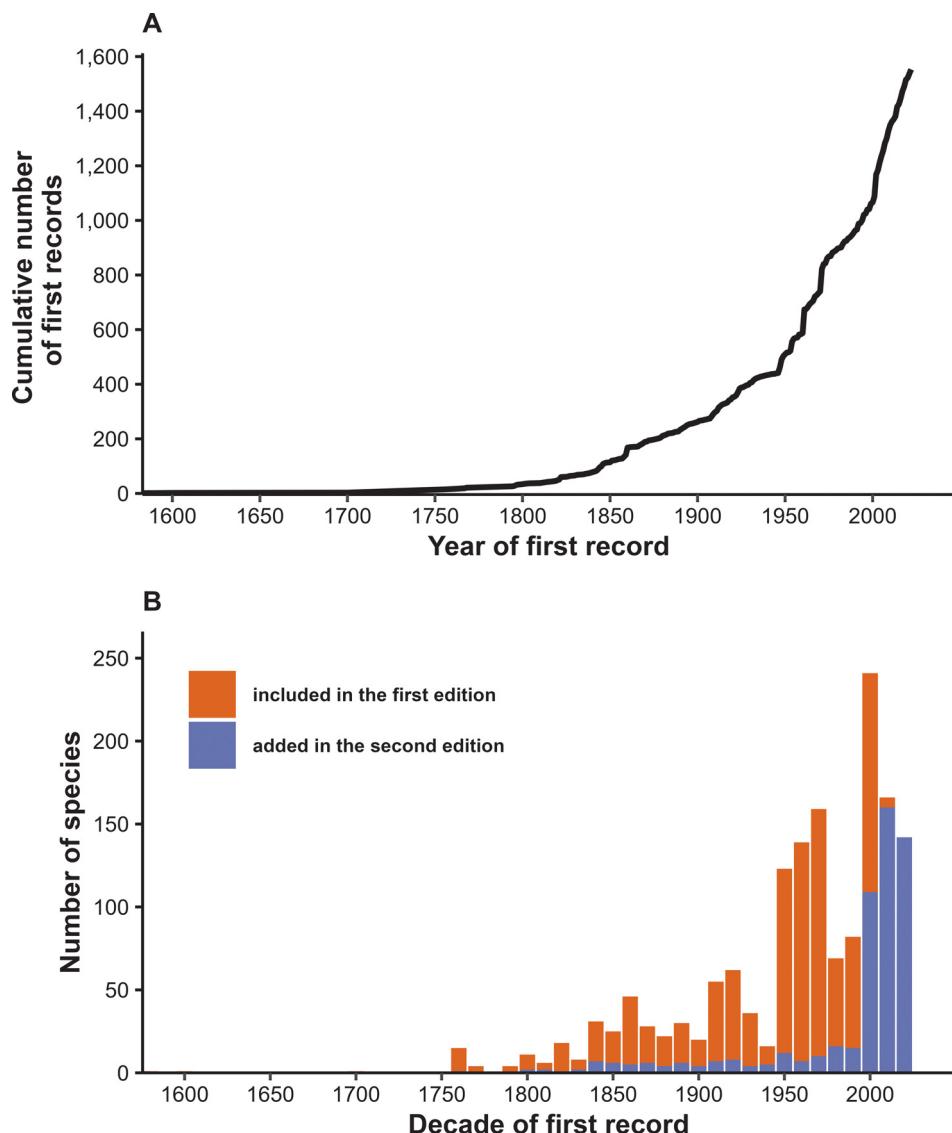
regions such as tropical Asia (214), South America (159), Australasia (24) and the Pacific Islands (8). No Austrian neophyte is native to the Antarctic region (Fig. 8).

### Pathways

We identified introduction pathways into Austria for 1,016 taxa (63%), with escape and stowaway being by far the most common pathways (912 and 118 taxa respectively) making up for an overwhelming majority (95%) of identified pathways (Fig. 9). Release (48 taxa) was far less common, as were dispersal via corridors (48 taxa) and as contaminants (33 taxa). Lastly, seven taxa are hybrids with one or more neophyte parents in their introduced range. Nine taxa (*Acer negundo*, *A. saccharinum*, *Ailanthus altissima*, *Chenopodium quinoa*, *Forsythia ×intermedia*, *Ipomoea purpurea*, *Physalis philadelphica*, *Reynoutria ×bohemica*, *Robinia pseudoacacia*) had a maximum of three introduction pathways.

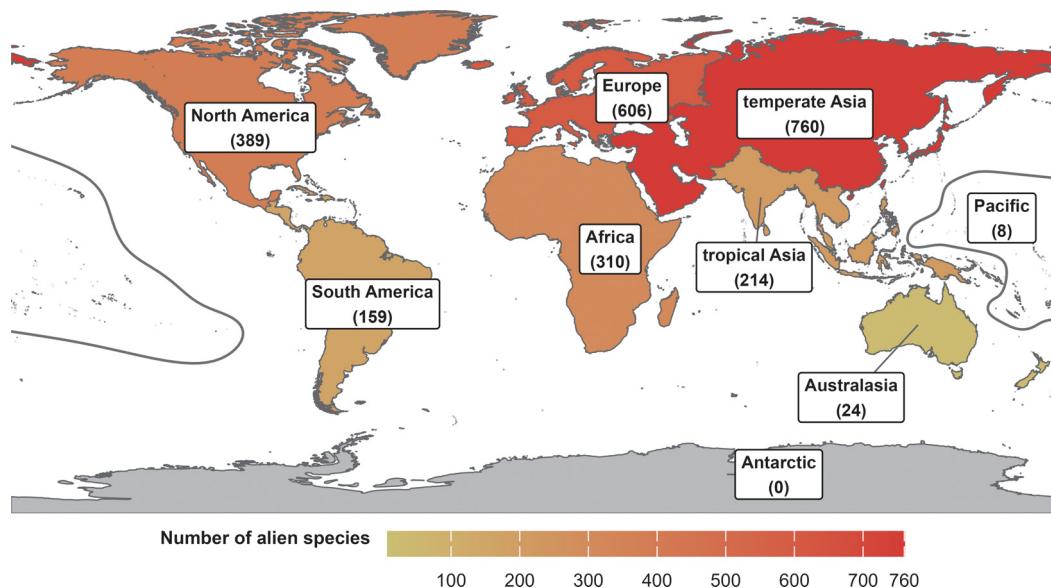
### Impacts

In total, 73 taxa that have negative impacts in Austria were identified (Fig. 10). Specifically, 48 have negative impacts on biodiversity, 26 on agriculture, nine on silviculture, six on human health, three on water management and one taxon negatively impacts animal

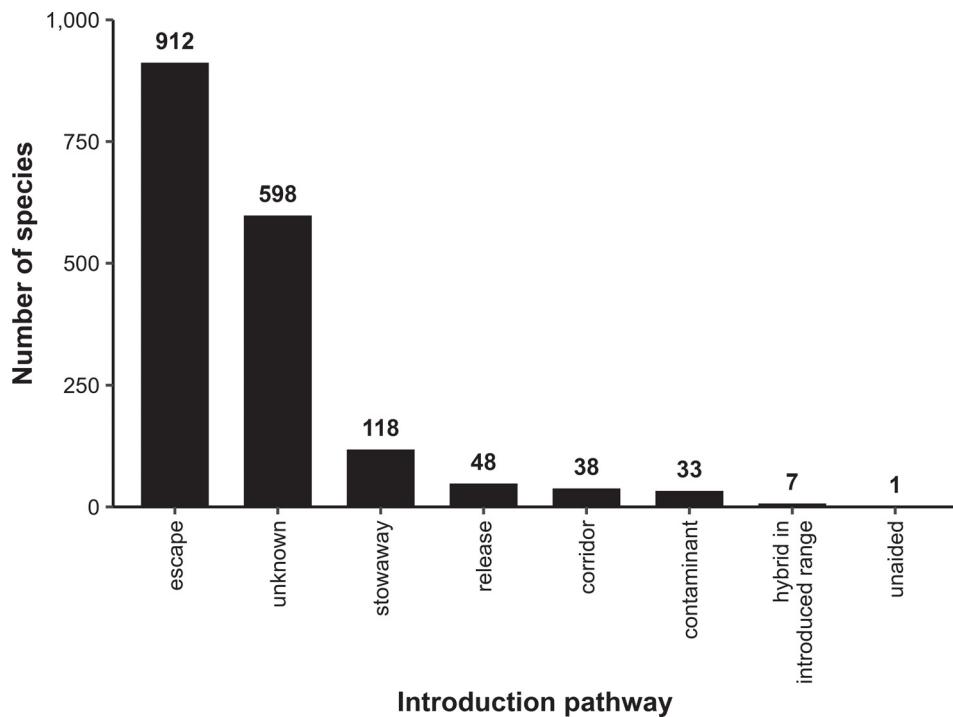


**Fig. 7.** The accumulation of neophytes based on their first records in Austria. Shown are (A) the cumulative number of first records and (B) the first records per decade, with different colors indicating taxa already included in the first edition and species added in the second edition.

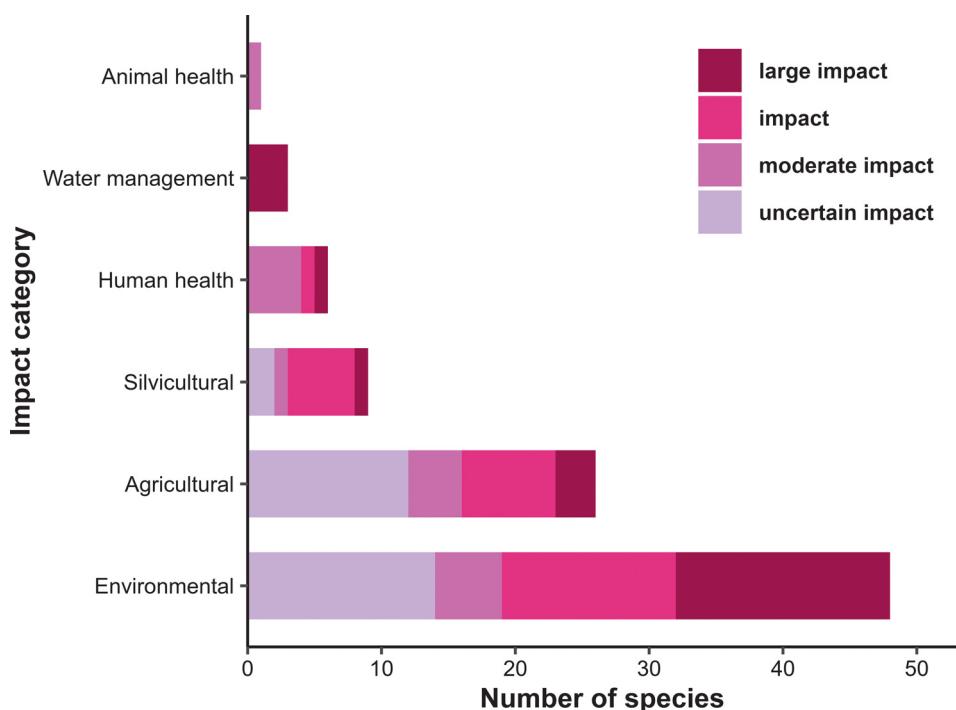
health. Fourteen taxa have negative impacts on at least two of the aforementioned categories (Fig. 10). In 28 cases, impacts were identified as uncertain due to a lack of information. The assessment of impacts provided here is conservative, as impacts that have not been studied or are poorly understood may have gone undetected.



**Fig. 8.** Native ranges (TDWG-continents) of neophytes in Austria. The grey line denotes the border of the Pacific region as it is the only TDWG continent formed exclusively by islands. Note that some taxa may be native to several continents.



**Fig. 9.** Pathways of introduction for neophytes in Austria. Note that one taxon can have several pathways of introduction, and “unaided” refers to taxa spreading from neighbouring countries through means of natural dispersal.



**Fig. 10.** Overview on the types and severity of impacts caused by neophytes in Austria ( $n = 73$ ); note that one taxon can have multiple impacts. Only impacts caused in Austria have been considered. The assessment was done by the authors based on literature and expert knowledge.

## Discussion

### *Rapid increase in neophyte numbers since the first edition of the Austrian neophyte checklist*

The second edition of the Austrian neophyte checklist includes 1,615 neophytes. The substantial increase from 1,110 (Walter et al. 2002) within two decades amounts to an increase of 45% of reported neophytes and reveals the rapid dynamics of neophyte accumulation. For comparison, the number of reported neophytes in the Czech Republic, a country of similar size and excellent documentation of its alien flora, has increased from 1046 in 2002 (Pyšek et al. 2002) to 1191 in 2022 (Pyšek et al. 2022) – a relative increase of 14%. Likely, increased research efforts on alien plant distributions, as conducted by several coauthors of this publication, may have contributed to the pronounced increase in recorded neophytes in Austria. However, the rising dynamics of plant invasions in Austria are further underscored by an increase in 92 established taxa compared to Walter et al. (2002), showing that many neophytes have become more widespread and permanent members of the Austrian flora.

### *Uneven neophyte distribution within Austria*

Within Austria, the federal states in eastern and northeastern Austria have the highest numbers of neophytes; this is particularly the case when adjusting for the large differences in area between federal states. Likely, several factors contribute to these differences. First, the warm lowlands of eastern Austria are densely populated, agricultural land use is intensive, and most transport infrastructure is concentrated there. These factors combined cause a high level of anthropogenic disturbance, habitat modifications, and propagule pressure, all factors known to promote neophyte invasions (e.g. Pyšek et al. 2010). Conversely, the cool climate of the mountains dominating most parts of the remaining federal states is a major barrier for the spread of neophytes in temperate regions such as Austria (Alexander et al. 2016).

### *Habitat preferences of neophytes in Austria*

Ruderal habitats are by far the most invaded, with 88% of neophytes affiliated with them. This finding is in line with habitat preferences reported in other alien plant checklists for central-European countries such as the Czech Republic (Pyšek et al. 2022), Slovakia (Medvecká et al. 2012), and Switzerland (FOEN 2022), and the findings of the first Austrian neophyte checklist (Rabitsch & Essl 2006). On the other side of the spectrum of invasion levels, we found that several natural habitats, such as wetlands, rocks, screes, and aquatic habitats, still harbour low numbers of neophytes.

Compared to the first edition (Rabitsch & Essl 2006), there was a marked increase in the relative prevalence of neophytes in ruderal habitats from 71% (792 taxa) to 88% (1,420) of taxa and a sixfold increase in wetlands from 0.5% (5 taxa) to 3% (49) of taxa. In the Czech Republic (Pyšek et al. 2022), similar trends can be shown across habitat types. It should be noted that comparable checklists (e.g. Pyšek et al. 2002, 2012, 2022, Medvecká et al. 2012, FOEN 2022) employed somewhat different definitions of habitats and thus, direct numerical comparisons should be interpreted with caution.

### *Accelerating neophyte accumulation*

Information on the first documented occurrences of neophytes was not included in the first edition of the Austrian neophyte checklist. Here, we compiled the first record data for all taxa. The number of recorded neophytes shows a steep increase from the mid-20th century onwards, with 42% of all taxa first recorded after 1980. Of the 548 taxa added in the second edition of the Austrian neophyte checklist, almost two-thirds (65%) were first recorded after 2002; the remainder were recorded earlier, but their presence in Austria was not yet known when the first edition of the Austrian neophyte checklist was compiled.

### *Many pathways and impacts remain unknown*

While the second edition of the neophyte checklist has filled many knowledge gaps present in the first edition, the specific pathways of introduction remain unknown for many taxa (37%). However, as the most common known pathways are escape from cultivation and introduction as stowaways, the dominant role of horticulture is underscored (van Kleunen et al. 2018). The release and stowaway pathways are probably best mitigated at the policy level, and taxa introduced by them are more likely to have ecological impacts

(Pergl et al. 2017) and thus, deserve additional focus. On the other hand, taxa escaping from cultivation present an issue of awareness-raising (e.g. through horticultural societies) as well as a policy issue (i.e. regulating sales of potential escapees).

While globally invasive species have large negative impacts on biodiversity, human economies, and human and animal welfare (Diagne et al. 2021, IPBES 2023), the number of neophytes with reported impacts in Austria is still rather small. However, given the ongoing rapid spread of several taxa with known large impacts, such as *Ambrosia artemisiifolia* (Mang et al. 2018), *Impatiens glandulifera* (Drescher & Prots 2003, Schiffleithner & Essl 2016), *Reynoutria* spp. (Vaseková et al. 2022), and the emergence of new impactful neophytes (Follak et al. 2017), it is clear that the impacts of invasive plants are rising rapidly also in Austria.

## Supplementary materials

**Table S1.** Austrian checklist of alien vascular plants introduced after 1492 (i.e. neophytes), 2nd edition (extended version of Appendix 1).

**Table S2.** Taxa excluded from the Austrian checklist of alien vascular plants and reasons for exclusion.

**Table S3.** Common synonyms of taxa.

Supplementary materials are available at <https://www.preslia.cz>.

## Acknowledgements

We are highly indebted to all experts who have collected data on the neophytes of Austria, namely Wolfgang Adler, Georg Amann, Thomas Amersberger, Thomas Anzböck, Maria Aschauer, Margarita Auer, Jürgen Baldinger, Thomas Barta, Johann Bauer, Johann P. Bauer, Andreas Berger, Peter Biskup, Manuel Böck, Romana Brandstätter, Jiří Danihelka, Rolf Diran, Anton Drescher, Brunhilde Drescher-Voith, Pavel Dřevovan, Ernst Duda, Iwona Dullinger, Peter Englmaier, Thomas Exner, Hermann Falkner, Josef Fally, Johann Flaschberger, Gerlinde Fischer, Manfred A. Fischer, Swen Follak, Hans Peter Fugger, Günter Gottschlich, Markus Grabher, Georg Grabherr, Viktoria Grass, Wolfgang Gregor, Josef Greimler, Aaron Griesbacher, Frank Grinschgl, Hans Peter Grohmann, Agnes Groiß, Johann Peter Gruber, Walter Gutermann, Max Haberhofer, Thomas Haberler, Brigitte Haberreiter, Georg Haindrich, Herbert Hagel, Frank Hartmetzky, Alexander Harrer, Robert Hehenberger, Norbert Helm, Karl Hillebrand, Andreas Hilpold, Norbert Hözl, Elvira Hörandl, Markus Hofbauer, Karsten Horn, Erich Hübl, Roland Kaiser, Rainer Karl, Gergely Király, Peter Kirchmeier, Gerhard Kleesadl, Barbara Knickmann, Gerhard Kniely, Gerhard Koller, Richard Kopf, Constantin Kopper, Volker Krautkrämer, Monika Kriechbaum, Matthias Kropf, Marianne Krusche, Pavel Kür, Andrea Lamprecht, Sonja Latzin, Werner Lazowski, Stefan Lefnaer, Martin Lepší, Petr Lepší, Susanne Leonhartsberger, Dominik Roman Letz, Matthias Mann, Rolf Marschner, Hans Marusek, Martin Mikulitsch, Helmut Modl, Karin Moosbrugger, Alexander Ch. Mrkvicka, Michael Münch, Kurt Nadler, Kai Uwe Nierbauer, Sophie Nießner, Norbert Novak, Günther Nowotny, Silke Oldorff, Ivan Ondrášek, Karl Oswald, Clemens Pachschwöll, Tetiana Pachschwöll, Karin Pall, David Paternoster, Harald Pauli, Hannes Paulus, Gertrud Pescoller Tiefenthaler, Stefanie Pfattner, Martin Pfeiler, Gerhard Pils, Harald Pliessnig, Maria Pokorny, David Prehsler, Martin A. Prinz, Andreas Raab, Uwe Raabe, Corinna Raffl, Wolfgang Rechenauer, Dieter Reich, Alexander Reischütz, Arnold Rinner, Rudolf Rožánek, Markus Sabor, Ruth Sander, Norbert Sauberer, Harald Schau, Josef Schaupp, Martin Scheuch, Brigitte Schmidt, Günther Schmidt, Hans Schön, Peter Schönswetter, Gerald M. Schneeweiß, Hendrik Schubert, Erich Schwienbacher, Kurt Seiser, Erich Sinn, Hans Smettan, Renate Spitaler, Günter Stadler, Herbert Stärker, Markus Staudinger, Franz Starlinger, Rupert Stingl, Michael Strudl, Alexander P. Sukhorukov, Matthias Svojška, Michael Thalinger, Angelika Till, Walter Till, Lorin Timaeus, Karl Tkalcics, Franz Tod, Andreas Tribsch, Vlk Valenta, Paul Vergörer, Ernst Vitek, Ernst Vukovic, Alfred Waldner, Bruno Wallnöfer, Josef Wanker, David Wedenig, Josef Weinzettl, Stefan Weiss, Thomas Wilhalm, Wolfgang Willner, Christian Zidorn, Karl Zimmerhackl, Manuela Zinöcker, Thomas Zuna-Kratky. Their work was the basis for this study. We highly appreciate the help of many colleagues who provided expertise for this publication. MG and FE appreciate funding by the Austrian Environment Agency, by the Austrian Science Foundation FWF (grant no. I 5825-B), and by the Austrian Climate Research Program (FA772033 “AgriWeedClim”). We appreciate the helpful comments received by Jiří Danihelka (Brno) and one anonymous reviewer.

## References

- Adlassnig W., Mayer E., Peroutka M., Pois W. & Lichtscheidl I. K. (2010) Two American *Sarracenia* species as neophyta in Central Europe. – Phyton (Horn) 49: 279–292.
- Adler W. & Mrkvicka A. C. (2003a) Die Flora Wiens gestern und heute. – Verlag des Naturhistorischen Museums Wien.
- Adler W. & Mrkvicka A. C. (2003b) Nachträge zur kürzlich erschienenen „Flora Wiens“ (I.). – Neilreichia 2–3: 99–106.
- Adler W. & Mrkvicka A. C. (2006) Nachträge zur „Flora Wiens“ (II.). – Neilreichia 4: 111–119.
- Adler W., Mrkvicka A. C. & Fischer M. A. (2008) Nachträge zur „Flora Wiens“ (III.). – Neilreichia 5: 173–180. mit Beiträgen von Gregor Dietrich und Rudolf Rožánek
- Adler W., Oswald K. & Fischer R. (1994) Exkursionsflora von Österreich. – Eugen Ulmer, Stuttgart.
- Alexander J. M., Lembrechts J. J., Cavieres L. A., Daehler C., Haider S., Kueffer C., Liu G., McDougall K., Milbau A., Pauchard A., Rew L. J. & Seipel T. (2016) Plant invasions into mountains and alpine ecosystems: current status and future challenges. – Alpine Botany 126: 89–103.
- Amann G. (2016) Aktualisierte Rote Liste der Farn- und Blütenpflanzen Vorarlbergs. – Bucher Verlag, Hohenems, Wien & Vaduz.
- Aschauer M. & Grabher M. (2017) Ein „neuer Neophyt“ in Vorarlberg (Österreich): *Dichanthelium acuminatum* (Sw.) Gould & C.A. Clark (*Poaceae*) im Rheindelta. – inatura - Forschung online 37: 1–5.
- Bacher S., Blackburn T. M., Essl F., Genovesi P., Heikkilä J., Jeschke J. M., Jones G., Keller R., Kenis M., Kueffer C., Martinou A. F., Nentwig W., Pergl J., Pyšek P., Rabitsch W., Richardson D. M., Roy H. E., Saul W. C., Scalera R., Vilà M., Wilson J. R. U. & Kumschick S. (2018) Socio-economic impact classification of alien taxa (SEICAT). – Methods in Ecology and Evolution 9: 159–168.
- Barta T. (2010) *Geranium aequale* (Bab.) Aedo (*Geraniaceae*) in Austria. – Annalen des Naturhistorischen Museums in Wien, B, 112: 509.
- Barta T. (2012) *Geranium macrostylum* BOISS. (*Geraniaceae*) new for Austria. – Annalen des Naturhistorischen Museums in Wien, B, 113: 263.
- Baschant R. (1955) Ruderalflächen und deren Pflanzen in und um Linz. – Naturkundliches Jahrbuch Der Stadt Linz 1: 253–261.
- Baum B. R. (1977) Oats: wild and cultivated. A monograph of the genus *Avena* L. (*Poaceae*). – Thorn Press Limited, Ottawa.
- Bayer J. N. (1860) Correspondenz. – Österreichische botanische Zeitschrift 10: 405–407.
- Beck G. (1894) Über Sisyrinchien. – Wiener illustrierte Garten-Zeitung 19: 405–411.
- Berg C., Heber G. & Drescher A. (2009) *Aralia elata* (Miq.) Seem. – eine neue invasive Art? – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 139: 135–147.
- Bernhardt K.-G. & Gregor T. (2019) Vielfalt aus aller Welt – neophytische *Typha*-Arten in Mitteleuropa. – Kochia 12: 99–113.
- Bernhardt K.-G. & Laubhann D. (2006) *Crambe hispanica*, der Spanische Meerkohl, (*Brassicaceae*) als Kulturbegleiter. – Neilreichia 4: 121–124.
- Bernhardt K.-G., Laubhann D. & Kropf M. (2008) *Chorispora tenella*, *Diplostachys erucoides* und *Capsella rubella* (*Brassicaceae*) in Wien und Niederösterreich. – Neilreichia 216: 211–216.
- Bernhardt K.-G., Naumer-Bernhardt E., Oschatz M., Stoeckl N. & Wernisch M. M. (2013) Floristische Inventarisierung als Beitrag zur Erfassung regionaler Phytodiversität am Beispiel der Gemeinde Zwentendorf an der Donau (Bezirk Tulln, Niederösterreich). – Wissenschaftliche Mitteilungen aus dem Niederösterreichischen Landesmuseum 24: 127–172.
- Bernhardt K.-G., Oswald K. & Schweighofer W. (2006) Floristische Beobachtungen an trocken gefallenen Schlammbänken der Donau in Niederösterreich im Sommer 2003. – Neilreichia 4: 125–130.
- Blackburn T. M., Essl F., Evans T., Hulme P. E., Jeschke J. M., Kühn I., Kumschick S., Marková Z., Mrugala A., Nentwig W., Pergl J., Pyšek P., Rabitsch W., Ricciardi A., Richardson D. M., Sendek A., Vilà M., Wilson J. R. U., Winter M., Genovesi P. & Bacher S. (2014) A unified classification of alien species based on the magnitude of their environmental impacts. – PLoS Biology 12: e1001850.
- Blackburn T. M., Pyšek P., Bacher S., Carlton J. T., Duncan R. P., Jarošík V., Wilson J. R. U. & Richardson D. M. (2011) A proposed unified framework for biological invasions. – Trends in Ecology & Evolution 26: 333–339.
- Bomble W. & Scholz H. (1999) Eine neue Unterart des *Bromus secalinus* (*Gramineae*) – ein sekundäres Unkraut. – Feddes Repertorium 110: 425–438.
- Brandes D. (2010) *Geranium sibiricum* als Neophyt in Osttirol. – Floristische Rundbriefe 43 (2009): 52–64.

- Brandes D. (2011) Neophyten in Osttirol. – Brandes Dietmar, diverse botanische Arbeiten 112: 1–68.  
URL: [https://www.zobodat.at/pdf/Brandes-Dietmar\\_112\\_2011\\_0001-0068.pdf](https://www.zobodat.at/pdf/Brandes-Dietmar_112_2011_0001-0068.pdf).
- Brandes D. (2012) Virtuelle Neophytenexkursion in das mittlere Inntal. – Brandes Dietmar, diverse botanische Arbeiten 118: 1–42. URL: [https://www.zobodat.at/pdf/Brandes-Dietmar\\_118\\_2012\\_0001-0042.pdf](https://www.zobodat.at/pdf/Brandes-Dietmar_118_2012_0001-0042.pdf).
- Brandes D. (2015) Neophyten in der Siedlungsflora von Osttirol. Alien plant species in the flora of settlements in East Tyrol (Austria). – Braunschweiger Geobotanische Arbeiten 10: 55–66.
- Brummitt R. K. (2001) World Geographic Scheme for Recording Plant Distributions, Edition 2. Hunt Institute for Botanical Documentation, Carnegie Mellon University (Pittsburgh).  
URL: <http://rs.tdwg.org/wgsrpd/doc/data>.
- Bucharova A. & van Kleunen M. (2009) Introduction history and species characteristics partly explain naturalization success of North American woody species in Europe. – Journal of Ecology 97: 230–238.
- Cayuela L., Granzow-de la Cerda I., Albuquerque F. S. & Golicher D. J. (2012) Taxonstand: an R package for species names standardisation in vegetation databases. – Methods in Ecology and Evolution 3: 1078–1083.
- Clusius C., Pona G., Moretus J. & Plantijnsche Drukkerij (1601) Rariorum plantarum historia: quae accesserint, proxima pagina docebit. – Ex officina Plantiniana apud Ioannem Moretum, Antverpiae.
- Crantz H. J. N. (1767) Stirpium austriacum fasciculus III. Umbelliferarum. – J. P. Kraus, Lipsiae.
- DAISIE (ed.) (2009) Handbook of alien species in Europe. – Springer, Dordrecht.
- Dalla Torre von Thunberg-Sternhof K. W. von (1928) Beiträge zur Flora von Tirol und Vorarlberg. – Tiroler Landesmuseum Ferdinandeum 7: 1–120.
- Dalla Torre von Thunberg-Sternhof K. W. von & Sarnthein L. von (1906) Flora der gefürsteten Grafschaft Tirol, des Landes Vorarlberg und des Fürstenthumes Liechtenstein. Band VI, 1. Teil. – Wagner'sche Universitäts-Buchhandlung, Innsbruck.
- Dalla Torre von Thunberg-Sternhof K. W. von & Sarnthein L. von (1909) Flora der gefürsteten Grafschaft Tirol, des Landes Vorarlberg und des Fürstenthumes Liechtenstein, Band VI, 2. Teil. – Wagner'sche Universitäts-Buchhandlung, Innsbruck.
- Dalla Torre von Thunberg-Sternhof K. W. von & Sarnthein L. von (1912) Flora der gefürsteten Grafschaft Tirol, des Landes Vorarlberg und des Fürstenthumes Liechtenstein. Band VI, 3. Teil. – Wagner'sche Universitäts-Buchhandlung, Innsbruck.
- Danihelka J., Chytrý K., Prokešová H. & Sedláček V. (2017) Chřest přeslenitý (*Asparagus verticillatus*) lokálně zdomácnělý na jižní Moravě [*Asparagus verticillatus* locally naturalised in south Moravia (SE Czech Republic)]. – Zprávy České botanické společnosti 52: 155–162.
- Diagne C., Leroy B., Vaissière A. C., Gozlan R. E., Roiz D., Jarić I., Salles J. M., Bradshaw C. J. A. & Courchamp F. (2021) High and rising economic costs of biological invasions worldwide. – Nature 592: 571–576.
- Dickoré W. B. & Kasperek G. (2010) Species of *Cotoneaster* (Rosaceae, Maloideae) indigenous to, naturalising or commonly cultivated in Central Europe. – Willdenowia 40: 13–45.
- Diran R. (2016) Beiträge zur Adventivflora von Wien und Niederösterreich. – Neilreichia 8: 27–39.
- Dolliner G. (1842) Enumeratio plantarum phanerogamicarum in Austria inferiori crescentium. – C. Gerold, Vienna.
- Dörr E. & Lippert W. (2004) Flora des Allgäus und seiner Umgebung. Band 2. – IHW Verlag, Eching.
- Drescher A. & Magnes M. (2001) Die wildwachsenden Neophyten und Archäophyten im Nationalpark Donau-Auen – aktueller Stand und Möglichkeiten der Bekämpfung. – Unpublished report.
- Drescher A. & Prots B. (2003) Distribution patterns of Himalayan balsam (*Impatiens glandulifera*, Royle) in Austria. – Kanitzia 11: 85–96.
- Eichberger C., Pflugbeil G. & Arming C. (2015) Floristische und vegetationskundliche Beiträge aus Salzburg, XVIII. – Mitteilungen der Gesellschaft für Salzburger Landeskunde 154–155: 655–680.
- Eichberger C., Pflugbeil G. & Wolkerstorfer C. (2021a) Floristische und vegetationskundliche Beiträge aus Salzburg, XXI. – Mitteilungen der Gesellschaft für Salzburger Landeskunde 160–161: 417–440.
- Eichberger C., Pflugbeil G. & Wolkerstorfer C. (2021b) Floristische und vegetationskundliche Beiträge aus Salzburg, XXII. – Mitteilungen der Gesellschaft für Salzburger Landeskunde 160–161: 441–485.
- Englmaier P. & Münch M. (2019) Potenziell verwilderungsfähige Gräserarten aus dem Zierpflanzen- und Saatguthandel: Steht die nächste Invasionswelle vor der Tür? – Neilreichia 10: 1–29.
- Englmaier P. & Wilhalm T. (2018) Alien grasses (Poaceae) in the flora of the Eastern Alps: contribution to an excursion flora of Austria and the Eastern Alps. – Neilreichia 9: 177–245.
- Erdinger C. (1872) Verzeichnis der in der Umgebung von Krems vorkommenden Laub- und Leber-Moose sowie der Gefäß-Kryptogamen und der phanerogamischen Gefäßpflanzen. – Josef Kinzl, Krems.

- Essl F. (1999) Floristische Beobachtungen aus dem östlichen Oberösterreich und dem angrenzenden Niederösterreich. – Beiträge zur Naturkunde Oberösterreichs 7: 205–244.
- Essl F. (2002) Verbreitung und Gesellschaftsanschluss des Buchsbaumes (*Buxus sempervirens* L.) im oberösterreichischen Enns- und Steyrtal. – Verhandlungen der Zoologisch-Botanischen Gesellschaft in Österreich 139: 75–79.
- Essl F. (2003) Bemerkenswerte floristische Funde aus Wien, Niederösterreich, dem Burgenland und der Steiermark. – Linzer biologische Beiträge 35: 935–956.
- Essl F. (2004a) Erstfund eines verwilderten Vorkommens der Kultur-Heidelbeere (*Vaccinium angustifolium × corymbosum*) in Österreich. – Linzer biologische Beiträge 36: 785–796.
- Essl F. (2004b) Verbreitung und vegetationskundlicher Anschluss von *Saxifraga ×urbium*, *S. ×geum* und *S. cuneifolia* in Oberösterreich. – Verhandlungen der zoologisch-botanischen Gesellschaft in Österreich 141: 13–41.
- Essl F. (2005) Bemerkenswerte floristische Funde aus Wien, Niederösterreich, dem Burgenland und der Steiermark, Teil II. – Linzer biologische Beiträge 37: 1207–1230.
- Essl F. (2006) Bemerkenswerte floristische Funde aus Wien, Niederösterreich, dem Burgenland und der Steiermark, Teil IV. – Linzer biologische Beiträge 38: 1071–1103.
- Essl F. (2007a) Verbreitung, Status und Vergesellschaftung von *Pinus strobus* in Österreich. – Tuexenia 27: 59–72.
- Essl F. (2007b) *Opuntia phaeacantha* Engelm. in Österreich. – Floristische Rundbriefe 40: 49–58.
- Essl F. (2008) Beitrag zur Floristik von Kärnten, Nord- und Osttirol (Österreich). – Linzer biologische Beiträge 40: 329–339.
- Essl F. (2019a) An overview of the first occurrences of *Rhodotypos scandens* in Austria. – BioInvasions Records 8: 736–741.
- Essl F. (2019b) First records of casual occurrences of Chinese windmill palm *Trachycarpus fortunei* (Hook.) H. Wendl. in Austria. – BioInvasions Records 8: 471–477.
- Essl F. (2022) Introduction, spread and distribution of *Abies cephalonica* in Austria. – BioInvasions Records 11: 593–599.
- Essl F., Bacher S., Blackburn T. M., Booy O., Brundu G., Brunel S., Cardoso A. C., Eschen R., Gallardo B., Galil B., García-Berthou E., Genovesi P., Groom Q., Harrower C., Hulme P. E., Katsanevakis S., Kenis M., Kühn I., Kumschick S., Martinou A. F., Nentwig W., O'Flynn C., Pagad S., Pergl J., Pyšek, P., Rabitsch W., Richardson D. M., Roques A., Roy H. E., Scalera R., Schindler S., Seebens H., Vanderhoeven S., Vilà M., Wilson J. R. U., Zenetos A. & Jeschke J. M. (2015) Crossing frontiers in tackling pathways of biological invasions. – BioScience 65: 769–782.
- Essl F. & Follak S. (2010) Bemerkenswerte floristische Funde aus Wien, Niederösterreich, dem Burgenland und der Steiermark, Teil VI. – Staphia 92: 15–20.
- Essl F. & Hauser E. (2005) Floristische Beobachtungen aus dem östlichen Oberösterreich und dem angrenzenden Niederösterreich, Teil IV. – Beiträge zur Naturkunde Oberösterreichs 14: 39–61.
- Essl F. & Stöhr O. (2006) Bemerkenswerte floristische Funde aus Wien, Niederösterreich, dem Burgenland und der Steiermark, Teil III. – Linzer biologische Beiträge 38: 121–163.
- European Commission (2019) Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1483614313362&uri=CELEX:32014R1143>.
- Fenzl E. (1852) Briefliche Mittheilung über die bei Gresten gefundene *Anemone apennina*. – Verhandlungen des zoologisch-botanischen Vereines in Wien 1: 186.
- Fischer M. A., Adler W. & Oswald K. (2005) Exkursionsflora für Österreich, Liechtenstein und Südtirol. Ed. 2. – Biologiezentrum der Oberösterreichischen Landesmuseen, Linz.
- Fischer M. A. & Niklfeld H. (eds) (2001) Floristische Neufunde (51–56). – Neilreichia 1: 237–241.
- Fischer M. A. & Niklfeld H. (eds) (2003) Floristische Neufunde (57–73). – Neilreichia 2–3: 287–297.
- Fischer M. A. & Niklfeld H. (eds) (2008) Floristische Neufunde (76–98). – Neilreichia 5: 263–288.
- Fischer M. A. & Niklfeld H. (eds) (2011) Floristische Neufunde (99–123). – Neilreichia 6: 365–396.
- Fischer M. A., Oswald K. & Adler W. (2008) Exkursionsflora für Österreich, Liechtenstein und Südtirol. Ed. 3. – Biologiezentrum der Oberösterreichischen Landesmuseen, Linz.
- Fischer R. (2001) *Silene flavescens* (Caryophyllaceae) neu für Österreich – übersehenes Relikt oder Ansalbung? – Neilreichia 1: 31–36.
- Flinck K.-E. & Hylnö B. (1991) Two new species of *Cotoneaster*. – Watsonia 18: 311–313.
- FOEN (ed.) (2022) Alien species in Switzerland. An inventory of alien species and their impact. 1st updated edition 2022. 1st edition 2006. – Environmental Studies No. 2220, Federal Office for the Environment, Bern.

- Follak S. (2010) Zum Vorkommen von *Sicyos angulatus* L. in Österreich. – *Stapfia* 92: 10–14.
- Follak S. (2015) Notizen zum Vorkommen von *Ammi majus* (Große Knorpelmöhre) in Österreich. – *Stapfia* 103: 115–119.
- Follak S. (2020) Distribution and small-scale spread of the invasive weed *Solanum carolinense* in Austria. – *EPPO Bulletin* 50: 322–326.
- Follak S., Aldrian U., Moser D. & Essl F. (2015) Reconstructing the invasion of *Cyperus esculentus* in Central Europe. – *Weed Research* 55: 289–297.
- Follak S., Schleicher C., Schwarz M. & Essl F. (2017) Major emerging alien plants in Austrian crop fields. – *Weed Research* 57: 406–416.
- Follak S., Schwarz M. & Essl F. (2014) Notizen zur Verbreitung von *Berberis thunbergii* in Österreich. – *Stapfia* 101: 67–70.
- Follak S., Schwarz M. & Essl F. (2020) First record of *Eriochloa villosa* (Thunb.) Kunth in Austria and notes on its distribution and agricultural impact in Central Europe. – *BioInvasions Records* 9: 8–16.
- Forstner W. (1972) Die Ring-Glockenblume (*Symphyandra hofmanii* Pantoczek) in der Steiermark. – *Verhandlungen der zoologisch-botanischen Gesellschaft in Wien* 112: 92–94.
- Forstner W. (1973) Die verwilderte Pantoffelblume. – *Natur und Land* 1973: 156–157.
- Forstner W. & Hübl E. (1971) Ruderal-, Segetal- und Adventivflora von Wien. – *Notring Verlag*, Wien.
- Forum Flora Austria (2022) Online Forum of the “Verein zur Erforschung der Flora Österreichs” – URL: <https://www.flora-austria.at> (accessed September 2022).
- Franz W. (1993) Bemerkungen zu den in Kärnten nachgewiesenen Sippen der Gattung Judenkirsche (*Physalis, Solanaceae*). – *Carinthia* II 183/103: 291–301.
- Franz W., Kosch M. & Leute G. H. (1990) Zur Flora und Vegetation der Kapuziner- und Schlangeninsel im Wörthersee (Kärnten, Österreich). Flora in vegetacija dveh otokov (Kapuziner- und Schlangeninsel) v Vrbskem jezeru (Koroška, Avstrija). – *Razprave IV, Razreda SAZU, Ljubljana* 31: 37–76.
- Fritsch K. von (1896) Bericht der Sektion für Botanik, *Verhandlungen der zoologisch-botanischen Gesellschaft in Wien* 46.
- Fritsch K. von (jun.) (1920) Beiträge zur Flora von Steiermark. I. – *Österreichische botanische Zeitschrift* 69: 225–230.
- Fritsch K. von (jun.) (1926) Beiträge zur Flora der Steiermark. VI. – *Österreichische botanische Zeitschrift* 75: 214–229.
- Fritsch K. von (jun.) (1929) Siebenter Beitrag zur Flora der Steiermark. – *Mitteilungen des naturwissenschaftlichen Vereins für Steiermark* 64–65: 29–78.
- Fritsch K. von (jun.) (1930) Neunter Beitrag zur Flora der Steiermark. – *Mitteilungen des naturwissenschaftlichen Vereins für Steiermark* 67: 53–89.
- Fritsch K. von (jun.) (1931) Zehnter Beitrag zur Flora der Steiermark. – *Mitteilungen des naturwissenschaftlichen Vereins für Steiermark* 68: 28–50.
- Fröhner S. (1986) Drei neue *Alchemilla*-Arten aus der Steiermark. – *Mitteilungen der Abteilung für Botanik am Landesmuseum „Joanneum“ in Graz* 13–14: 55–62.
- Geosphere Austria (2025) Geology, geophysics, climatology and meteorology. – Federal Institute for Geology, Geophysics, Climatology and Meteorology, URL: <https://www.geosphere.at/en>.
- Gilli C., Gutermann W., Billensteiner A. & Niklfeld H. (2019a) Liste der Gefäßpflanzen Österreichs. Version 1.0. – URL: [https://plantbiogeography.univie.ac.at/fileadmin/user\\_upload/p\\_plantbiogeography/documents/taxaliste\\_oe\\_v1.0.pdf](https://plantbiogeography.univie.ac.at/fileadmin/user_upload/p_plantbiogeography/documents/taxaliste_oe_v1.0.pdf).
- Gilli C. & Niklfeld H. (eds) (2018) Floristische Neufunde (236–304). – *Neilreichia* 9: 289–354.
- Gilli C., Pachschwöll C. & Niklfeld H. (eds) (2019b) Floristische Neufunde (305–375). – *Neilreichia* 10: 197–274.
- Gilli C., Pachschwöll C. & Niklfeld H. (eds) (2020) Floristische Neufunde (376–429). – *Neilreichia* 11: 165–227.
- Gilli C., Pachschwöll C. & Niklfeld H. (eds) (2021) Floristische Neufunde (430–508). – *Neilreichia* 12: 291–400.
- Gilli C., Schratt-Ehrendorfer L., Raabe U., Barta T., Weiss S., Király G., Weinzettl J., Tkalcics R., Albert R., Dunkl S., Englmaier P., Grafl K., Hofbauer M., Karrer G., Kniely G., Niklfeld H., Schau H. & Wukovatz E. (2022) Checkliste und Rote Liste der Farn- und Blütenpflanzen des Burgenlandes. – Naturschutzbund Burgenland. URL: [https://www.burgenland.at/fileadmin/user\\_upload/20220907\\_RL\\_Burgenland.pdf](https://www.burgenland.at/fileadmin/user_upload/20220907_RL_Burgenland.pdf).
- Glantschnig T. (1940) Ergänzungen zur Flora Oberkärtens. – *Carinthia* II 130/50: 93–97.

- Grabher M. (2017) Flora des Naturschutzgebietes Rheindelta. Vorläufige Artenliste der Gefäßpflanzen, Stand Mai 2017. – UMG Umweltbüro Grabher, Bregenz.  
URL: [http://www.umg.at/umgberichte/UMGberichte2\\_Flora\\_Rheindelta.pdf](http://www.umg.at/umgberichte/UMGberichte2_Flora_Rheindelta.pdf).
- Griebl N. (2020) Kosmos Naturführer – Neophyten. Alle Arten im deutschsprachigen Raum. – Kosmos Verlag, Stuttgart.
- Grims F. (1988) Die Gattung *Alchemilla* in Oberösterreich. – Linzer biologische Beiträge 20: 919–979.
- Gutermann W. [unter Mitarbeit von Niklfeld H.] (1973) Liste der Gefäßpflanzen Mitteleuropas. Herausgegeben von F. Ehrendorfer. 2., erweiterte Auflage – Gustav Fischer Verlag, Stuttgart.
- Hamburger I. (1948) Zur Adventivflora von Graz. – Monografien Botanik und Blütenpflanzen 354: 1–123.
- Hanausek T. F. (1908) Notiz. – Österreichische botanische Zeitschrift 58: 495.
- Handel-Mazzetti H. F. von (1957) Zur floristischen Erforschung von Tirol und Vorarlberg. VII. – Österreichische botanische Zeitschrift 97: 126–146.
- Hartl H. (2007) Ein Feigenbaum oberhalb von Obervellach. – Carinthia II 197: 89–90.
- Hartl H., Leute G. H., Kniely G., Perko M. & Niklfeld H. (1992) Verbreitungsatlas der Farn- und Blütenpflanzen Kärntens. – Naturwissenschaftlicher Verein für Kärnten, Klagenfurt.
- Hassler M. (2020) Neuer Schlüssel und Atlas der Nachtkerzen Europas. – URL: <https://flora-deutschlands.de/files/OenotheraAtlas14-3red.pdf>.
- Hausmann F. von (1854) Flora von Tirol. – Wagner, Innsbruck.
- Hayek A. von (1908–1911) Flora von Steiermark. – Gebrüder Borntraeger, Berlin, Akademische Druck- u. Verlagsanstalt Graz, Graz.
- Hayek G. von (1909) Literatur zur Flora von Steiermark. – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 45: 464–469.
- Heber G. & Zernig K. (eds) (2013) Bemerkenswertes zur Flora der Steiermark 2. – Joannea Botanik 10: 111–134.
- Herbarium WU (2022) Herbarium WU. – University of Vienna. URL: <https://herbarium.univie.ac.at/>. (Accessed September 2022)
- Hinterhuber R. (1855) Nachträge zum Prodromus einer Flora von Salzburg etc. – Österreichische botanische Zeitschrift 5: 329–349.
- Hofbauer W. (2005) Erstfund des Archaeophyten *Thlaspi alliaceum* L. für Nordtirol sowie neue Fundortangaben zu diversen Neophyten. – Berichte des naturwissenschaftlich-medizinischen Vereins in Innsbruck 92: 45–53.
- Hohla M. (2000) Beiträge zur Kenntnis der Flora des Innviertels und des angrenzenden Bayerns. – Beiträge zur Naturkunde Oberösterreichs 9: 251–307.
- Hohla M. (2001) *Dittrichia graveolens* (L.) Greuter, *Juncus ensifolius* Wikstr. und *Ranunculus penicillatus* (Dumort.) Bab. neu für Österreich und weitere Beiträge zur Kenntnis der Flora des Innviertels und des angrenzenden Bayerns. – Beiträge zur Naturkunde Oberösterreichs 10: 275–353.
- Hohla M. (2002) *Agrostis scabra* Willd. neu für Oberösterreich sowie weitere Beiträge zur Kenntnis der Flora des Innviertels und Niederbayerns. – Beiträge zur Naturkunde Oberösterreichs 11: 465–505.
- Hohla M. (2005): Mais & Co – Aufstrebende Ackerbegleiter im Portrait. – ÖKO-L 27/3: 10–20.
- Hohla M. (2006a) Neues über die Verbreitung von *Eragrostis albensis*, *E. multicaulis* und *E. pilosa* in Österreich. – Linzer biologische Beiträge 38: 1233–1253.
- Hohla M. (2006b) *Bromus diandrus* und *Eragrostis multicaulis* neu für Oberösterreich sowie weitere Beiträge zur Kenntnis der Flora des Innviertels. – Beiträge zur Naturkunde Oberösterreichs 16: 11–83.
- Hohla M. (2006c) *Panicum riparium* (Poaceae) – neu für Österreich – und weitere Beiträge zur Kenntnis der Adventivflora Oberösterreichs. – Neilreichia 4: 9–44.
- Hohla M. (2008) *Oenothera suaveolens* ein Wiederfund und *Achillea lanulosa* ein Neufund für Österreich sowie weitere Beiträge zur Kenntnis der Flora des Innviertels. – Beiträge zur Naturkunde Oberösterreichs 18: 89–114.
- Hohla M. (2009) *Bromus pumpellianus*, *Mimulus ringens* und *Poa bigelovii* – neu für Österreich sowie weitere Beiträge zur Kenntnis der Flora des Innviertels. – Beiträge zur Naturkunde Oberösterreichs 19: 151–175.
- Hohla M. (2011a) *Cardamine corymbosa* (Brassicaceae) und *Bromopsis (Bromus) riparia* (Poaceae) – neu für Österreich sowie weitere Beiträge zur Adventivflora von Oberösterreich, Niederösterreich und Salzburg. – Neilreichia 9: 55–79.
- Hohla M. (2011b) Zwei Funde der Kleinen Seerose (*Nymphaea candida*) sowie weitere Beiträge zur Kenntnis der Flora von Oberösterreich. – Stapfia 95: 141–161.
- Hohla M. (2011c) So eine Pflanzerei! – ÖKO-L 33: 3–16.
- Hohla M. (2012a) *Glyceria grandis* var. *grandis* (Amerikanisches Schwadengras) – ein Neuzugang der Flora von Österreich. – Floristische Rundbriefe 45/46: 62–70.

- Hohla M. (2012b) *Plantago coronopus* – neu für Oberösterreich sowie weitere Beiträge zur Kenntnis der Flora des Innviertels. – *Stapfia* 97: 180–192.
- Hohla M. (2013) *Eragrostis amurensis*, *Euphorbia serpens* und *Lepidium latifolium* – neu für Oberösterreich, sowie weitere Beiträge zur Flora Österreichs. – *Stapfia* 99: 35–51.
- Hohla M. (2014) *Hystrix patula* – neu für Österreich, sowie weitere Beiträge zur Flora von Oberösterreich, Salzburg, Steiermark und Vorarlberg. – *Stapfia* 101: 83–100.
- Hohla M. (2016) Wiederfund der Kanten-Wolfsmilch (*Euphorbia angulata*) in Oberösterreich, sowie weitere Beiträge zur Flora von Oberösterreich, Niederösterreich, Steiermark und Vorarlberg. – *Stapfia* 105: 109–118.
- Hohla M. (2018a) *Artemisia gilvescens*, *Oenothera macrocarpa* und *Pseudosasa japonica* – neu für Österreich – sowie weitere Beiträge zur Adventivflora von Oberösterreich und der Steiermark. – *Neilreichia* 9: 143–159.
- Hohla M. (2018b) *Physalis grisea* und *Sedum pallidum* neu für Österreich sowie weitere Beiträge zur Adventivflora von Österreich. – *Stapfia* 109: 25–40.
- Hohla M. (2021) *Knautia macedonica*, *Panicum chloroticum*, *Sorghastrum nutans* und *Vulpia geniculata* neu für Österreich sowie weitere Beiträge zur Adventivflora Oberösterreichs. – *Stapfia* 112: 105–115.
- Hohla M. (2022) Flora des Innviertels. – *Stapfia* 115: 1–730.
- Hohla M. (2023) *Artemisia tournefortiana* (Asteraceae) – neu für Österreich sowie weitere Beiträge zur Kenntnis der Autobahn- bzw. Straßenrandflora des Burgenlands, Oberösterreichs, Salzburgs und der Steiermark. – *Neilreichia* 13–14: 227–241.
- Hohla M., Diewald W. & Király G. (2015) *Limonium gmelini* – eine Steppenpflanze an österreichischen Autobahnen sowie weitere Neuigkeiten zur Flora Österreichs. – *Stapfia* 103: 127–150.
- Hohla M., Kellerer S. & Király G. (2019) *Carex morrowii*, *Heuchera micrantha*, *Oxalis tetraphylla*, *Persicaria weyrichii* und *Phlomis russeliana* neu für Österreich sowie weitere Beiträge zur Adventivflora. – *Stapfia* 111: 97–110.
- Hohla M., Kleesadl G. & Melzer H. (1998) Floristisches von den Bahnanlagen Oberösterreichs. – Beiträge zur Naturkunde Oberösterreichs 6: 139–301.
- Hohla M., Kleesadl G. & Melzer H. (2000) Neues zur Flora der oberösterreichischen Bahnanlagen-mit Einbeziehung einiger grenznaher Bahnhöfe Bayerns. – Beiträge zur Naturkunde Oberösterreichs 9: 191–250.
- Hohla M., Kleesadl G. & Melzer H. (2002) Neues zur Flora der oberösterreichischen Bahnanlagen – mit Einbeziehung einiger Bahnhöfe Bayerns - Fortsetzung. – Beiträge zur Naturkunde Oberösterreichs 11: 507–578.
- Hohla M., Kleesadl G. & Melzer H. (2005a) Neues zur Flora der oberösterreichischen Bahnanlagen. – Beiträge zur Naturkunde Oberösterreichs 14: 147–199.
- Hohla M. & Melzer H. (2003) Floristisches von den Autobahnen der Bundesländer Salzburg, Oberösterreich, Niederösterreich und Burgenland. – Linzer biologische Beiträge 35: 1307–1326.
- Hohla M. & Raabe U. (2012) *Cochlearica danica* – das Dänische Löffelkraut – kein überraschender Neuzugang der Flora von Oberösterreich. – *Stapfia* 97: 206–209.
- Hohla M. & Scholz H. (2011) Zwei neue indigene *Elytrigia*-Arten (Poaceae) der Flora Mitteleuropas. – *Stapfia* 95: 46–54.
- Hohla M., Stöhr O., Brandstätter G., Danner J., Diewald W., Essl F., Fiedler H., Grims F., Höglinger F., Kleesadl G., Kraml A., Lenglachner F., Lugmair A., Nadler K., Niklfeld H., Schmalzer A., Schrott-Ehrendorfer L., Schröck C., Strauch M. & Wittmann H. (2009) Katalog und Rote Liste der Gefäßpflanzen Oberösterreichs. – *Stapfia* 91: 1–324.
- Hohla M., Stöhr O. & Schröck C. (2005b) Beiträge zur Kenntnis der Flora des Innviertels. – Beiträge zur Naturkunde Oberösterreichs 14: 201–286.
- Höhnel F. von (1876) Beiträge zur Kenntnis der Flora von Niederösterreich. – Österreichische botanische Zeitschrift 26: 120–125.
- Host N. T. (1797) Synopsis plantarum in Austria provinciisque adiacentibus sponte crescentium. – C. F. Wappler, Vindobonae.
- Host N. T. (1831) Flora austriaca. Vol. II. – F. Beck, Viennae.
- Hügin G. (1999) Anmerkungen zur Unterscheidung von *Eragrostis multicaulis* und *Eragrostis pilosa*. – Botanik und Naturschutz in Hessen 11: 91–93.
- Hügin G. & Starlinger F. (1997) Erstnachweis für *Chamaesyce glyptosperma* in Mitteleuropa (mit Berücksichtigung der übrigen europäischen Vorkommen). – Floristische Rundbriefe 31: 12–17.
- Hulme P. E. (2021) Unwelcome exchange: international trade as a direct and indirect driver of biological invasions worldwide. – One Earth 4: 666–679.

- Hulme P. E., Bacher S., Kenis M., Klotz S., Kühn I., Minchin D., Nentwig W., Olenin S., Panov V., Pergl J., Pyšek P., Roques A., Sol D., Solarz W. & Vilà M. (2008) Grasping at the routes of biological invasions: a framework for integrating pathways into policy. – *Journal of Applied Ecology* 45: 403–414.
- iNaturalist (2022) – URL: [www.inaturalist.org](http://www.inaturalist.org) (accessed September 2022).
- IPBES (2023) Summary for policymakers of the thematic assessment report on invasive alien species and their control of the intergovernmental science-policy platform on biodiversity and ecosystem services. – IPBES Secretariat, Bonn. URL: <https://doi.org/10.5281/zenodo.7430692>.
- IUCN (2018) Guidance for interpretation of CBD categories on introduction pathways. Technical note prepared by IUCN for the European Commission. – URL: <https://www.cbd.int/doc/c/9d85/3bc5/d640f059d03acd717602cd76/sbstta-22-inf-09-en.pdf>.
- JACQ (2022) Virtual Herbaria Website. – JACQ Consortium, URL: <https://www.jacq.org> (Accessed September 2022)
- Jacquin N. J. (1762) *Enumeratio stirpium plerarumque, quae sponte crescunt in agro Vindobonensi, montibusque confinibus*. – J. P. Kraus, Vindobonae.
- Jacquin N. J. (1773) *Florae Austriae, sive Plantarum selectarum in Austriae archiducatu sponte crescentium, icones, ad vivum coloratae, et descriptionibus, ac synonymis illustratae*. Vol. 1. – L. J. Kaliwoda, Viennae.
- Jäger E. J., Ebel F., Hanelt P. & Müller G. K. (Eds.) (2008) Rothmaler - Exkursionsflora von Deutschland. 5. Krautige Zier- und Nutzpflanzen. – Spektrum, Heidelberg, Berlin.
- Janchen E. (1956–1960) Catalogus florae Austriae. Ein systematisches Verzeichnis der auf österreichischem Gebiet festgestellten Pflanzenarten. Band 1–4. – Springer, Wien.
- Janchen E. (1964) Catalogus florae Austriae. Zweites Ergänzungsheft. – Springer, Wien.
- Janchen E. (1966) Catalogus florae Austriae. Drittes Ergänzungsheft. – Springer, Wien.
- Janchen E. (1977) Flora von Wien, Niederösterreich und Nordburgenland. – Verein für Landeskunde von Niederösterreich und Wien.
- Janchen E. & Neumayer H. (1942) Beiträge zur Benennung, Bewertung und Verbreitung der Farn- und Blütenpflanzen Deutschlands. – Österreichische botanische Zeitschrift 91: 209–298.
- Janecek B., Tintner J., Klug B., Ahamer H. & Fischer M. A. (2003) *Orchis anthropophora (Acera anthropophorum; Orchidaceae)* – zweiter Fund in Österreich (mit Überlegungen zum floristischen Status der österreichischen Vorkommen). – *Neilreichia* 2–3: 177–186.
- Karrer G. (2021) Interessante Gefäßpflanzen-Funde aus Österreich, 1. – *Neilreichia* 12: 183–197.
- Khek E. (1905) Floristisches aus Ober-Oesterreich. – Allgemeine botanische Zeitschrift für Systematik, Floristik, Pflanzengeographie 11: 21–23.
- Király G. (2000) Neue Ergebnisse der floristischen Forschung im westlichen Grenzgebiet Ungarns. – Verhandlungen der zoologisch-botanischen Gesellschaft in Österreich 137: 235–253.
- Kleesadl G. (2009) Floristische Neu-, Erst- und Wiederfunde für Österreich, Oberösterreich bzw. die jeweiligen drei Großregionen Oberösterreichs. – Beiträge zur Naturkunde Oberösterreichs 19: 49–112.
- Kleesadl G. (2011) Floristische Neu- und Wiederfunde für Österreich, Oberösterreich bzw. die jeweiligen drei Großregionen Oberösterreichs. – *Stapfia* 95: 6–15.
- Kleesadl G. (2017) Floristische Neu- und Wiederfunde aus Ober- und Niederösterreich. – *Stapfia* 107: 29–50.
- Kleesadl G. & Brandstätter G. (2013) Erstnachweise von Gefäßpflanzen für Oberösterreich (1990–2012). – Beiträge zur Naturkunde Oberösterreichs 23: 131–157.
- Kleesadl G. & Schröck C. (2021) Floristische Kurzmitteilungen 01 (2021). – *Stapfia* 112: 225–253.
- Kleesadl G. & Schröck C. (2022) Floristische Kurzmitteilungen 02 (2022). – *Stapfia* 113: 111–128.
- Knapp S. (2018) *Solanum pimpinellifolium* - new for the alien flora of Austria, with comments on Austrian records of *S. triflorum* and *S. nitidibaccatum*. – *Neilreichia* 9: 49–53.
- Kniely G. (2016) Aus dem Herbarium GJO: Neues zur Flora von Österreich. – *Joannea Botanik* 13: 67–72.
- Kniely G., Leute G.-H. & Maurer W. (2006) Die Flora des Klopeiner Hügellandes und seiner Umgebung in Kärnten. – *Carinthia II* 196: 425–482.
- Kögeler K. (1949) Mittelmeer-Flora in Graz. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 77/78: 93–100.
- Kögeler K. (1951) Zweiter Beitrag zur Flora der Steiermark. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 79/80: 133–140.
- Kornhuber A. G. & Heimerl A. (1885) *Erechthites hieracifolia* Rafinesque, eine neue Wanderpflanze der europäischen Flora. – Österreichische botanische Zeitschrift 35: 297–303.
- Koutecký P. (2012) A diploid drop in the tetraploid ocean: hybridization and longterm survival of a singular population of *Centaurea weldeniana* Rchb. (Asteraceae), a taxon new to Austria. – *Plant Systematics and Evolution* 298: 1349–1360.

- Koutecký P. & Pachschwöll C. (2023) *Centaurea nemoralis* and *C. nigra*, two recurrently introduced but often overlooked neophytes of the Austrian flora. – *Neilreichia* 13–14: 293–303.
- Kramer G. H. (1756) *Elenchus vegetabilium et animalium per Austriam inferiorem observatorum*. – Typis Iohannis Thomae Trattner, Viennae, Pragae et Tergesti.
- Krisai R. & Schmidt R. (1983) Die Moore Oberösterreichs. – Rudolf Trauner, Linz.
- Lefnaer S. (2018) Floristische Neuigkeiten aus dem niederösterreichischen Weinviertel und Wien nördlich der Donau. – *Neilreichia* 9: 133–142.
- Lefnaer S. (2020) Floristische Neuigkeiten aus dem niederösterreichischen Weinviertel und Wien nördlich der Donau, 3. – *Neilreichia* 11: 27–45.
- Lefnaer S. (2021) Floristische Neuigkeiten aus dem niederösterreichischen Weinviertel und Wien nördlich der Donau, 4. – *Neilreichia* 12: 9–37.
- Leonhartsberger S. (2015) Neues zur Adventivflora von Graz. – *Joannea Botanik* 12: 39–68.
- Leonhartsberger S. (2018) Einschätzung des Ausbreitungspotenzials einiger Kulturrefuglinge aus dem Grazer Raum. – *Joannea Botanik*.
- Leute G.-H. (1973) Nachträge zur Flora von Kärnten III. – *Carinthia* II 163: 389–424.
- Leute G. H. (2003) Neue und bemerkenswerte Pflanzenfunde im Bereich der Landeshauptstadt Klagenfurt in Kärnten VI. – *Rudolfinum - Jahrbuch des Landesmuseums für Kärnten* 2002: 371–389.
- Leute G.-H., Pirker U., Prugger O., Rippel H. & Wagner S. (1975) Nachträge zur Flora von Kärnten IV. – *Carinthia* II 168: 243–254.
- Lippert W. & Meierott L. (2018) Kommentierte Artenliste Farn- und Blütenpflanzen Bayerns. Vorarbeiten zu einer neuen Flora von Bayern. Online-Version Dezember 2018 – Bayerischen Botanischen Gesellschaft, München.  
URL: [https://www.zobodat.at/pdf/Berichte-Bayerischen-Bot-Ges-Erforschung-Flora\\_2018\\_SB\\_0001-0251.pdf](https://www.zobodat.at/pdf/Berichte-Bayerischen-Bot-Ges-Erforschung-Flora_2018_SB_0001-0251.pdf).
- Maier M., Neuner W. & Polatschek A. (2001) Flora von Nordtirol, Osttirol und Vorarlberg. Band 5. Einkeimblättrige: *Poaceae* bis *Zannichelliaceae*. – Tiroler Landesmuseum Ferdinandeum, Innsbruck.
- Maly J. K. (1868) Flora von Steiermark. – Wilhelm Braumüller, Wien.
- Mang T., Essl F., Moser D. & Dullinger S. (2018) Climate warming drives invasion history of *Ambrosia artemisiifolia* in Central Europe. – *Preslia* 90: 59–81.
- Maurer W. (1996) Flora der Steiermark. Band 1. Farnpflanzen (Pteridophyten) und freikronblättrige Blütenpflanzen (*Apetale* und *Dialypetale*). – IHW-Verlag, Eching.
- Medvecká J., Kliment J., Májeková J., Halada L., Zalibrová M., Gojdičová E., Feráková V. & Jarolímek I. (2012) Inventory of the alien flora of Slovakia. – *Preslia* 84: 257–309.
- Melzer H. (1954) Zur Adventivflora der Steiermark I. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 84: 103–120.
- Melzer H. (1955) Floristisches aus Niederösterreich und dem Burgenland. – Verhandlungen der zoologisch-botanischen Gesellschaft in Österreich 95: 104–113.
- Melzer H. (1959) Neues zur Flora von Steiermark, III. – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 89: 76–86.
- Melzer H. (1962a) Neues zur Flora von Steiermark (V). – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 92: 77–100.
- Melzer H. (1962b) Floristisches aus Niederösterreich und dem Burgenland, IV. – Verhandlungen der zoologisch-botanischen Gesellschaft in Österreich 101–102: 192–200.
- Melzer H. (1964) Neues zur Flora von Steiermark (VII). – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 94: 108–125.
- Melzer H. (1966) Floristisches aus Kärnten. – *Carinthia* II 156: 21–27.
- Melzer H. (1968) Notizen zur Adventivflora von Kärnten. – *Carinthia* II 158: 127–137.
- Melzer H. (1973) Neues zur Flora von Steiermark, XV. – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 92: 119–139.
- Melzer H. (1975) Neues zur Flora von Steiermark, XVII. – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 105: 147–160.
- Melzer H. (1979) Neues zur Flora von Oberösterreich, Niederösterreich, Wien und dem Burgenland. – Linzer biologische Beiträge 11: 169–192.
- Melzer H. (1980) Neues zur Flora von Steiermark, XXII. – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 110: 117–126.
- Melzer H. (1983) Floristisch Neues aus Kärnten. – *Carinthia* II 173: 151–165.
- Melzer H. (1985) Neues zur Flora von Steiermark, XXVII – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 115: 79–93.

- Melzer H. (1987) Neues zur Flora von Steiermark, XXIX. – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 117: 89–104.
- Melzer H. (1988a) Über *Chorispora tenella*, einen südosteuropäisch-asiatischen Kreuzblütler, *Viola cucullata*, das Amerikanische Veilchen, und andere Pflanzenfunde in Kärnten. – Carinthia II 178: 561–566.
- Melzer H. (1988b) Neues zur Flora von Steiermark, XXX. – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 118: 157–171.
- Melzer H. (1991) Neues zur Flora von Steiermark, XXXII. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 121: 183–193.
- Melzer H. (1993) Über *Amaranthus bouchonii* Aellen, Bouchons Fuchsschwanz, *Agrostis castellana* Boissier & Reuter, das Kastilische Straußgras, und andere bemerkenswerte Blütenpflanzen Kärntens. – Carinthia II 183: 715–722.
- Melzer H. (1995) Neues zur Adventivflora der Steiermark, vor allem der Bahnanlagen. – Linzer biologische Beiträge 27: 217–234.
- Melzer H. (1996a) Neues zur Flora von Steiermark, XXXV. – Mitteilungen des naturwissenschaftlichen Vereines für Steiermark 126: 83–97.
- Melzer H. (1996b) *Poa trivialis* subsp. *sylvicola* – neu für Österreich und weitere Funde bemerkenswerter Blütenpflanzen in Kärnten. – Linzer biologische Beiträge 28: 841–861.
- Melzer H. (1997) Neues zur Flora von Steiermark, XXXVI. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 127: 65–75.
- Melzer H. (2003) *Sporobolus vaginiflorus* (Poaceae), ein Neubürger aus Nordamerika, lange übersehen in Österreich – und anderes Neue zur Flora von Kärnten. – Neilreichia 2–3: 131–142.
- Melzer H. (2005) Neues zur Flora der Steiermark, XLI. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 134: 153–188.
- Melzer H. (2006) Neues zur Flora der Steiermark, XLII. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 135: 51–58.
- Melzer H. & Barta T. (1992) Neues zur Flora von Österreich und neue Fundorte bemerkenswerter Blütenpflanzen im Burgenland, in Niederösterreich und Wien. – Linzer biologische Beiträge 24: 709–723.
- Melzer H. & Barta T. (1994) Neues zur Flora von Wien, Niederösterreich und dem Burgenland. – Verhandlungen der zoologisch-botanischen Gesellschaft in Österreich 131: 107–118.
- Melzer H. & Barta T. (1996) Neues zur Flora des Burgenlandes, von Niederösterreich, Wien und Oberösterreich. – Linzer biologische Beiträge 28: 863–882.
- Melzer H. & Barta T. (1997) *Anthoxanthum aristatum* Boissier, das Grannen-Ruchgras, neu für das Burgenland und andere Neuigkeiten zur Flora dieses Bundeslandes, von Wien und Niederösterreich. – Linzer biologische Beiträge 29: 899–919.
- Melzer H. & Barta T. (2000) *Crambe hispanica*, der Spanische Meerkohl, ein Neufund für Österreich, und weitere floristische Neuigkeiten aus Wien, Niederösterreich und dem Burgenland. – Linzer biologische Beiträge 32: 341–362.
- Melzer H. & Barta T. (2001) *Cotula coronopifolia*, die Laugenblume, neu für Österreich und anderes Neue zur Flora von Wien, Niederösterreich und dem Burgenland. – Linzer biologische Beiträge 33: 877–903.
- Melzer H. & Barta T. (2002) *Dipsacus strigosus*, die Schlanke Karde, und anderes Neues zur Flora von Oberösterreich, Wien und dem Burgenland. – Linzer biologische Beiträge 34: 57–89.
- Melzer H. & Barta T. (2003) Neue Daten zur Flora von Wien, Niederösterreich und dem Burgenland. – Linzer biologische Beiträge 35: 1159–1193.
- Melzer H. & Barta T. (2005) *Bromus hordeaceus* subsp. *thominei*, die Strand-Weich-Trespe, neu für Österreich, ebenso sechs weitere Sippen und andere floristische Neuigkeiten aus Wien, Niederösterreich und Burgenland. – Linzer biologische Beiträge 37: 1401–1430.
- Melzer H. & Barta T. (2008) *Cerastium lucorum*, das Großfrucht-Hornkraut – neu für das Burgenland und andere Neuigkeiten zur Flora dieses Bundeslandes sowie von Wien und Niederösterreich. – Linzer biologische Beiträge 40: 517–550.
- Melzer H. & Ocepek B. (2009) Neues zur Flora der Steiermark, XLIII. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 139: 161–181.
- Müllner A. N., Adler W. & Mrkvicka A. C. (2000) Datenbank zur Verbreitung und Gefährdung der Gefäßpflanzen Wiens. – Natur und Naturschutz - Studien der Wiener Umweltschutzabteilung (MA22) 41: 1–13, URL: [https://www.zobodat.at/pdf/MA22-Wien\\_41\\_0001-0013.pdf](https://www.zobodat.at/pdf/MA22-Wien_41_0001-0013.pdf).
- Murr J. (1903) Zur Gartenflora Tirols. – Deutsche botanische Monatsschrift 21: 49–51.
- Murr J. (1907) Beiträge zur Flora von Tirol und Vorarlberg, XX. – Allgemeine botanische Zeitschrift für Systematik, Floristik, Pflanzengeographie 13: 23–24.

- Murr J. (1923) Neue Uebersicht über die Farn- und Blütenpflanzen von Vorarlberg und Liechtenstein. 3 Hefte. – Kommissionsverlag Buchhandlung F. Unterberger, Feldkirch, Bregenz.
- Murr J. (1931) Neue Beiträge zur Flora der Umgebung von Innsbruck und des übrigen Nordtirols. – Veröffentlichungen des Tiroler Landesmuseums Ferdinandeum 11: 39–80.
- Nadler K. & Haug G. (2021) Dorf-Flora Prellenkirchen (Niederösterreich) nebst Ergänzungen zur Scherrasenflora 2019. – *Stapfia* 112: 147–206.
- NAGO (2022) NAGO-Naturkundliche Arbeitsgemeinschaft Osttirol – URL: [www.nago-osttirol.at](http://www.nago-osttirol.at).
- Neilreich A. (1846) Flora von Wien. – Fr. Beck's Universitäts-Buchhandlung, Wien.
- Neilreich A. (1852) Zweifelhafte Pflanzen der Wiener Flora. – Verhandlungen des zoologisch-botanischen Vereins in Wien 1: 37–46.
- Neilreich A. (1859) Flora von Nieder-Österreich. Erster Theil. – Carl Gerold's Sohn, Vienna.
- Neilreich A. (1866) Nachträge zur Flora von Nieder-Österreich. – K. und K. zoologisch-botanischen Gesellschaft in Wien, Wien.
- Němec R., Grulich V., Filippov P., Reiterová L. & Musil Z. (2018) Cévnaté rostliny národních parků Podyjí a Thayatal (1982–2018) [Vascular plants of Podyjí/Thayatal National Parks (1982–2018)]. – *Thayensia* 15: 9–76.
- Neumayer H. (1922) Floristisches aus Niederösterreich. IV. – Verhandlungen der zoologisch-botanischen Gesellschaft in Wien 72: 165–172.
- Neumayer H. (1924) Floristisches aus den Nordostalpen und deren Vorlanden I. – Verhandlungen der zoologisch-botanischen Gesellschaft in Wien 73: 211–222.
- Neumayer H. (1930) Floristisches aus Österreich einschließlich einiger angrenzender Gebiete I. – Verhandlungen der zoologisch-botanischen Gesellschaft in Wien 79: 336–411.
- Neuner H. (2009) Neophytenkartierung im Raum Jenbach/Tirol. – Diploma thesis, University of Innsbruck.
- Niklfeld H. (ed.) (2015) Floristische Neufunde (124–169). – *Neilreichia* 7: 157–194.
- Niklfeld H. (ed.) (2016) Floristische Neufunde (170–235). – *Neilreichia* 8: 181–238.
- Niklfeld H. & Schrott-Ehrendorfer L. (2022) Data from the Floristic Mapping Project Austria. Unpublished, Vienna. – URL: <https://plantbiogeography.univie.ac.at/research/distribution-atlases>.
- Observation International (2022) – URL: [www.observation.org](http://www.observation.org) (accessed September 2022)
- Pachschwöll C., Gilli C. & Niklfeld H. (2025) Floristische Neufunde (509–620). – *Neilreichia* 15: 127–248.
- Pagitz K. (2002) Die Verbreitung der Himbeeren und Brombeeren im Großraum Innsbruck/Nordtirol. – Veröffentlichungen des Tiroler Landesmuseums Ferdinandeum 82: 5–28.
- Pagitz K. (2004) Ein Nachweis von *Arnica chamissonis* Less. in Nordtirol (Austria). – Berichte des naturwissenschaftlich-medizinischen Vereins in Innsbruck 91: 103–109.
- Pagitz K. (2007) Geo-Tag der Artenvielfalt 2007 in Tirol – Ötztal. – Veröffentlichungen des Tiroler Landesmuseums Ferdinandeum 87: 73–170.
- Pagitz K. (2008) Neuheiten, besonders Neophyten, in der Tiroler Flora. – *Neilreichia* 5: 115–129.
- Pagitz K. (2012) *Eragrostis albensis* neu für den Alpenraum – sowie weitere Beiträge zur Gattung *Eragrostis* (*Eragrostideae, Poaceae*) in Tirol und Österreich. – *Stapfia* 97: 193–205.
- Pagitz K. (2013) Neues zur Brombeer-Flora der Ostalpen. – *Gredleriana* 13: 45–70.
- Pagitz K. (2016) *Rubus pericrispatus* und *Rubus perrobustus*, zwei neue Brombeer-Arten für Italien – sowie weitere Aktualisierungen zur Brombeer-Flora der Ostalpen. – *Gredleriana* 16: 71–80.
- Pagitz K., Király G., & Hohla M. (2016) 5. Alpenländisch-österreichischer Brombeerworkshop. – URL: <https://www.flora-austria.at/Docs/VA/2016/2016-07-27-31%20Rubus-Workshop.pdf>.
- Pagitz K., Hohla M. & Király G. (2019b) 8. Alpenländisch-Österreichischer Brombeer-Workshop Oberösterreich 10. bis 12. Juli 2019. – URL: <https://www.flora-austria.at/Docs/VA/2019/2019-07-10%20Brombeer-Workshop.pdf>.
- Pagitz K., Hohla M. & Király G. (2020) Die *Rubus*-Flora Kärntens – aktualisierte und kommentierte Checkliste der Gattung *Rubus* für Kärnten, inklusive Fundortergänzungen. – *Neilreichia* 77: 47–77.
- Pagitz K., Hohla M., Trávníček B., Zernig K., Žíla V. & Király G. (2019a) Beiträge zur Brombeer-Flora der Steiermark. – *Joannea Botanik* 16: 47–64.
- Pagitz K. & Lechner-Pagitz C. (2005) Ergänzungen und Bemerkungen zu in Tirol wildwachsenden Pflanzensippen (IV). – Berichte des naturwissenschaftlich-medizinischen Vereins in Innsbruck 92: 55–78.
- Pagitz K. & Lechner-Pagitz C. (2015) Neues zur Neophytenflora Nord- und Osttirols (Österreich). – *Neilreichia* 7: 29–44.
- Pagitz K., Stöhr O., Thalinger M., Aster I., Baldau M., Lechner-Pagitz C., Niklfeld H., Schrott-Ehrendorfer L. & Schönwetter P. (2023) Rote Liste und Checkliste der Farn- und Blütenpflanzen Nord- und Osttirols. – Naturkundliche Beiträge der Abteilung Umweltschutz 16: 1–296, Amt der Tiroler Landesregierung, Innsbruck.

- Pall K., Mayerhofer V., Mayerhofer S., Moog O., Leitner P., Huber T. & Hauer W. (2013) Aquatische Neobiota in Österreich. – Lebensministerium Österreich, Wien.
- Pergl J., Pyšek P., Bacher S., Essl F., Genovesi P., Harrower C. A., Hulme P. E., Jeschke J. M., Kenis M., Kühn I., Perglová I., Rabitsch W., Roques A., Roy D. B., Roy H. E., Vilà M., Winter M. & Nentwig W. (2017) Troubling travellers: are ecologically harmful alien species associated with particular introduction pathways? – *NeoBiota* 32: 1–20.
- Perth U. (2013) *Dysphania* sect. *Botryoides* (*Amaranthaceae* s.lat.) in Asia. – *Willdenowia* 43: 65–80.
- Peruzzi L. (2018) Floristic inventories and collaborative approaches: a new era for checklists and floras? – *Plant Biosystems* 152: 177–178.
- Pflugbeil G. (2015) Floristische Besonderheiten in den Gemeindegebieten von Dorfbeuern und Lamprechtshausen. – *Mitteilungen aus dem Haus der Natur* 22: 47–57.
- Pflugbeil G. (2018) Vorarbeiten an einer Liste der Gefäßpflanzen des Bundeslandes Salzburg, Teil 3: Die Gattung *Oenothera* / Nachtkerze (*Onagraceae*). – *Neilreichia* 9: 55–93.
- Pflugbeil G. (2020) Floristische Besonderheiten im Pinzgau mit dem Schwerpunkt Mitterpinzgau. – *Mitteilungen aus dem Haus der Natur* 26: 85–103.
- Pflugbeil G., Langer C., Moosbrugger K., Wittmann H. & Meindl H. (2017) Floristische Besonderheiten des Tennengaus und bemerkenswerte Funde aus anderen Teilen des Landes Salzburgs. – *Mitteilungen aus dem Haus der Natur* 24: 53–74.
- Pflugbeil G. & Moosbrugger K. (2016) Floristische Besonderheiten in der Stadt Salzburg und ihren Umlandgemeinden. – *Mitteilungen aus dem Haus der Natur* 23: 58–71.
- Pflugbeil G. & Pils P. (2013) Vorarbeiten an einer Liste der Gefäßpflanzen des Bundeslandes Salzburg, Teil 1: Neophyten. – *Mitteilungen aus dem Haus der Natur* 21: 25–83.
- Pils P. & Pflugbeil G. (2012) Nachträge zur Neophytenflora der Stadt Salzburg, I. – *Mitteilungen aus dem Haus der Natur* 20: 5–15.
- Pils P., Schröck C., Kaiser R., Gewolf S., Nowotny G. & Stöhr O. (2008) Neophytenflora der Stadt Salzburg (Österreich). – *Sauteria* 16: 246–250.
- Pils P., Wittmann H. & Nowotny G. (2002) Beiträge zur Flora des Bundeslandes Salzburg III. – *Linzer biologische Beiträge* 34: 5–165.
- Polatschek A. (1980) Beitrag zur Neuen Flora von Tirol und Vorarlberg. – *Verhandlungen der zoologisch-botanischen Gesellschaft in Österreich* 118–119: 88–96.
- Polatschek A. (1984) *Senecio inaequidens* DC. neu für Österreich und Spanien. – *Verhandlungen der zoologisch-botanischen Gesellschaft in Österreich* 122: 93–95.
- Polatschek A. (1997) Flora von Nordtirol, Osttirol und Vorarlberg. Band 1. Einführung, Farmpflanzen, Nadelhölzer, Samenpflanzen: *Aceraceae* bis *Boraginaceae*. – Tiroler Landesmuseum Ferdinandeum, Innsbruck.
- Polatschek A. (1999) Flora von Nordtirol, Osttirol und Vorarlberg. Band 2. Samenpflanzen: *Brassicaceae* bis *Euphorbiaceae*. – Tiroler Landesmuseum Ferdinandeum, Innsbruck.
- Polatschek A. (2000) Flora von Nordtirol, Osttirol und Vorarlberg. Band 3. Samenpflanzen: *Fabaceae* bis *Rosaceae*. – Tiroler Landesmuseum Ferdinandeum, Innsbruck.
- Polatschek A. (2013) Revision der Gattung *Erysimum* (*Cruciferae*): Teil 5. Nord-, West-, Zentraleuropa, Rumänien und westliche Balkan-Halbinsel bis Albanien. – *Annalen des Naturhistorischen Museums in Wien*, B, 115: 75–218.
- Polatschek A. (2015) Beitrag zur Gattung *Sisymbrium* (*Cruciferae*): *S. austriacum* und *S. pallescens*. – *Annalen des Naturhistorischen Museums in Wien*, B, 117: 227–237.
- Polatschek A. & Neuner W. (2013) Flora von Nordtirol, Osttirol und Vorarlberg. Band 6. Inhaltsverzeichnis, Einleitung, Floristische Daten in Systematischer Anordnung, Kartenteil, Register. – Tiroler Landesmuseum Ferdinandeum, Innsbruck.
- Pyšek P. (2003) How reliable are data on alien species in Flora Europaea? – *Flora* 198: 499–507.
- Pyšek P., Danihelka J., Sádlo J., Chrtěk J. Jr., Chytrý M., Jarošík V., Kaplan Z., Krahulec F., Moravcová L., Pergl J., Štajerová K. & Tichý L. (2012) Catalogue of alien plants of the Czech Republic (2nd edition): checklist update, taxonomic diversity and invasion patterns. – *Preslia* 84: 155–255.
- Pyšek P., Hulme P. E., Simberloff D., Bacher S., Blackburn T. M., Carlton J. T., Dawson W., Essl F., Foxcroft L. C., Genovesi P., Jeschke J. M., Kühn I., Liebhold A. M., Mandrak N. E., Meyerson L. A., Pauchard A., Pergl J., Roy H. E., Seebens H., van Kleunen M., Vilà M., Wingfield M. J. & Richardson D. M. (2020) Scientists' warning on invasive alien species. – *Biological Reviews* 95: 1511–1534.
- Pyšek P., Jarošík V., Hulme P. E., Kühn I., Wild J., Arianoutsou M., Bacher S., Chiron F., Didžiulis V., Essl F., Genovesi P., Gherardi F., Hejda M., Kark S., Lambdon P. W., Desprez-Loustau M. L., Nentwig W., Pergl J., Poboljšaj K., Rabitsch W., Roques A., Roy D. B., Shirley S., Solarz W., Vil à M. & Winter M. (2010)

- Disentangling the role of environmental and human pressures on biological invasions across Europe. – Proceedings of the National Academy of Sciences of the United States of America 107: 12157–12162.
- Pyšek P., Richardson D. M., Rejmánek M., Webster G. L., Williamson M. & Kirschner J. (2004) Alien plants in checklists and floras: towards better communication between taxonomists and ecologists. – Taxon 53: 131–143.
- Pyšek P., Sádlo J., Chrtěk J., Chytrý M., Kaplan Z., Pergl J., Pokorná A., Axmanová I., Čuda J., Doležal J., Dřevojan P., Hejda M., Kočář P., Kortz A., Lososová Z., Lustyk P., Skálová H., Štajerová K., Večeřa M., Vítková M., Wild J. & Danihelka J. (2022) Catalogue of alien plants of the Czech Republic (3rd edition). – Preslia 94: 447–577.
- Pyšek P., Sádlo J. & Mandák B. (2002) Catalogue of alien plants in the Czech Republic. – Preslia 74: 97–186.
- Raabe U. (2019) Die Gattung *Lindernia* (*Linderniaceae*) im Burgenland, Österreich. – Neilreichia 10: 171–183.
- Rabitsch W. & Essl F. (2006) Biological invasions in Austria: patterns and case studies. – Biological Invasions 8: 295–308.
- Rauscher R. (1871) Aufzählung der in der Umgebung von Linz wildwachsenden oder im Freien gebauten blühentragenden Gefäß-Pflanzen. – Jahresberichte des Vereins für Naturkunde in Österreich ob der Enns zu Linz 2: 1–43.
- Rechinger K. H. (1950) Notizen zur Adventiv- und Ruderalfloren von Wien. – Österreichische botanische Zeitschrift 97: 114–123.
- Reich D., Barta T., Pils P. & Sander R. (2018) Beiträge zur Kenntnis der Gattung *Vulpia* (*Poaceae*) in Österreich mit besonderer Berücksichtigung von *Vulpia ciliata*, neu für Wien und Niederösterreich. – Neilreichia 9: 247–267.
- Reichert H., Gregor T. & Meierott L. (2018) *Euphorbia saratoi* (= *E. podperae*, *E. pseudovirgata* auct., *E. virgata* var. *orientalis*, *E. virgultosa*) – in Mitteleuropa und Nordamerika ein Neophyt unklarer Herkunft. – Kochia 11: 1–36.
- Reif R. (1995) Zur Pflanzenwelt des oberen Görtschitztales. – Carinthia II 185: 183–195.
- Richardson D. M., Pyšek P., Rejmánek M., Barbour M. G., Panetta F. D. & West C. J. (2000) Naturalization and invasion of alien plants: concepts and definitions. – Diversity and Distributions 6: 93–107.
- Rostański K. & Forstner W. (1982) Die Gattung *Oenothera* (*Onagraceae*) in Österreich. – Phyton (Austria) 22: 87–113.
- Ruttner A. (1955) Die Pflanzenwelt des Grossraumes von Linz vor 100 Jahren. – Naturkundliches Jahrbuch der Stadt Linz 1: 127–169.
- Sailer F. S. (1844) Flora der Linzergegend und des oberen und unteren Mühlviertels in Oberösterreich oder Aufzählung der allda wildwachsenden Pflanzen mit kenntlichen Blüthen mittels Angabe ihrer deutschen, lateinischen und vulgaren Namen (etc.). – Sailer, Linz.
- Sauberer N., Gilli C., Prinz M. A. & Till W. (2020) Der erste Nachweis von *Crassula helmsii* in Österreich und weitere Nachträge (IV) zur Flora von Traiskirchen (Niederösterreich). – Biodiversität und Naturschutz in Ostösterreich - BCBEA 5: 25–48.
- Sauberer N. & Mrkvicka A. C. (2020) Beiträge zur Flora des südlichen Wiener Beckens und der Thermenlinie (Niederösterreich). – Biodiversität und Naturschutz in Ostösterreich - BCBEA 5: 97–116.
- Sauberer N. & Till W. (2015) Die Flora der Stadtgemeinde Traiskirchen in Niederösterreich: Eine kommentierte Artenliste der Farn- und Blütenpflanzen. – Biodiversität und Naturschutz in Ostösterreich - BCBEA 1: 3–63.
- Sauberer N. & Till W. (2017) Nachträge zur Flora der Stadtgemeinde Traiskirchen II. – Biodiversität und Naturschutz in Ostösterreich - BCBEA 3: 26–35.
- Saukel J. (2003) *Crepis pygmaea* (*Asteraceae*) – neu für Österreich. – Neilreichia 2–3: 241–243.
- Scharfetter A., Schlatt F., Scheuer C. & Berg C. (2011) Tag der Artenvielfalt – Die Gefäßpflanzen des Botanischen Gartens Graz. – Mitteilungen des naturwissenschaftlichen Vereins für Steiermark 141: 143–166.
- Schiffleithner V. & Essl F. (2016) Is it worth the effort? Spread and management success of invasive alien plant species in a Central European National Park. – NeoBiota 31: 43–61.
- Schinninger I. (2008) Die Bedeutung brachliegender Bahnareale als Lebensraum für Pflanzen am Beispiel der Stadt Wien – Braunschweiger Geobotanische Arbeiten 9: 393–404.
- Schinninger I. & Rožánek R. (2008) Bemerkenswerte Gefäßpflanzenfunde auf brachliegendem Eisenbahngelände in Wien. – Neilreichia 5: 203–210.
- Schneeweiß G. M. (2000) Die kurzlebigen Arten der Gattung *Alyssum* (*Brassicaceae*) in Österreich. – Annalen des Naturhistorischen Museums in Wien, B, 102: 389–407.
- Scholz H. (2008) Kulturpflanzen und Anökophyten. – Neilreichia 5: 217–220.

- Scholz H. & Hohla M. (2008) Drei für Österreich neue Taxa der anökophytischen Gattung *Bromus* (*Poaceae*). – Linzer biologische Beiträge 40: 279–286.
- Scholz H. & Mikolás V. (1991) The weedy representatives of Proso Millet (*Panicum miliaceum*, *Poaceae*) in Central Europe. – Thasizia 1: 31–41.
- Schrammel E. M., Drescher A. & Berg C. (2019) Neophyten in der urbanen Gehölzvegetation von Graz. – Braunschweiger Geobotanische Arbeiten 13: 323–354.
- Schratt-Ehrendorfer L., Niklfeld H., Schröck C. & Stöhr O. (eds) (2022) Rote Liste der Farn- und Blütenpflanzen Österreichs. – Stapfia 114, Land Oberösterreich, Linz.
- Schratt-Ehrendorfer L., Tribsch A., Schneeweiß G. M., Schönswetter P., Staudinger M. & Greimler J. (2000) Weitere floristische Funde aus Kärnten. – Wulfenia 7: 27–39.
- Schröck C., Stöhr O., Gewolf S., Eichberger C., Nowotny G., Mayr A. & Pilsl P. (2004) Beiträge zur Adventivflora von Salzburg I. – Sauteria 13: 221–337.
- Schultes J. A. (1794) Flora austriaca. Enchiridion ad excursiones botanicas. – Alb. Ant. Patzowsky, Viennae.
- Schultes J. A. (1814) Österreichs Flora. Zweyter Theil. – C. Schaumburg und Compagnie, Vienna.
- Schur F. P. J. (1868) Phytographische Fragmente. – Öesterreichische botanische Zeitschrift 18: 310–318.
- Seebens H., Bacher S., Blackburn T. M., Capinha C., Dawson W., Dullinger S., Genovesi P., Hulme P. E., van Kleunen M., Kühn I., Jeschke J. M., Lenzner B., Liebold A. M., Pattison Z., Pergl J., Pyšek P., Winter M. & Essl F. (2021) Projecting the continental accumulation of alien species through to 2050. – Global Change Biology 27: 970–982.
- Seebens H., Blackburn T. M., Dyer E. E., Genovesi P., Hulme P. E., Jeschke J. M., Pagad S., Pyšek P., Winter M., Arianoutsou M., Bacher S., Blasius B., Brundu G., Capinha C., Celesti-Grapow L., Dawson W., Dullinger S., Fuentes N., Jäger H., Kartesz J., Kenis M., Kreft H., Kühn I., Lenzner B., Liebold A., Mosena A., Moser D., Nishino M., Pearman D., Pergl J., Rabitsch W., Rojas-Sandoval J., Roques A., Rorke S., Rossinelli S., Roy H. E., Scalera R., Schindler S., Štajerová K., Tokarska-Guzik B., van Kleunen M., Walker K., Weigelt P., Yamanaka T. & Essl F. (2017) No saturation in the accumulation of alien species worldwide. – Nature Communications 8: 14435.
- Simberloff D. (2009) The role of propagule pressure in biological invasions. – The Annual Review of Ecology, Evolution and Systematics 40: 81–102.
- Slovák M., Kučera J., Marhold K. & Zozomová-Lihová J. (2012) The morphological and genetic variation in the polymorphic species *Picris hieracioides* (*Compositae*, *Lactuceae*) in Europe strongly contrasts with traditional taxonomical concepts. – Systematic Botany 37: 258–278.
- Smettan H. W. (2006) Floristisches aus den Chiemgauer Alpen (Tirol). – Veröffentlichungen des Tiroler Landesmuseums Ferdinandeum 56: 129–168.
- Smettan H. W. (2012) Neophyten im Tiroler Unterinntal. – Wissenschaftliches Jahrbuch der Tiroler Landesmuseen 5: 445–464.
- Speta F. (1976) Über *Chionodoxa* Boiss., ihre Gliederung und Zugehörigkeit zu *Scilla* L. – Naturkundliches Jahrbuch Stadt Linz 21: 9–79.
- Speta F. (1978) Botanische Arbeitsgemeinschaft. – Jahrbuch des Oberösterreichischen Musealvereines 123: 66–75.
- Speta F. (1990) Botanische Arbeitsgemeinschaft. – Jahrbuch des Oberösterreichischen Musealvereines 135: 62–79.
- Speta F. (2000) Beitrag zur Kenntnis von *Ornithogalum* s.l. (*Hyacinthaceae*) in Oberösterreich. – Beiträge zur Naturkunde Oberösterreichs 9: 743–792.
- Spitaler R. & Zidorn C. (2005) Erstnachweis von *Polycarpon tetraphyllum* in Nordtirol (*Caryophyllaceae*). – Berichte des naturwissenschaftlich-medizinischen Vereins in Innsbruck 92: 41–43.
- Statistik Austria (2023) Demographisches Jahrbuch 2021. – Statistik Austria, Wien.  
URL: <https://www.statistik.at/services/tools/services/publikationen/detail/1517>.
- Stöhr O. (2002) Floristisches aus der Gemeinde Vorderstoder. – Beiträge zur Naturkunde Oberösterreichs 11: 411–459.
- Stöhr O. (2007) Notizen zur Flora von Osttirol. – Veröffentlichungen des Tiroler Landesmuseums Ferdinandeum 87: 193–204.
- Stöhr O. (2008) Notizen zur Flora von Osttirol, II. – Wissenschaftliches Jahrbuch der Tiroler Landesmuseen 1: 347–363.
- Stöhr O. (2009) Notizen zur Flora von Osttirol, III. – Wissenschaftliches Jahrbuch der Tiroler Landesmuseen 2: 291–305.
- Stöhr O. (2011) Notizen zur Flora von Osttirol, IV. – Wissenschaftliches Jahrbuch der Tiroler Landesmuseen 4: 419–433.

- Stöhr O. (2019) Zur Frage der Identität junger Eibenverwilderungen (*Taxus* sp.) im Siedlungsraum von Osttirol (Österreich). – Braunschweiger Geobotanische Arbeiten 13: 93–117.
- Stöhr O. (2021) Beiträge zur Flora von Österreich, V. – *Neilreichia* 12: 61–104.
- Stöhr O., Berger A., Baldinger J., Hohla M., Langer C., Meindl H., Moosbrugger K., Pflugbeil G., Pilsl P., Sauberer N., Schwab R., Thalinger M., Zechmeister H. G. & Gilli C. (2021) *Cyrtomium fortunei*, *Onoclea sensibilis* und *Osmunda regalis* neu für Österreich sowie eine aktualisierte Übersicht neophytischer Gefäß-kryptogamen Österreichs. – *Neilreichia* 12: 105–144.
- Stöhr O. & Brandes D. (2014) Flora der Bahnhöfe von Osttirol. – *Carinthia* II 204: 631–670.
- Stöhr O., Pilsl P., Essl F., Hohla M. & Schröck C. (2007) Beiträge zur Flora von Österreich, II. – Linzer biologische Beiträge 39: 155–292.
- Stöhr O., Pilsl P., Essl F., Wittmann H. & Hohla M. (2009) Beiträge zur Flora von Österreich, III. – Linzer biologische Beiträge 41: 1677–1756.
- Stöhr O., Pilsl P., Schröck C., Nowotny G. & Kaiser R. (2004) Neue Gefäßpflanzenfunde aus Salzburg. – Mitteilungen aus dem Haus der Natur 16: 46–64.
- Stöhr O., Wittmann H., Schröck C., Essl F., Brandstätter G., Hohla M., Niederbichler C. & Kaiser R. (2006) Beiträge zur Flora von Österreich. – *Neilreichia* 4: 139–190.
- Stöhr O., Pilsl P., Staudinger M., Kleesadl G., Essl F., Englisch Th., Lugmair A. & Wittmann H. (2012) Beiträge zur Flora von Österreich, IV. – *Stapfia* 97: 53–136.
- Teyber J. (1909) Über interessante Pflanzen aus Niederösterreich und Dalmatien. – Verhandlungen der zoologisch-botanischen Gesellschaft in Wien 59: 60–68.
- The Angiosperm Phylogeny Group (2016) An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG IV. – *Botanical Journal of the Linnean Society* 181: 1–20.
- The Plant List (2013) Version 1.1. Published on the Internet. – URL: <http://www.theplantlist.org/>.
- Till W. (2011) Berichtenswerte Pflanzenfunde aus Ostösterreich. – Annalen des Naturhistorischen Museums in Wien, B 112: 499–500.
- Tintner J. (2016) *Carex grayi* J. – Carey (Cyperaceae) – first record in Austria. – Annalen des Naturhistorischen Museums Wien, B, 118: 73–77.
- Traxler G. (1958) Die Flora des Leithagebirges und am Neusiedlersee. 1. Ergänzung zum gleichnamigen Buch von Karl Phil. – Burgenländische Heimatblätter 20: 19–29.
- Traxler G. (1959) Die Flora des Leithagebirges und am Neusiedlersee. 2. Ergänzung zum gleichnamigen Buch von Karl Phil. – Burgenländische Heimatblätter 21: 23–35.
- Traxler G. (1967) Floristische Neuigkeiten aus dem Burgenland (I). – Burgenländische Heimatblätter 29: 2–4.
- Traxler G. (1969) Floristische Neuigkeiten aus dem Burgenland (III). – Burgenländische Heimatblätter 31: 49–55.
- Traxler G. (1970) Floristische Neuigkeiten aus dem Burgenland (IV). – Burgenländische Heimatblätter 32: 1–11.
- Traxler G. (1971) Floristische Neuigkeiten aus dem Burgenland (V). – Burgenländische Heimatblätter 33: 49–56.
- Traxler G. (1973) Floristische Neuigkeiten aus dem Burgenland (VII). – Burgenländische Heimatblätter 35: 163–171.
- Traxler G. (1975) Floristische Neuigkeiten aus dem Burgenland (IX). – Burgenländische Heimatblätter 37: 52–64.
- Traxler G. (1977) Floristische Forschung im Burgenland. – Wissenschaftliche Arbeiten Burgenland 58: 91–100.
- Traxler G. (1979) *Cichorium calvum* Schultz Bip. ex Asch., Kahlfrüchtige Wegwarte (Zichorie) – neu für Österreich. – Burgenländische Heimatblätter 41: 91–93.
- Traxler G. (1980) Der Vogelfuß-Hornklee – ein neuer Ankömmling der Pflanzenwelt in Österreich. – Burgenländische Heimatblätter 42: 151–152.
- Traxler G. (1984) Neue Beiträge zur Flora des Burgenlandes. – Burgenländische Heimatblätter 46: 15–28.
- Traxler G. (1989a) Floristische Neuigkeiten aus dem Burgenland (XXII). – Burgenländische Heimatblätter 51: 83–92.
- Traxler G. (1989b) Liste der Gefäßpflanzen des Burgenlandes. 2. Auflage. – Veröffentlichungen der Internationalen Clusius-Forschungsgesellschaft Güssing 7: 1–31.
- van Kleunen M., Dawson W., Essl F., Pergl J., Winter M., Weber E., Kreft H., Weigelt P., Kartesz J., Nishino M., Antonova L. A., Barcelona J. F., Cabezas F. J., Cárdenas D., Cárdenas-Toro J., Castaño N., Chacón E., Chatelain C., Ebel A. L., Figueiredo E., Fuentes N., Groom Q. J., Henderson L., Inderjit, Kupriyanov A., Masciadri S., Meerman J., Morozova O., Moser D., Nickrent D. L., Patzelt A., Pelser P. B., Baptiste M. P.,

- Poopath M., Schulze M., Seebens H., Shu W.-S., Thomas J., Velayos M., Wieringa J. J. & Pyšek P. (2015) Global exchange and accumulation of non-native plants. – *Nature* 525: 100–103.
- van Kleunen M., Essl F., Pergl J., Brundu G., Carboni M., Dullinger S., Early R., González-Moreno P., Groom Q. J., Hulme P. E., Kueffer C., Kühn I., Mágua C., Maurel N., Novoa A., Pareja M., Pyšek P., Seebens H., Tanner R., Touza J., Verbrugge L., Weber E., Dawson W., Kreft H., Weigelt P., Winter M., Klonner G., Talluto M.-V. & Dehnen-Schmutz K. (2018) The changing role of ornamental horticulture in alien plant invasions. – *Biological Reviews* 93: 1421–1437.
- van Kleunen M., Pyšek P., Dawson W., Essl F., Pergl J., Weigelt P., Stein A., Dullinger S., König C., Lenzner B., Maurel N., Moser D., Seebens H., Kartesz J., Nishino M., Aleksanyan A., Ansong M., Antonova L. A., Barcelona J. F., Breckle S. W., Brundu G., Cabezas F. J., Cárdenas D., Cárdenas-Toro J., Castaño N., Chacón E., Chatelain C., Conn B., de Sá Dechoum M., Dufour-Dror J. M., Ebel A. L., Figueiredo E., Fragman-Sapir O., Fuentes N., Groom Q. J., Henderson L., Inderjit, Jogan N., Krestov P., Kupriyanov A., Masciadri S., Meerman J., Morozova O., Nickrent D., Nowak A., Patzelt A., Pelser P. B., Shu W.-S., Thomas J., Uludag A., Velayos M., Verkhosina A., Villaseñor J. L., Weber E., Wieringa J. J., Yazlýk A., Zeddam A., Zykova E. & Winter M. (2019) The Global Naturalized Alien Flora (GloNAF) database. – *Ecology* 100: e02542.
- Vaseková B., Majorošová M., Belčáková I. & Slobodník B. (2022) Distribution and management of *Fallopia japonica* in riparian biotopes in Slovakia and Austria. – *Biosystems Diversity* 30: 442–452.
- Vitek E. (2020) *Asarina procumbens* (Antirrhinaceae), locally naturalised in Austria. – *Annalen des Naturhistorischen Museums in Wien*, B, 122: 245–248.
- Vitek E., Adler W., Mrkvicka A. C., Barta T., Essl F., Gilli C., Gottschlich G., Haberhofer M., Horak E., Lefnaer S., Marschner R., Novak N., Pachschwöll C., Raabe U., Reischütz A., Strudl M., Till W., Tod F. & Walter J. (2021) Neues von der Flora Wiens. – *Neilreichia* 12: 219–290.
- Vitek E., Danihelka J. & Adler W. (2012) *Viola × palmata* L. (Violaceae) new for Austria and Europe. – *Annalen des Naturhistorischen Museums in Wien*, B, 113: 264–265.
- Vitousek P. M., D'Antonio C. M., Loope L. L., Rejmánek M. & Westbrooks R. (1997) Introduced species: a significant component of human-caused global change. – *New Zealand Journal of Ecology* 21: 1–16.
- Vollrath H. (2004) Der Grundgebirgsabschnitt des Inn von Schärding bis Passau. Teil III und Teil IV. – *Berichte der naturwissenschaftlichen Gesellschaft Bayreuth* 25: 149–226.
- Wagenitz G. W. F. (ed.) (1979) *Compositae I: Allgemeiner Teil, Eupatorium-Achillea*. – In: Hegi: *Illustrierte Flora von Mitteleuropa*, Vol. 6, p. 321–366, Paul Parey, Berlin und Hamburg.
- Wallnöfer B. (2006) Über *Carex cristatella*, *C. punctata*, *C. microglochin* und *C. atrofusca* (Cyperaceae) in Oberösterreich und Umgebung. – *Beiträge zur Naturkunde Oberösterreichs* 16: 217–222.
- Wallnöfer B. (2012) On the spread of the North American *Carex vulpinoidea* Michx. (Cyperaceae) in Europe and particularly in Austria. – *Annalen des Naturhistorischen Museums in Wien*, B, 114: 43–58.
- Wallnöfer B. (2014) Über die Verbreitung von *Eleusine indica* und *E. tristachya* (Gramineae) in Österreich. – *Annalen des Naturhistorischen Museums in Wien*, B, 116: 181–190.
- Wallnöfer B. & Adler W. (2015) Über die Einschleppung des nordamerikanischen *Plagiobothrys scouleri* (Boraginaceae) in die Schweiz und nach Österreich. – *Annalen des Naturhistorischen Museums in Wien*, B, 117: 219–226.
- Wallnöfer B. & Barta T. (2012) Zweiter Nachweis von *Beckmannia syzigachne* (Steud.) Fernald (Gramineae) in Niederösterreich. – *Annalen des Naturhistorischen Museums in Wien*, B, 113: 257–259.
- Wallnöfer B. & Essl F. (2016) Overview on alien *Carex* species of section *Cyperoideae* (including *Ovales*) in Europe and the discovery of *Carex scoparia* in Austria. – *Annalen des Naturhistorischen Museums in Wien*, B, 118: 115–127.
- Wallnöfer B., Mereda P. J. & Barta T. (2012) *Silene csereii* Baumg. (Caryophyllaceae) – eine gelegentlich nach Österreich verschleppte ostmediterran-pontische Steppenpflanze. – *Annalen des Naturhistorischen Museums in Wien*, B, 113: 253–256.
- Wallnöfer B., Strudl M. & Pokorný M. (2015) Über fremdländische Arten von *Cephalaria* (Dipsacaceae), *Gilia* (Polemoniaceae), *Ornithopus* (Fabaceae) und *Trachystemon* (Boraginaceae) in Österreich. – *Stapfia* 103: 151–159.
- Walter J. (2006) Vorkommen und Verbreitung der infraspezifischen Sippen des Gemüse-Portulaks (*Portulaca oleracea*, Portulacaceae) in Österreich – Schlüssel und erster Überblick. – *Neilreichia* 4: 235–242.
- Walter J. & Dobeš C. (2004) Morphological characters, geographic distribution and ecology of neophytic *Amaranthus blitum* L. subsp. *emarginatus* in Austria. – *Annalen des Naturhistorischen Museums Wien* B 105: 645–672

- Walter J., Essl F., Niklfeld H. & Fischer M. A. (2002) Gefäßpflanzen. – In: Essl F. & Rabitsch W. (eds), *Neobiota in Österreich*, p. 46–157, Umweltbundesamt, Vienna.
- Walther G.-R., Roques A., Hulme P. E., Sykes M. T., Pyšek P., Kühn I., Zobel M., Bacher S., Botta-Dukát Z. & Bugmann H. (2009) Alien species in a warmer world: risks and opportunities. – *Trends in Ecology & Evolution* 24: 686–693.
- Walz R. (1890) Zur Flora des Leithagebirges. – *Verhandlungen der zoologisch-botanischen Gesellschaft in Wien* 40: 549–570.
- Weber E. (2005) Liste der Farn- und Blütenpflanzen des Burgenlandes. – *Veröffentlichungen der Internationalen Clusius-Forschungsgesellschaft Güssing* 9: 3–45.
- Wilhalm T. (2009) *Digitaria ciliaris* in Europe. – *Willdenowia* 39: 247–259.
- Wilhalm T. & Pagitz K. (2001) *Bromus diandrus* Roth in Österreich. – *Linzer biologische Beiträge* 33: 955–965.
- Wittmann H. & Pflugbeil G. (2017) Beiträge zur Flora des Bundeslandes Salzburg IV. – *Mitteilungen aus dem Haus der Natur* 24: 75–99.
- Wittmann H. & Pilsl P. (1997) Beiträge zur Flora des Bundeslandes Salzburg II. – *Linzer biologische Beiträge* 29: 385–506.
- Wróbel A., Klichowska E., Baiakhetov E., Nowak A., & Nobis M. (2021) Invasion of *Eragrostis albensis* in Central Europe: distribution patterns, taxonomy and phylogenetic insight into the *Eragrostis pilosa* complex. – *Biological Invasions* 23: 2305–2327.
- Zernig K., Berg C., Burkard R., Kniely G. & Schwager P. (2017) Bemerkenswertes zur Flora der Steiermark 5. – *Joannea Botanik* 14: 261–275.
- Zernig K., Berg C., Heber G., Kniely G., Leonhartsberger S., & Sengl P. (2015) Bemerkenswertes zur Flora der Steiermark 3. – *Joannea Botanik* 12: 197–229.
- Zernig K., Berg C., Heber G., Kniely G., Leonhartsberger S., & Sengl P. (2016) Bemerkenswertes zur Flora der Steiermark 4. – *Joannea Botanik* 13: 167–185.
- Zernig K., Berg C., Heber G., Kniely G., Leonhartsberger S. & Sengl P. (2018) Bemerkenswertes zur Flora der Steiermark 6. – *Joannea Botanik* 15: 215–245.
- Zernig K., Berg C., Heber G., Kniely G., Leonhartsberger S. & Sengl P. (2019) Bemerkenswertes zur Flora der Steiermark 7. – *Joannea Botanik* 16: 161–184.
- Zernig K., Berg C., Leonhartsberger S. & Vitek E. (2022) Bemerkenswertes zur Flora der Steiermark 9. – *Joannea Botanik* 18: 197–229.
- Zernig K., Heber G., Kniely G., Leonhartsberger S. & Pötl M. (2020) Bemerkenswertes zur Flora der Steiermark 8. – *Joannea Botanik* 17: 141–161.
- Zidorn C. (2008) *Veronica arguteserrata* in Innsbruck – Erstnachweis für Österreich. – *Neilreichia* 5: 199–202.
- Zidorn C. (2010) Floristische Notizen aus Osttirol (3). – *Berichte des naturwissenschaftlichen-medizinischen Vereins in Innsbruck* 96: 59–71.
- ZoBoDat (2022) ZoBoDat: Datenbank ZoBoDat. – URL: <https://www.zobodat.at/belege.php> (Accessed September 2022).

## Přehled rakouských neofytů (druhé vydání)

Dvaadvacet let od prvního vydání rakouského seznamu nepůvodních cévnatých rostlin zavlečených po roce 1492 (tj. neofytů) přináší tento článek zcela revidované druhé vydání. Tato aktualizace vychází z údajů o neofytích zjištěných v Rakousku do září 2022; uvádíme informace o regionálním rozšíření ve spolkových zemích, invazním statusu, stanovištích, prvních nálezech, oblastech původu, cestách zavlečení, šíření a impaktu. Současné neofytí flóra obsahuje 1615 taxonů – 1388 druhů, 7 agregátů, 138 hybridů, 70 poddruhů a 12 nižších infraspecifických taxonů, patřících do 135 čeledí. Nově bylo zjištěno 548 taxonů, což představuje 45% nárůst oproti prvnímu seznamu; 99 taxonů bylo naopak vyřazeno kvůli chybám nebo pochybným záznamům, některé jsou v současnosti považovány za původní nebo archeofyty. Většina neofytů (1180) se v Rakousku vyskytuje pouze přeležitostně, 207 druhů je lokálně naturalizovaných a 226 druhů považujeme za široce rozšířené. Nejvíce neofytů se vyskytuje na ruderálních (1420 taxonů) a vegetálních (204 taxonů) stanovištích. Nejvýznamnějšími oblastmi původu rakouských neofytů jsou temperátní Asie (761 druhů), Evropa (607), Severní Amerika (389) a Afrika (311). Zatímco v roce 1850 bylo v Rakousku známo 118 neofytů, v roce 1900 tento počet vzrostl na 265, v roce 1950 na 514, v roce 2000 na 1084 a v současnosti na 1615 taxonů. Záznamy o nově zavlečených druzích vykazují obzvláště výrazný nárůst od poloviny 20. století; 1056 druhů (65 %) bylo poprvé zaznamenáno po roce 1950 a 496 druhů (31 %) po roce 2000. U 1016 druhů se podařilo zjistit způsob, jakým byly zavlečeny, nejčastější jsou zplanění (912 druhů) a neúmyslné zavlečení (118 druhů). Pro 73 taxonů jsou k dispozici důkazy o negativních důsledcích – 48 druhů má negativní dopad na biodiverzitu, 26 druhů na zemědělství, devět na lesnictví, šest na lidské zdraví, tři na vodní hospodářství a jeden na zdraví zvířat.

**How to cite:** Glaser M., Gilli C., Griebl N., Hohla M., Pflugbeil G., Stöhr O., Pils P., Ehrendorfer-Schratt L., Niklfeld H., Walter J., Pagitz K. & Essl F. (2025) Checklist of Austrian neophytes (2nd edition). – Preslia 97: 413–539.

Preslia, a journal of the Czech Botanical Society  
© Česká botanická společnost / Czech Botanical Society, Praha 2025  
<https://www.preslia.cz>

This is an open access article published under a CC BY license, which permits use, distribution and reproduction in any medium, provided the original work is properly cited (Creative Commons Attribution 4.0 International License, <https://creativecommons.org/licenses/by/4.0/>).

**Appendix 1.** Taxa list ( $n = 1,615$ ) included in the second edition of the checklist of neophytes in Austria. Taxa are arranged alphabetically. Taxon names follow Fischer et al. (2008) with updates from Gilli et al. (2019a) and Schrott-Ehrendorfer et al. (2022), family codes are the first five letters of the family (The Angiosperm Phylogeny Group 2016). For each taxon the following information is given: a superscript EU after the taxon name signifies it is listed on the list of invasive alien species of European Union concern (European Commission 2019), Questions = do questions remain regarding taxon (t = taxonomy, a = archaeophyte status possible, c = aneophytes), its invasion status for Austria and its federal states (e = established, le = locally established, c = casual occurrence, x = taxon was recorded in error, f = taxon only occurs in cultivation, a = taxon is cultivated in the wild, ? = uncertainties about status), habitat affiliation (x = taxon occurs in this habitat), first record, native range on the TDWG-1 level (Eur = Europe, Afr = Africa, Asi-Tem = temperate Asia, Asi-Tro = tropical Asia, Aus = Australasia, Pac = Pacific Islands, NAm = North America, SAm = South America), pathway of introduction (rel = release, esc = escape, con = contaminant, sto = stowaway, cor = corridor, una = without human help “unaided”, hyb = taxon is a hybrid occurring only in its introduced range) and impacts (xx = large impact, x = impact, (x) = moderate impact, x? = uncertain impact), New taxon = if the taxon is new to the second edition presented here, the column “Source” includes relevant sources for the taxon in Austria.

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & screes	Ruderal habitats	Seggetal habitats	First record	Native Range	
<i>Abelmoschus manihot</i>	Malva	x c							c														x	2018	Asi-Tem, Asi-Tro	
<i>Abies cephalonica</i>	Pinac	le?	le?									x													2005	Eur
<i>Abies grandis</i>	Pinac	x c	c		c							x													2005	NAm
<i>Abies nordmanniana</i>	Pinac	x c				c						x													2005	Asi-Tem
<i>Abutilon theophrasti</i>	Malva	e e e e e	e	c c c c c																			x x	1874	Asi-Tem	
<i>Acaena buchananii</i>	Rosac	x c								c													x	2008	Aus	
<i>Acaena inermis</i>	Rosac	c				c	c																x	2002	Aus	
<i>Acaena microphylla</i>	Rosac	c					c																x	1997	Aus	
<i>Acalypha virginica</i>	Epho	c				c																	x x	1948	NAm	
<i>Acanthus hungaricus</i>	Acant	x le	le							c													x	2013	Eur	
<i>Acer cappadocicum</i>	Sapin	x c					c																x	1996	Asi-Tem, Asi-Tro	
<i>Acer ginnala</i>	Sapin	c	c c c c		c c c																		x	1988	Asi-Tem	
<i>Acer monspessulanum</i>	Sapin		le	le	c c			?	c													x	1960	Eur, Afr, Asi-Tem		
<i>Acer negundo</i>	Sapin		e e e e e	e e e	e e e			le	e e	x	x											x	1917	NAm, SAm		
<i>Acer palmatum</i>	Sapin	x c					c															x	2002	Asi-Tem		
<i>Acer saccharinum</i>	Sapin		le?	c	le?	c	c	le?	e?	c	c		c	x	x							x	1971	NAm		
<i>Achillea ageratum</i>	Aster	c				c																x	1948	Eur, Afr		
<i>Achillea clypeolata</i>	Aster	x c				c																x	2018	Eur, Asi-Tem		
<i>Achillea crithmifolia</i>	Aster	c	c c c c		c			c														x	1821	Eur, Asi-Tem		
<i>Achillea filipendulina</i>	Aster	c c c c c		c	c			c		c												x	1971	Asi-Tem		
<i>Achyranthes aspera</i>	Amara	x c				c																x	2015	Afr, Asi-Tem, Asi-Tro, Aus, Pac		
<i>Aconitum ×stoerkianum</i>	Ranun	x c				x			c													x	2005			
<i>Aconitum carmichaelii</i>	Ranun	x c				c	c c c															x	2011	Asi-Tem		
<i>Acorus calamus</i>	Acora	e e e e e	e e e	e	c	le	le						x x										1794	Asi-Tem, Asi-Tro		
<i>Acorus gramineus</i>	Acora	c c											x x										1977	Asi-Tem, Asi-Tro		
<i>Actinidia arguta</i>	Actin	x c			c? c?			c														x	2019	Asi-Tem		



Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carnithia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Actinidia deliciosa</i>	Actin		c		c	c	c		c			c	c					x		2002	Asi-Tem				
<i>Adiantum capillus-veneris</i>	Pteri		x le?	le? c	le?													x x		2020	Eur, Afr, Asi-Tem, Asi-Tro, Aus, Pac, NAm, SAm				
<i>Adonis annua</i>	Ranun		c	c c c c c								c						x		1846	Eur, Afr, Asi-Tem				
<i>Aegilops cylindrica</i>	Poace		le c	c le c		c												x		1947	Eur, Afr, Asi-Tem, Asi-Tro				
<i>Aesculus hippocastanum</i>	Sapin		e e? e e? e?	e e? e e e c	x x												x		1846	Eur, Asi-Tem					
<i>Agastache foeniculum</i>	Lamia		c	c c														x		1999	NAm				
<i>Agastache rugosa</i>	Lamia		x c	c c					c c									x		2004	Asi-Tem, Asi-Tro				
<i>Ageratina altissima</i>	Aster		le	le	c	c											x x			1930	NAm				
<i>Ageratum houstonianum</i>	Aster		c c	c c c c														x		1960	NAm, SAm				
<i>Agropyron desertorum</i>	Poace		c	c														x		1965	Eur, Asi-Tem, Asi-Tro				
<i>Agrostis castellana</i>	Poace		c		c c c				c								x		1974	Eur, Afr, Asi-Tem					
<i>Agrostis scabra</i> s.orig.	Poace		e	e		c											x		1909	Asi-Tem, NAm					
<i>Ailanthus altissima</i> <sup>EU</sup>	Simar		e e e e e e	e le c e c	x x												x x		1920	Asi-Tem					
<i>Akebia quinata</i>	Lardi		x le		c le											x		x		2006	Asi-Tem				
<i>Albizia julibrissin</i>	Fabac		x c c c	c													x		2019	Asi-Tem, Asi-Tro					
<i>Alcea rosea</i>	Malva		c c c c c	c c c c c												x		x		1821					
<i>Alcea rugosa</i>	Malva		x c						c								x		2014	Eur, Asi-Tem					
<i>Alchemilla cymatophylla</i>	Rosac		le?		le?	c									x		x		1985	Eur, Asi-Tem					
<i>Alchemilla mollis</i> s.str.	Rosac		e c c c c c	c c le c e le	x x x											x x		x x		1944	Eur, Asi-Tem				
<i>Alchemilla sericata</i>	Rosac		x c		c c											x		x		2015	Eur, Asi-Tem				
<i>Alchemilla speciosa</i>	Rosac		le						le							x		x		1977	Eur, Asi-Tem				
<i>Alisma subcordatum</i>	Alism		x c		c										x			x		2007	NAm				
<i>Alkekengi officinarum</i> var. <i>franchetii</i>	Solan		e	c c c c c	e											x		x		1960	Asi-Tem				
<i>Allium atroviolaceum</i>	Amary		x c c c													x		x		1998	Eur, Asi-Tem				
<i>Allium cepa</i> (incl. var. <i>ascalonicum</i> )	Amary		c x c c c c	c c c	c c c											x		x							
<i>Allium cristophii</i>	Amary		x c c c c													x		x		1992	Asi-Tem				
<i>Allium fistulosum</i>	Amary		c c		c c				c							x		x							
<i>Allium hollandicum</i>	Amary		x c c c						c							x		x		2010	Asi-Tem				
<i>Allium moly</i>	Amary		x c		c											x		x		2011	Eur				
<i>Allium multibulbosum</i>	Amary		c	c	c				c				c			x		x		1773	Eur, Afr, Asi-Tem				
<i>Allium neapolitanum</i>	Amary		x c	?	c										x		x		2019	Eur, Afr, Asi-Tem					
<i>Allium oreophilum</i>	Amary		x c		c										x		x		2012	Asi-Tem, Asi-Tro					
<i>Allium paradoxum</i>	Amary		le	le	le				c	e		x			x		x		1970	Asi-Tem					
<i>Allium porrum</i>	Amary		c c	c c	c c				c	c		c			x	x x	x x								
<i>Allium rosenorum</i>	Amary		x c	c c								x			x	x	x		2008	Asi-Tem					
<i>Allium sativum</i>	Amary		c e e e c	c c c												x	x	x							
<i>Allium stipitatum</i>	Amary		x le?	c le?												x	x	x		2017	Asi-Tem, Asi-Tro				
<i>Allium subhirsutum</i>	Amary		c		c										x	x	x		2000	Eur, Afr, Asi-Tem					
<i>Allium tuberosum</i>	Amary		x le	c c le					c						x	x	x		2010	Asi-Tem, Asi-Tro					
<i>Alnus cordata</i>	Betul		x c		c c	c?								x		x	x		2001	Eur					

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
--	---	--------

- esc Walter et al. 2002, Hofbauer 2005, Hohla et al. 2009, Pflugbeil & Pils 2013, Leonhartsberger 2015, Pagitz & Lechner-Pagitz 2015, Amann 2016
- esc Sauberer & Mrkvicka 2020, Stöhr et al. 2021
- con, sto Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009
- Forstner & Hübl 1971, Fischer et al. 2008, Niklfeld 2016, JACQ 2022
- rel, esc Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Brandes 2015, Pagitz et al. 2023
- esc Hohla et al. 2000, Fischer & Niklfeld 2011
- esc Gilli et al. 2020, Hohla 2022, Stöhr unpubl.
- esc Hamburger 1948, Stöhr et al. 2007, Fischer et al. 2008
- esc Janchen 1956–1960, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
- esc Forstner & Hübl 1971, Walter et al. 2002
- con, sto Melzer 1993, Fischer et al. 2008, Hohla 2012b
- esc Teyber 1909, Fischer et al. 2008, Hohla et al. 2009
- esc xx (x) Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016
- esc Niklfeld 2015, Zernig et al. 2019
- esc Forum Flora Austria 2022, Pachschwöll et al. 2025
- esc Hamburger 1948, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
- esc Amann 2016
- esc, con Grims 1988, Fischer et al. 2008, Hohla et al. 2009
- esc Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016, Vitek et al. 2021, Pagitz et al. 2023, Leonhartsberger & Wendelin unpubl., Fröhner unpubl.
- esc Hohla et al. 2015, Fröhner unpubl.
- esc Fröhner 1986, Fischer et al. 2008
- esc Hohla et al. 2009
- esc Franz 1993, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023, Barta unpubl., Stöhr unpubl.
- esc Fischer & Niklfeld 2001, Sauberer et al. 2020, Haberler unpubl.
- esc Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, JACQ 2022, Pachschwöll et al. 2025
- esc Melzer & Barta 1992, Fischer et al. 2008, Stöhr et al. 2012
- esc Fischer et al. 2008, Hohla et al. 2009
- esc Gilli et al. 2020, Gilli et al. 2021, Forum Flora Austria 2022, Stöhr unpubl.
- esc Hohla 2011b
- esc Jacquin 1773, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009
- esc Nadler & Haug 2021, Forum Flora Austria 2022, Vasold unpubl.
- esc Hohla 2012b
- esc Adler & Mrkvicka 2003a, Pflugbeil & Pils 2013, Gilli et al. 2019b, Pagitz et al. 2023
- esc Murr 1923, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
- esc JACQ 2022, Barta unpubl.
- esc Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
- esc Gilli et al. 2021
- esc Hohla 2000, Hohla et al. 2009
- esc Leonhartsberger 2018, Gilli et al. 2020, Forum Flora Austria 2022, Stöhr unpubl.
- esc Stöhr et al. 2006, Hohla et al. 2009, Pflugbeil & Pils 2013

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Scenical habitats	First record	Native Range		
<i>Alnus japonica</i>	Betul	x	c							c														x	2011	Asi-Tem	
<i>Alopecurus myosuroides</i>	Poace	x	e	e	e	e	e	c	e	c	c	c	c	c										x	x	1842	Eur, Afr, Asi-Tem, Asi-Tro
<i>Alopecurus rendlei</i>	Poace		c		c	c		c	c															x	1826	Eur, Afr, Asi-Tem	
<i>Althaea cannabina</i>	Malva		le?le?	?	c	c	c																	x	1756	Eur, Asi-Tem	
<i>Althaea taurinensis</i>	Malva	t	x	e	e	e	e	e	c	c	c	c	c	c	x	x							x	1900	Eur, Asi-Tem		
<i>Alyssum hirsutum</i>	Brass		c		c	c																		x	1997	Eur, Asi-Tem	
<i>Alyssum strigosum</i>	Brass		c		c	?																		x	1883	Eur, Asi-Tem	
<i>Amaranthus albus</i>	Amara		e	e	e	e	e	e	e	c	c	c	c	c									x	x	1916	NAm	
<i>Amaranthus blitoides</i>	Amara		e	e	e	e	c		c	?	c												x	x	1916	NAm	
<i>Amaranthus bouchonii</i>	Amara		c	?	c	c	c	c	c	c	c												x	x	1964	NAm, SAm	
<i>Amaranthus caudatus</i>	Amara		c	c	c	c	c	c	c	c	c	c	c	c									x	x	1846	SAm	
<i>Amaranthus crispus</i> s.str.	Amara		c	c	c	c	c	c	c														x	x	1914	SAm	
<i>Amaranthus cruentus</i>	Amara		c	c	c	c	c	c	c	c	c	c	c	c									x	x	1903	NAm, SAm	
<i>Amaranthus cruentus</i> × <i>A. retroflexus</i>	Amara		c		c	c																		x	x	1924	
<i>Amaranthus deflexus</i>	Amara		e	le	c	e	c			c		c											x	x	1963	SAm	
<i>Amaranthus emarginatus</i> var. <i>emarginatus</i>	Amara	x	e	le?	c							e												x	x	2006	SAm
<i>Amaranthus emarginatus</i> var. <i>pseudogracilis</i>	Amara	x	e	le	e	c	c	c	c	c	c	c	c	c									x	x	1986	SAm	
<i>Amaranthus hybridus</i> s.str.	Amara		c	c	c	c	c	c	c	c	c	c	c	c									x	x	1949	NAm, SAm	
<i>Amaranthus</i> <i>hypochondriacus</i>	Amara		c	c	c	c	c	c	c	c	c	c	c	c									x	x	1971	NAm	
<i>Amaranthus muricatus</i>	Amara		c		c																			x	x	2001	SAm
<i>Amaranthus palmeri</i>	Amara		c			c																		x	x	1951	NAm
<i>Amaranthus powellii</i>	Amara		e	e	e	e	e	e	e	e	e	e	e	e									x	x	1935	NAm, SAm	
<i>Amaranthus powellii</i> × <i>A. retroflexus</i>	Amara		c		c	c																		x	x	1955	
<i>Amaranthus retroflexus</i>	Amara		e	e	e	e	e	e	e	e	e	e	e	e									x	x	1821	NAm	
<i>Amaranthus standleyanus</i>	Amara		c	c	c	c	c	c	c														x	x	1958	SAm	
<i>Amaranthus tamariscinus</i>	Amara		c			c																		x	x	1950	NAm
<i>Amaranthus tuberculatus</i>	Amara		c			c																		x	x	1949	NAm
<i>Amaranthus viridis</i>	Amara		c	?	c	c	c	c	c														x	x	1913	SAm	
<i>Amberboa moschata</i>	Aster	x	c								c													x	2008	Asi-Tem	
<i>Ambrosia artemisiifolia</i>	Aster		e	e	e	e	e	e	e	e	e	e	e	e									x	x	1883	NAm	
<i>Ambrosia psilostachya</i>	Aster		c			c				c	c													x	1952	NAm	
<i>Ambrosia trifida</i>	Aster		c			c	c	c	c															x	x	1948	NAm
<i>Amelanchier lamarckii</i>	Rosac	x	c	c	c	c	c	c	c	c	c	c	c	c									x	2008	NAm		
<i>Amelanchier spicata</i>	Rosac		le?	le?																				x	1923	NAm	
<i>Ammi majus</i>	Apiac		le	c	le	c	c	c	c	c	c	c	c	c									x	x	1756	Eur, Afr, Asi-Tem, Asi-Tro	
<i>Amorpha fruticosa</i>	Fabac		e	e	e	e	le	c	c	c	c	c	c	c	x								x	1971	NAm		
<i>Amsinckia calycina</i>	Borag		c		c																			x	1996	SAm	
<i>Anacyclus clavatus</i>	Aster		c			c																		x	1948	Eur, Afr, Asi-Tem	
<i>Anacyclus radiatus</i>	Aster		c			c																		x	1994	Eur, Afr	

## Introduction

			Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Pilsl & Pflugbeil 2012, Pflugbeil & Pilsl 2013	
sto	(x)		Dolliner 1842, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Polatschek & Neuner 2013, Amann 2016, Forum Flora Austria 2022, Stöhr unpubl.	
sto			Hamburger 1948, Walter et al. 2002, Fischer et al. 2008, Pflugbeil & Pilsl 2013	
esc			Kramer 1756, Walter et al. 2002, Adler & Mrkvicka 2003a, Melzer & Barta 2003, Hohla 2021, Tkalcscs unpubl.	
esc			Forum Flora Austria 2022, Herbarium WU 2022, Kleesadl & Schröck 2022, Király unpubl., Pagitz unpubl., Stöhr unpubl.	
esc			Schneeweiß 2000, Melzer & Barta 2003	
sto, cor			Schneeweiß 2000, Walter et al. 2002, Melzer & Barta 2008	
sto			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Stöhr & Brandes 2014, Amann 2016	
sto			Forstner & Hübl 1971, Fischer et al. 2008, Pflugbeil & Pilsl 2013	
sto			Melzer 1964, Fischer et al. 2008, Pflugbeil & Pilsl 2013, Hohla et al. 2019	
hyb			Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013	
hyb			Forstner & Hübl 1971, Fischer et al. 2008, Hohla 2018b	
hyb			Murr 1903, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pilsl 2013	
hyb			Murr 1931, Walter et al. 2002	
			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2019, JACQ 2022, Pachschwöll et al. 2025	
			Pachschwöll et al. 2025, Pagitz unpubl.	
			Walter & Dobeš 2004, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Pagitz et al. 2023, Barta unpubl., Thalinger & Pagitz unpubl.	
			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013	
			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Polatschek & Neuner 2013, Pachschwöll et al. 2025	
			Walter et al. 2002, Fischer et al. 2008	
			Melzer 1955, Walter et al. 2002	
xx			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Brandes 2015	
			Melzer 1955, Walter et al. 2002	
xx			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Brandes 2015	
			Melzer 1959, Fischer et al. 2008	
			Melzer 1959	
			Melzer 1955	
esc			Melzer 1988b, Fischer et al. 2008, Hohla et al. 2009, Niklfeld 2016	
sto, cor	xx	xx	Brandes 2011	
sto, cor	xx	(x)	Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Brandes 2015, Amann 2016, JACQ 2022	
esc		(x)	Karrer 2021	
esc		(x)	Melzer 1954, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013	
esc			Hohla 2011a, Smettan 2012, Heber & Zernig 2013, Pflugbeil & Pilsl 2013, Pagitz et al. 2023	
esc			Neumayer 1924, Fischer et al. 2008, JACQ 2022, Adler unpubl., Reich et al. unpubl.	
sto			Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Follak 2015, Stöhr unpubl.	
esc	x?		Forstner & Hübl 1971, Polatschek 2000, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Zernig et al. 2019	
con, sto			Fischer et al. 2008, Wallnöfer & Adler 2015	
			Melzer 1954, Walter et al. 2002	
			Melzer 1995, Walter et al. 2002	

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Anacyclus valentinus</i>	Aster	c		c													x		1948	Eur, Afr					
<i>Anaphalis margaritacea</i>	Aster	c c c c c c c c c c c c														x			1838	Asi-Tem, Asi-Tro, NAm					
<i>Anchusa azurea</i>	Borag	c c c c c c c c c c c															x		1814	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Anchusa ochroleuca</i>	Borag	c c c															x		1927	Eur, Asi-Tem					
<i>Andryala integrifolia</i>	Aster	c c														x		1948	Eur, Afr						
<i>Anemone ×hybrida</i>	Ranun	c c c c c c c														x		1977							
<i>Anemone apennina</i>	Ranun	le c le le													x x		x		1851	Eur					
<i>Anemone blanda</i>	Ranun	le le le c c c x x													x x		x		1998	Eur, Asi-Tem					
<i>Anemone tomentosa</i>	Ranun	x c													x		x		2014	Asi-Tem					
<i>Anethum graveolens</i>	Apiac	c c c c c c c c c c c c														x x									
<i>Angelica archangelica</i>	Apiac	e c e e e c x c													x				1767	Eur, Asi-Tem					
<i>Anthoxanthum aristatum</i>	Poace	e e c c c c													x		x x		1952	Eur, Afr, Asi-Tem					
<i>Anthriscus cerefolium</i> var. <i>cerefolium</i>	Apiac	le c c c le c c le?													x		x		1846	Eur, Asi-Tem					
<i>Antirrhinum majus</i> s.str.	Plant	le le le le c c c le? c c c													x x x	x	x		1756	Eur					
<i>Aplos americana</i>	Apiac	c		c											x		x		1988	NAm					
<i>Aquilegia canadensis</i>	Ranun	x c													x				2012	NAm					
<i>Aquilegia chrysanth</i>	Ranun	x c													x		x		2002	NAm					
<i>Aquilegia flavescens</i>	Ranun	x c													x		x		2002	NAm					
<i>Aquilegia glandulosa</i>	Ranun	x c c		c											x		x		2013	Asi-Tem					
<i>Arabis caucasica</i>	Brass	c c c c c c c													x x	x	x		1909	Eur, Afr, Asi-Tem					
<i>Arabis procurrens</i>	Brass	le c c c													x		x		1947	Eur					
<i>Arabis rosea</i>	Brass	x le le													x		x		2008	Eur					
<i>Arabis verna</i>	Brass	x c													x		x		1940	Eur, Afr, Asi-Tem					
<i>Aralia elata</i>	Arali	le		le c le? c											x		x		1909	Asi-Tem					
<i>Argemone mexicana</i>	Papav	c c c													x		x		1947	NAm, SAm					
<i>Aristolochia macrophylla</i>	Arist	x c													x		x		1899	NAm					
<i>Armoracia rusticana</i>	Brass	c e e e e e e e e e e													x		x		1994	NAm					
<i>Arnica chamissonis</i>	Aster	x le													x		x								
<i>Artemisia abrotanum</i>	Aster	c ? c c c c c													x		x		1971	Eur, Asi-Tem					
<i>Artemisia annua</i>	Aster	le? le? le? le? c c c													x		x		1867	Eur, Asi-Tem					
<i>Artemisia biennis</i>	Aster	x le?													x		x		2005	NAm					
<i>Artemisia dracunculus</i>	Aster	c ? c c c													x		x		1971	Eur, Asi-Tem, Asi-Tro, NAm					
<i>Artemisia gilvescens</i>	Aster	x c													x		x		2016	Asi-Tem					
<i>Artemisia repens</i>	Aster	x le c le le													x		x		1946	Eur, Asi-Tem					
<i>Artemisia tournefortiana</i>	Aster	x c													x		x		2022	Asi-Tem, Asi-Tro					
<i>Artemisia verlotiorum</i>	Aster	e e e e e e e e c e e													x	x x	x		1923	Asi-Tem					
<i>Arum italicum</i>	Arace	x le c le c c c													x		x		2010	Eur, Afr, Asi-Tem					
<i>Arundo donax</i>	Poace	x c c													x	x x	x		2002	Asi-Tem, Asi-Tro, SAm					
<i>Asarina procumbens</i>	Plant	x le		le? le											x		x		2004	Eur					

## Introduction

		Source
		Environmental Agriculture Silviculture Water management Human health Animal health
esc		Kögeler 1949, Walter et al. 2002 Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022 Schultes 1814, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Melzer 1962b, Fischer et al. 2008 Melzer 1954
esc		Speta 1978, Hohla et al. 2009, Pflugbeil & Pils 2013, Vitek et al. 2021, Herbarium WU 2022, JACQ 2022, Hohla unpubl., Reich et al. unpubl., Reich et al.
esc		Fenzl 1852, Fischer et al. 2008, Gilli et al. 2021, Niklfeld & Schrott-Ehrendorfer 2022, Adler unpubl. Stöhr et al. 2006, Stöhr et al. 2007, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pachschwöll et al. unpubl. Pflugbeil & Moosbrugger 2016
esc		Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013 Crantz 1767, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz unpubl.
esc		Melzer 1954, Melzer & Barta 1997, Fischer et al. 2008, Hohla et al. 2009, Raabe unpubl. Neilreich 1846, Fischer et al. 2008, Hohla 2009, Pflugbeil & Pils 2013, Leonhartsberger 2015, Niklfeld & Schrott-Ehrendorfer 2022, Pagitz et al. 2023
esc		Kramer 1756, Hartl et al. 1992, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022
esc		Melzer 1991, Fischer et al. 2008
esc		Polatschek & Neuner 2013
esc		Pflugbeil & Pils 2013
esc		Schröck et al. 2004, Pflugbeil & Pils 2013
esc		Sauberer & Till 2015
esc		Dalla Torre von Thunberg-Sternhof & Sarnthein 1909, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Schratt-Ehrendorfer et al. 2000, Fischer et al. 2008, Pflugbeil & Pils 2013, Stöhr unpubl.
esc		Gilli et al. 2020
esc		Pflugbeil & Pils 2013
esc		Dalla Torre von Thunberg-Sternhof & Sarnthein 1909, Walter et al. 2002, Berg et al. 2009, Hohla 2012b, Gilli et al. 2021
esc		Hamburger 1948, Fischer et al. 2008
esc		Hohla 2009, Pflugbeil & Pils 2013, Forum Flora Austria 2022, Stöhr unpubl.
esc		Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
con, sto		Pagitz 2004, Pagitz unpubl.
sto	(x)	Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli unpubl. Adler & Mrkvicka 2003a, Fischer et al. 2008, Fischer & Niklfeld 2011, Pflugbeil & Pils 2013, Kleesadl & Schröck 2021 Pflugbeil & Pils 2013, Amann 2016
sto		Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Niklfeld & Schrott-Ehrendorfer 2022, Gilli unpubl., Barta unpubl. Hohla 2018a Rechinger 1950, Fischer et al. 2008, Pachschwöll unpubl. Hohla 2023
esc		Murr 1923, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Brandes 2015 Hohla 2011a, Bernhardt et al. 2013, Pflugbeil & Pils 2013, Niklfeld 2016, Zernig et al. 2022
esc		Pflugbeil & Pils 2013, Hohla 2014, Gilli et al. 2020
esc		Vitek 2020, Vitek et al. 2021

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Asclepias syriaca</i> <sup>EU</sup>	Apocyn		e e e e e	e e e e e	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	x	1797	NAm		
<i>Asclepias tuberosa</i>	Apocyn	x c							c											x	2003	NAm			
<i>Asparagus verticillatus</i>	Aspar	x le?	c le?														x				x	2017	Eur, Asi-Tem		
<i>Asperula orientalis</i>	Rubia	c	c					c					c							x	1904	Asi-Tem			
<i>Aphodelus fistulosus</i>	Aspho	c	c																	x	1950	Eur, Afr, Asi-Tem			
<i>Asplenium ceterach</i> subsp. <i>bivalens</i>	Asple	x c						c									x			x	1962	Eur, Asi-Tem			
<i>Asplenium ceterach</i> subsp. <i>ceterach</i>	Asple	x le	c le		c			le	le	c		c					x			x	1837	Eur, Afr, Asi-Tem, Asi-Tro			
<i>Astilbe ×arendsii</i>	Saxif	x c							c	c	c						x			x	2018				
<i>Astilbe chinensis</i>	Saxif	x c							c	c						x			x	2003	Asi-Tem, Asi-Tro				
<i>Astilbe japonica</i>	Saxif	c	c c	c	c	c	c	c	c	c	c	c	c	c	x x			x	x	1971	Asi-Tem				
<i>Astilbe rubra</i>	Saxif	x c						c		c						x			x	2003	Asi-Tem, Asi-Tro				
<i>Astilboides tabularis</i>	Saxif	x c	c													x			x	2016	Asi-Tem				
<i>Astragalus falcatus</i>	Fabac	c		c												x			x	1971	Eur, Asi-Tem				
<i>Astragalus galeiformis</i>	Fabac	x c	c													x			x	1977	Eur, Asi-Tem				
<i>Atocion armeria</i>	Caryo	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	x			x	x	1836	Eur, Asi-Tem				
<i>Atriplex hortensis</i>	Amara	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	x			x							
<i>Atriplex littoralis</i> s.str.	Amara	x c		x	x							x	c			x			x	1917	Eur, Afr, Asi-Tem				
<i>Atriplex micrantha</i>	Amara	e e	e e	e c	e c	e c	le								x			x	x	1990	Eur				
<i>Aubrieta ×cultorum</i>	Brass	c c							c	c						x			x	1976					
<i>Aucuba japonica</i>	Garry	x c		c	c										x			x	2004	Asi-Tem					
<i>Aurinia petraea</i>	Brass	c		c											x			x	1931	Eur					
<i>Aurinia sinuata</i>	Brass	x c							c						x			x	2018	Eur					
<i>Avellinia festucoidea</i>	Poace	x c		c											x			x	1949	Eur, Afr, Asi-Tem					
<i>Avena barbata</i>	Poace	c		c							c c				x			x	1954	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Avena sativa</i>	Poace	c c c c c c c c c c													x			x							
<i>Avena sterilis</i>	Poace	x c		c c c							c c				x			x	x	1859	Eur, Afr, Asi-Tem, Asi-Tro				
<i>Avena strigosa</i>	Poace	c c c c c c c ?													x			x	1854	Eur					
<i>Avena vilis</i>	Poace	a, t x c		c				c	c	?					x			x	x	1880					
<i>Azolla filiculoides</i>	Salvi	e	e e?	c	c										x			x		1958	NAm, SAm				
<i>Barbarea intermedia</i>	Brass	e c	c c c c c	c	c	c	le	c	e	e					x			x	1909	Eur, Afr					
<i>Barbarea intermedia</i> × <i>B. vulgaris</i>	Brass	c								c					x			x	1907						
<i>Barbarea rupicola</i>	Brass	x c	c	c	c	c									x			x	2016	Eur					
<i>Barbarea verna</i>	Brass	e	c c c	c	c	c	?				e				x			x	1966	Eur, Asi-Tem					
<i>Bassia hyssopifolia</i>	Amara	c c c		c											x			x	1890	Eur, Asi-Tem, Asi-Tro					
<i>Bassia scoparia</i> (incl. subsp. <i>densiflora</i> )	Amara	x e e e e c e?	c c c c c												x			x	1756	Eur, Asi-Tem, Asi-Tro					

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc	x		Host 1797, Fischer et al. 2008, Hohla et al. 2009, Fischer & Niklfeld 2011, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Amann 2016, Gilli & Niklfeld 2018, Niklfeld & Schrott-Ehrendorfer 2022, Stöhr unpubl.
esc			Pflugbeil & Pils 2013
esc			Danigelka et al. 2017, Gilli et al. 2020
			Walter et al. 2002, JACQ 2022
			Janchen 1977, Walter et al. 2002
esc			Stöhr et al. 2021
esc			Stöhr et al. 2021
esc			Pagitz et al. 2023, Stöhr unpubl.
esc			Stöhr et al. 2006, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc			Forstner & Hübl 1971, Walter et al. 2002, Fischer et al. 2008, Hohla 2011b, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016, Gilli unpubl.
esc			Pflugbeil & Pils 2013, Hohla 2018a
esc			Hohla 2016
			Forstner & Hübl 1971, Walter et al. 2002
			Gilli & Niklfeld 2018
esc			Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013
			Gilli et al. 2021
esc, cor			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Hohla 2014, Pagitz & Lechner-Pagitz 2015, Pachschwöll et al. 2025
esc			Walter et al. 2002, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc			Essl 2005, Hohla 2018a
			Walter et al. 2002
			JACQ 2022, Pils unpubl.
			Kögeler 1949
			Walter et al. 2002, Fischer et al. 2008, Amann 2016
esc, sto			Walter et al. 2002, Adler & Mrkvicka 2003b, Pflugbeil & Pils 2013, Amann 2016
cor			Maier et al. 2001, Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Amann 2016
			Janchen 1956–1960, 1977, Forstner & Hübl 1971, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pachschwöll et al. 2025
esc			Baum 1977, Pflugbeil & Pils 2013, Englmaier & Wilhalm 2018, JACQ 2022
sto			Fischer et al. 2008, Pall et al. 2013, Hohla et al. 2015, Niklfeld 2016, Stöhr et al. 2021
			Fischer et al. 2008, Hohla et al. 2009, Pall et al. 2013, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023
			Murr 1923, Walter et al. 2002
			Hohla 2016, ZoBoDat 2022, Hohla unpubl.
			Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. 2023
			Hamburger 1948, Fischer et al. 2008
(x)			Kramer 1756, Fischer et al. 2008, Kleesadl 2017, JACQ 2022

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Beckmannia syzigachne</i>	Poace		c ? c									c						x	2000	Eur, Asi-Tem, NAm					
<i>Begonia xsemperflorens</i> auct.	Begon	x c		c	c														x	1971					
<i>Bellardia trixago</i>	Oroba		c			c	c											x	x	1954	Eur, Afr, Asi-Tem				
<i>Berberis ×decumbens</i>	Aquif	x c		c														x		2014					
<i>Berberis ×frikartii</i>	Berbe	x c							c									x		2003					
<i>Berberis ×ottawensis</i>	Berbe	x c	c															x		2016					
<i>Berberis ×wagneri</i>	Aquif	x c	c														x		2014						
<i>Berberis aquifolium</i>	Aquif		e e e e c e c le	c c c x x													x		1971	NAm					
<i>Berberis julianae</i>	Berbe		e c c c		c c e c		x												1971	Asi-Tem					
<i>Berberis thunbergii</i>	Berbe		le c c c c le? c	le? le le? ?	x x												x		1971	Asi-Tem					
<i>Bergenia ×schmidtii</i>	Saxif	c c	c c	c													x		1970						
<i>Bergenia cordifolia</i>	Saxif	c c	c														x		1971	Asi-Tem					
<i>Bergenia crassifolia</i>	Saxif	c	c		c c c	c										x		1960	Asi-Tem						
<i>Berteroa mutabilis</i>	Brass	c		c												x		1946	Eur, Asi-Tem						
<i>Beta trigyna</i>	Amara	c	c c													x		1966	Eur, Asi-Tem						
<i>Beta vulgaris</i> subsp. <i>maritima</i>	Amara	c		c												x	x	1948	Eur, Afr, Asi-Tem						
<i>Beta vulgaris</i> subsp. <i>vulgaris</i>	Amara	c x c c c c c c c		c												x	x								
<i>Bidens bipinnata</i>	Aster	c	c c	c c	c											x		1923	NAm						
<i>Bidens ferulifolia</i>	Aster	x c	c c	c	c	c	c	c	c	c	c					x		2001	NAm						
<i>Bidens frondosa</i>	Aster		e e e e e	e le e		c c										x	x	1960	NAm						
<i>Bidens pilosa</i>	Aster	c			c											x		1968	NAm, SAm						
<i>Bidens vulgata</i>	Aster	c			c											x		1983	NAm						
<i>Bistorta affinis</i>	Polyg	x c			c c	c	c									x		2005	Asi-Tem, Asi-Tro						
<i>Bistorta amplexicaulis</i>	Polyg	x c	c			c										x		2017	Asi-Tem, Asi-Tro						
<i>Blitum capitatum</i>	Amara	c c c c c c c c														x		1836	NAm						
<i>Borago officinalis</i>	Borag	a c c c c c c c c c c														x			Eur, Afr, Asi-Tem						
<i>Brachypodium distachyon</i>	Poace	c		c												x		1954	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Brachyscome iberidifolia</i>	Aster	x c							c							x		1979	Aus						
<i>Brassica elongata</i> subsp. <i>elongata</i>	Brass	x c c c				x										x		1957	Eur						
<i>Brassica elongata</i> subsp. <i>integrifolia</i>	Brass		c x x c c	c			?									x	x	1920	Eur, Asi-Tem						
<i>Brassica juncea</i>	Brass		c c c c c c c c	c c c c												x		1909	Asi-Tem						
<i>Brassica napus</i>	Brass	a, c	e? e? e? e? e? e?	c e? c c c c c c	c c c c											x									
<i>Brassica oleracea</i>	Brass	a	c c c c c c c c	c c c c c c												x			Eur						
<i>Brassica rapa</i>	Brass	a	e? c c c c c c	e? e? c c c c												x			Eur, Afr, Asi-Tem						
<i>Briza maxima</i>	Poace	x c		c												x		2015	Eur, Afr, Asi-Tem						

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
sto			Smettan 2006, Wallnöfer & Barta 2012
esc			Forstner & Hübl 1971, Walter et al. 2002, Hohla et al. 2009
			Walter et al. 2002
esc			Gilli et al. 2020
esc			Pflugbeil & Pils 2013
esc			Gilli et al. 2020
esc			Gilli et al. 2020
esc	x		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023, Kniely unpubl.
esc			Forstner & Hübl 1971, Fischer et al. 2008, Stöhr et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Amann 2016, Leonhartsberger 2018, Pagitz et al. 2023
esc			Forstner & Hübl 1971, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Follak et al. 2014, Pagitz & Lechner-Pagitz 2015, Amann 2016
esc			Walter et al. 2002, Hohla et al. 2009
esc			Forstner & Hübl 1971, Walter et al. 2002
esc			Fischer et al. 2008, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023
			Hamburger 1948, Walter et al. 2002
esc			Walter et al. 2002, Gilli et al. 2021
			Melzer 1959, Fischer et al. 2008
esc			Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
			Fischer et al. 2008, Amann 2016, Pagitz et al. 2023
esc			Brandes 2012, Pflugbeil & Pils 2013, Hohla 2014, Gilli et al. 2021, Forum Flora Austria 2022, Pagitz et al. 2023, Nadler unpubl.
cor	x		Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016
			Walter et al. 2002
			Walter et al. 2002
esc			Hohla 2006b, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Gilli et al. 2019b, Pils unpubl.
esc			Hamburger 1948, Hartl et al. 1992, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Hamburger 1948, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016
esc			Walter et al. 2002
			Wagenitz 1979
			Traxler 1958, Janchen 1977
			Fritsch (jun.) 1920, Janchen 1956–1960, Fischer et al. 2008, Pflugbeil & Pils 2013, Hohla unpubl.
esc			Fischer et al. 2008, Melzer & Barta 2008, Pflugbeil & Pils 2013, Hohla 2018a
esc			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015
esc			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc			Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023, Kniely unpubl.
			Hohla et al. 2015

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range	
<i>Brizza minor</i>	Poace	c		c		x													x	1954	Eur, Afr, Asi-Tem					
<i>Bromus arvensis</i>	Poace	x c										c								x	2005	Eur				
subsp. <i>parviflorus</i>																										
<i>Bromus briziformis</i>	Poace	c		c																x	1941	Asi-Tem				
<i>Bromus catharticus</i>	Poace	c c c c		c c c c		c		c c c											x	1923	SAm					
<i>Bromus commutatus</i>	Poace	c c c		c c		c c c c		c c c c											x	1879	Eur, Asi-Tem					
subsp. <i>decipiens</i>																										
<i>Bromus diandrus</i> s.str.	Poace	c		c c c		c c c		c c c											x	1954	Eur, Afr, Asi-Tem					
<i>Bromus hordeaceus</i>	Poace	x c c c c c c c c c c		c c c c c c c c c c		c c c c c c c c c c		c c c c c c c c c c										x	1948	Eur						
subsp. <i>pseudothomomiei</i>																										
<i>Bromus incisus</i>	Poace	x c				c													x	2006	Eur, Asi-Tem					
<i>Bromus inermis</i>	Poace	x c		c		c		c c										x	2004	Eur, Asi-Tem, NAm						
subsp. <i>pumpellianus</i>																										
<i>Bromus lanceolatus</i>	Poace	c		c															x	1981	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Bromus lepidus</i>	Poace	t c		c c c															x	1930	Eur, Asi-Tem					
<i>Bromus luzonensis</i>	Poace	t e	?	c e c le c															x	1971	NAm, SAm					
<i>Bromus madritensis</i>	Poace	c		c															x	1949	Eur, Afr, Asi-Tem					
<i>Bromus racemosus</i>	Poace	x c c		c															x	1998	Eur, Afr, Asi-Tem, Asi-Tro					
subsp. <i>lusitanicus</i>																										
<i>Bromus riparius</i>	Poace	x le?				le?		c											x	2010	Eur, Asi-Tem					
<i>Bromus sitchensis</i>	Poace	t x c		c															x	2003	NAm					
<i>Broussonetia papyrifera</i>	Morac	c c c c c														x				1966	Asi-Tem, Asi-Tro					
<i>Brunnera macrophylla</i>	Borag	le c c c	le	c c c	le	c c c c c c c										x x			x	1960	Asi-Tem					
<i>Buddleja davidii</i>	Scrop	e e e e e e e e	e	e e e e e e e e	e	e e e e e e e e	e	e e e e e e e e	e	e e e e e e e e	e	e e e e e e e e	e	x	x			x x		1946	Asi-Tem					
<i>Bunias erucago</i>	Brass	a	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	e ? c c c e c c c c c c	x	x	x	x	x x		1843	Eur, Asi-Tem					
<i>Bunias orientalis</i>	Brass																		x x	1866	Eur, Asi-Tem					
<i>Bunium bulbocastanum</i>	Apiac	le	le	c		c												x		1958	Eur, Afr					
<i>Bupleurum baldense</i> s.str.	Apiac	c		c															x	1954	Eur					
<i>Bupleurum odontites</i>	Apiac	c																x		1902	Eur, Afr					
<i>Bupleurum subovatum</i>	Apiac	c		c														x		1954	Eur, Afr, Asi-Tem					
<i>Buxus sempervirens</i>	Buxac	le c c c c	le	le?	c c c c	le	le?	c	c c c x x											1850	Eur, Afr, Asi-Tem					
<i>Cabomba caroliniana</i> <sup>EU</sup>	Cabom	le?	le?	?		le?										x			x	1964	NAm, SAm					
<i>Calamagrostis brachytricha</i>	Poace	x c		c														x		2017	Eur, Asi-Tem, Asi-Tro					
<i>Calandrinia ciliata</i> s.lat.	Monti	x c						c										x		2007	NAm, SAm					
<i>Calceolaria tripartita</i>	Calce	x c		c				c									x			1969	NAm, SAm					
<i>Calendula arvensis</i>	Aster	c	c	c c	c	c		c								x			x	1954	Eur, Afr, Asi-Tem					
<i>Calendula officinalis</i>	Aster	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	x	x	x	x	x		1821	Eur					
<i>Calepina irregularis</i>	Brass	le	le	c	c	c												x		2002	Eur, Afr, Asi-Tem					
<i>Calibrachoa ×hybrida</i>	Solan	x c	c														x			2020						
<i>Callistephus chinensis</i>	Aster	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	c c c c c c c c	x	x	x	x	x		1912	Asi-Tem					
<i>Callitrichia obtusangula</i>	Plant	x e	e e	e												x				1960						
<i>Calocedrus decurrens</i>	Cupre	x c	c													x			x	2005	NAm					

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
sto			Walter et al. 2002, Pflugbeil & Pils 2013 Pagitz & Lechner-Pagitz 2015
esc, con, sto			Hamburger 1948, Walter et al. 2002
rel, esc, sto			Fischer et al. 2008, Eichberger et al. 2015, Diran 2016
sto, cor			Bomble & Scholz 1999, Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Pagitz & Lechner-Pagitz 2015, Gilli & Niklfeld 2018
sto, cor			Wilhalm & Pagitz 2001, Hohla et al. 2009, Amann 2016
sto			Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016, Forum Flora Austria 2022, Stöhr unpubl.
rel, esc			Hohla et al. 2009, Pflugbeil & Pils 2013, Diran 2016, Forum Flora Austria 2022, Stöhr unpubl.
sto			Englmaier & Wilhalm 2018
sto			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Englmaier & Wilhalm 2018
esc, sto			Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Amann 2016, Kniely unpubl.
sto			Fischer et al. 2008
sto			Scholz & Hohla 2008
rel, esc,			Hohla 2011a, Kleesadl & Schröck 2021
sto			Hohla 2012b, ZoBoDat 2022
esc			Fischer et al. 2008, Scharfetter et al. 2011, Stöhr et al. 2012
esc			Walter et al. 2002, Hohla et al. 2009, Essl & Follak 2010, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016, Pachschwöll et al. 2025, Stöhr unpubl.
esc	x		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016
			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli unpubl.
			Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
			Fischer et al. 2008
			Walter et al. 2002
			Walter et al. 2002
			Melzer 1954
esc			Essl 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Pagitz et al. 2023, Pachschwöll et al. 2025
esc, sto			Melzer 1964, Hartl et al. 1992, Fischer & Niklfeld 2011
esc			Englmaier & Wilhalm 2018
			Gilli et al. 2019b
			Forstner 1973
			Fischer et al. 2008, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015
sto			Hohla et al. 2009, Niklfeld 2015, Zernig et al. 2019
esc			Forum Flora Austria 2022, Pagitz unpubl.
esc			Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
			Janchen 1956–1960, Fischer et al. 2008, Hohla et al. 2009
rel, esc			Essl & Hauser 2005, Essl & Stöhr 2006

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Scenical habitats	First record	Native Range
<i>Camelina microcarpa</i> subsp. <i>microcarpa</i>	Brass	x c c c c c	c	c	c c c													x	1994	Eur, Afr, Asi-Tem					
<i>Camelina rumelica</i>	Brass	c c c c																x x	1855	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Camelina sativa</i> var. <i>sativa</i>	Brass	c c c c c c c c c c c c c c																x	1859	Eur, Asi-Tem, Asi-Tro					
<i>Camelina sativa</i> var. <i>zingeri</i>	Brass	c c c	c															x	1960	Eur, Asi-Tem, Asi-Tro					
<i>Campanula alliariifolia</i>	Campa	le? le? le?																x x	1948	Asi-Tem					
<i>Campanula carpatica</i>	Campa	c c c c		c c c														x	1971	Eur					
<i>Campanula garganica</i>	Campa	le c c le		c													x x	1971	Eur, Afr						
<i>Campanula hofmannii</i>	Campa	c c	c															x	1970	Eur					
<i>Campanula medium</i>	Campa	c c c c c c	c	c c c														x	1874	Eur					
<i>Campanula portenschlagiana</i>	Campa	c c c c	c	c c c c														x	2002	Eur					
<i>Campanula poscharskyana</i>	Campa	c c c c c	c c														x x	1953	Eur						
<i>Campanula pyramidalis</i>	Campa	c c c c	?														x	1962	Eur						
<i>Campanula rhomboidalis</i>	Campa	le	le le	c c	c												x	x	1924	Eur					
<i>Canna indica</i>	Canna	x c		c	c												x	2011	NAm, SAm						
<i>Capsella rubella</i>	Brass	c c c c c c c c	c	c c c c c c													x	1893	Eur, Afr						
<i>Capsicum annuum</i>	Solan	c	c	c c c													x	1960	NAm, SAm						
<i>Caragana arborescens</i>	Fabac	c c c c c		c c c c x													x	1960	Asi-Tem						
<i>Caragana frutex</i>	Fabac	c	c														x	1971	Eur, Asi-Tem						
<i>Cardamine corymbosa</i>	Brass	x c		c													x	2010	Aus						
<i>Cardamine glanduligera</i>	Brass	le		le c													x	1961	Eur						
<i>Cardamine occulta</i>	Brass	x le	c c c c c c c c c c														x	2003	Asi-Tro						
<i>Carduus hamulosus</i>	Aster	c ? c c	x	c													x	1891	Eur, Asi-Tem						
<i>Carex bebbii</i>	Cyper	le? ? x															x	1991	NAm						
<i>Carex cristatella</i>	Cyper	x c		c													x	1854	NAm						
<i>Carex grayi</i>	Cyper	x c	c														x	2008	NAm						
<i>Carex morrowii</i>	Cyper	x c		c													x	2019	Asi-Tem						
<i>Carex muskingumensis</i>	Cyper	x c	c		c												x	2002	NAm						
<i>Carex scoparia</i>	Cyper	x le		le												x		2009	NAm						
<i>Carex vulpinoides</i>	Cyper	le c c	c le c le	le c	le c											x	x	1935	NAm, SAm						
<i>Carpobrotus edulis</i>	Aizo	c															x	1923	Afr						
<i>Carthamus lanatus</i>	Aster	c c															x	1817	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Carthamus tinctorius</i>	Aster	c c	c c c c	c x													x	1914	Asi-Tem						
<i>Caryopteris ×clandonensis</i>	Lamia	c c	c c c c	c c													x	1996							
<i>Catalpa bignonioides</i>	Bigno	c ? c c c c c c c c														x	x	1998	NAm						
<i>Catalpa ovata</i>	Bigno	x c	c c c c	c													x	2006	Asi-Tem						
<i>Catapodium rigidum</i>	Poace	x c	c c c c c c														x	1948	Eur, Afr, Asi-Tem						
<i>Celastrus orbiculatus</i> <sup>EU</sup>	Celas	x le	c le?	le	c											x	x	2003	Asi-Tem						

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
		Adler et al. 1994, Polatschek 1999, Adler & Mrkvicka 2003a, Fischer et al. 2008, Kleesadl 2009, Polatschek & Neuner 2013, Kniely unpubl. Forstner & Hübl 1971, Fischer et al. 2008
		Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
		Janchen 1956–1960, Maurer 1996, Hohla 2005, Fischer et al. 2008, Hohla et al. 2009
esc		Melzer 1988b, Walter et al. 2002, Pachschwöll et al. 2025
esc		Forstner & Hübl 1971, Kniely et al. 2006, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Brandes 2015, Gilli et al. 2019b
esc		Forstner & Hübl 1971, Adler 2021 unpubl., JACQ 2022, Rozanek unpubl., Zernig unpubl., Pils unpubl.
esc		Forstner 1972, Walter et al. 2002
esc		Höhnlel 1876, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Hohla 2006c, 2014, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Sauberer et al. 2020, Vitek et al. 2021, Pagitz et al. 2023
esc		Melzer 1973, Adler et al. 2008, Fischer et al. 2008, Hohla et al. 2009, Eichberger et al. 2015, Pagitz et al. 2023
esc		Forstner & Hübl 1971, Walter et al. 2002, Hohla et al. 2009, Gilli unpubl.
esc		Neumayer 1930, Polatschek 1999, Fischer et al. 2008, Hohla et al. 2009, Amann 2016, Observation International 2022
esc		Hohla 2011b, Pflugbeil & Pils 2013, Forum Flora Austria 2022
esc		Janchen 1977, Walter et al. 2002, Pachschwöll et al. 2025, Leonhartsberger & Wendelin unpubl.
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Fischer et al. 2008, Pflugbeil & Pils 2013, Forum Flora Austria 2022, Pagitz et al. 2023, Pachschwöll et al. 2025, Sauberer & Prinz unpubl., Stöhr unpubl.
esc		Forstner & Hübl 1971, Walter et al. 2002
		Hohla 2011a
		Melzer 1962a, Walter et al. 2002, Hohla 2021
		Hohla 2012b, 2014, Hohla et al. 2015, Amann 2016, Niklfeld 2016, Pils unpubl., Essl unpubl., Stöhr unpubl.
		Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Gilli unpubl.
		Fischer et al. 2008, Wallnöfer & Essl 2016
		Wallnöfer 2006
		Amann 2016, Tintner 2016
		Hohla et al. 2019
		Wallnöfer & Essl 2016, Observation International 2022
		Wallnöfer & Essl 2016
esc		Wallnöfer 2012, Pflugbeil & Pils 2013, Zernig et al. 2018, Raabe & Gilli 2021 unpubl., Pagitz unpubl.
		Murr 1923, Walter et al. 2002
		Neilreich 1846, Walter et al. 2002
esc, sto		Hayek 1908–1956, Fischer et al. 2008, Hohla et al. 2009, Amann 2016, Pachschwöll et al. 2025
esc		Melzer & Barta 2001, Walter et al. 2002, Adler & Mrkvicka 2006, Fischer et al. 2008, Hohla 2012b, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Hohla et al. 1998, 2009, Stöhr et al. 2007, Fischer et al. 2008, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Stöhr et al. 2007, Gilli et al. 2021, Pachschwöll et al. 2025
		Melzer 1954, Hartl et al. 1992, Pflugbeil & Pils 2013, Kleesadl 2017, Gilli & Niklfeld 2018, iNaturalist 2022
esc		Heber & Zernig 2013, Sauberer & Till 2015, Gilli et al. 2021, Forum Flora Austria 2022, Stöhr unpubl.

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & screes	Ruderal habitats	Segal habitats	First record	Native Range	
<i>Celastrus scandens</i>	Celas	c	c	c											x									x	1971	NAm
<i>Celosia argentea</i>	Amara	c c	c	c				c x																x	1971	Afr
<i>Celtis australis</i>	Canna	x c	c	c											x									x	2000	Eur, Afr, Asi-Tem
<i>Celtis occidentalis</i>	Canna		le?	c le?	c										x									x	1971	NAm
<i>Cenchrus caudatus</i>	Poace	x c		c c					c														x	2006	Afr, Asi-Tem	
<i>Cenchrus orientalis</i>	Poace	x c	c																				x	2022	Afr, Asi-Tem, Asi-Tro	
<i>Cenchrus purpurascens</i>	Poace		x c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c		x x								x x	2002	Asi-Tem, Asi-Tro, Aus	
<i>Cenchrus spinifex</i>	Poace	x c						c															x	1952	NAm, SAm	
<i>Centaurea benedicta</i>	Aster	a	c	?	c					c													x		Eur, Afr, Asi-Tem, Asi-Tro	
<i>Centaurea calcitrapa</i>	Aster		c	c c		c c	c c	c c	c c	c c	c c	c c	c c		x								x	1838	Eur, Afr, Asi-Tem	
<i>Centaurea diffusa</i>	Aster		c	c c		c c	c c	c c	c c	c c	c c	c c	c c		x								x	1918	Eur, Asi-Tem	
<i>Centaurea diffusa</i> × <i>C. stoebe</i> s. str.	Aster		c	c c		c c	c c	c c	c c	c c	c c	c c	c c		x								x	1918		
<i>Centaurea diluta</i>	Aster		c											c									x	1989	Eur, Afr	
<i>Centaurea jacea</i>	Aster	x le		le				c							x								x	1931		
<i>Centaurea nemoralis</i>	Aster	x c		c c		c c	c c	c c	c c	c c	c c	c c	c c		x								x	1911	Eur	
<i>Centaurea nigra</i> agg.	Aster		c	c c	c c	c c	x c	c							x								x	1845	Eur, Afr	
<i>Centaurea nigra</i> s.str.	Aster	x c		c											x								x	1878	Eur	
<i>Centaurea rupestris</i>	Aster		c					c															x	1817	Eur	
<i>Centaurea scabiosa</i> subsp. <i>spinulosa</i>	Aster		c	c c		c c	c c	c c	c c	c c	c c	c c	c c		x								x	1901	Eur	
<i>Centaurea solstitialis</i>	Aster		le?	c le?	c c	c c	c c	c c	c c	c c	c c	c c	c c		x								x x	1846	Eur, Afr, Asi-Tem	
<i>Centaurea weldeniana</i>	Aster	x le		le											x								x	1886	Eur	
<i>Centranthus ruber</i>	Capri		e	c e?	e?	le	c	c c	c c	c c	e e	e e	e e		x								x x	1971	Eur, Afr	
<i>Cephalaria gigantea</i>	Capri		le		le	c	c															x	1986	Asi-Tem		
<i>Cephalaria syriaca</i>	Capri		c			c									x								x	1958	Eur, Afr, Asi-Tem	
<i>Cephalotaxus harringtonia</i>	Podoc	x c				c									x								x	2010	Asi-Tem	
<i>Cerastium dichotomum</i>	Caryo	x c		c																			x	2008	Eur, Afr, Asi-Tem, Asi-Tro	
<i>Cerastium tomentosum</i> s.str.	Caryo		e	c	le	le	c	le	c	le	e	e	c		x								x	1895	Eur	
<i>Ceratocapnos claviculata</i>	Papav		le?					le?			c					x							x	2000	Eur	
<i>Ceratopteris thalictroides</i>	Pteri		c					c							x								x	1964	Afr, NAm, SAm	
<i>Ceratostigma plumbaginoides</i>	Plumb	x le		c		le	c	c	c	c					x								x x	2006	Asi-Tem	
<i>Cercidiphyllum japonicum</i>	Cerci	x c		c c	c?				c													x	2019	Asi-Tem		
<i>Cercis chinensis</i>	Fabac	x c								c												x	2002	Asi-Tem		
<i>Cercis siliquastrum</i>	Fabac		le?	c	le?	c																x	2006	Eur, Asi-Tem		
<i>Chaenomeles ×superba</i>	Rosac		c		c	c	c	c	c	c	c	c	c		x								x	2002		
<i>Chaenomeles japonica</i>	Rosac		c						c													x	2002	Asi-Tem		
<i>Chaenomeles speciosa</i>	Rosac	c c		c	x				c							x							x	1971	Asi-Tem, Asi-Tro	
<i>Chaenomeles</i> × <i>superba</i>	Rosac		c		c	c	c	c	c	c	c	c	c		x								x	2002		
<i>Chaenorhinum origanifolium</i>	Plant		c		c	c	c	c	c	c	c	c	c									x	2002	Eur, Afr		
<i>Chaenostoma cordatum</i>	Scrop	x c		c																		x	2022	Afr		

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Forstner & Hübl 1971, Franz et al. 1990, Walter et al. 2002
esc		Forstner & Hübl 1971, Walter et al. 2002, Melzer 2003, JACQ 2022, Pachschwöll et al. 2025
esc		Fischer & Niklfeld 2011
esc		Forstner & Hübl 1971, Fischer et al. 2008, Helm unpubl.
esc		Pflugbeil & Pils 2013, Zernig et al. 2022, Lefnaer unpubl.
		Pachschwöll et al. 2025
esc, sto		Hohla 2002, Hohla et al. 2009, 2015, Niklfeld 2016, Zernig et al. 2019, Pagitz et al. 2023, Pachschwöll et al. 2025, Pils 2025 Melzer 1954 Hausmann 1854, Fischer et al. 2008
		Forstner & Hübl 1971, Reif 1995, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013 Rechinger 1950, Fischer et al. 2008, Hohla et al. 2009 Neumayer 1922, Walter et al. 2002
		Polatschek 1997, Dörr & Lippert 2004, Amann 2016 Koutecký & Pachschwöll 2023
		Koutecký & Pachschwöll 2023 Hohla et al. 2009, Koutecký & Pachschwöll 2023 Koutecký & Pachschwöll 2023 Hamburger 1948, Walter et al. 2002 Hayek 1908–1956, Janchen 1977, Walter et al. 2002
		Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld 2015, 2016 Koutecký 2012, JACQ 2022
esc		Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023, Leonhartsberger unpubl., Stöhr unpubl. Hohla et al. 2009, Wallnöfer et al. 2015, Zernig et al. 2017 Melzer 1959, Walter et al. 2002 Vitek et al. 2021 Fischer & Niklfeld 2008
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Pagitz et al. 2023
sto		Fischer et al. 2008, Kleesadl 2009
esc		Walter et al. 2002, Stöhr et al. 2021
		Hohla 2011a, Pflugbeil & Pils 2013, Lefnaer 2018, Leonhartsberger 2018
esc		Hohla et al. 2019, Eichberger et al. 2021b, Forum Flora Austria 2022, Gilli unpubl., Griebl unpubl., Pflugbeil unpubl.
esc		Pflugbeil & Pils 2013
esc		Essl 2006, Stöhr et al. 2012, Sauberer et al. 2020
esc		Schröck et al. 2004, Hohla et al. 2009, Pflugbeil & Pils 2013, Stöhr & Brandes 2014, Leonhartsberger 2018, Vitek et al. 2021
esc		Schröck et al. 2004, Pflugbeil & Pils 2013
esc		Forstner & Hübl 1971, Walter et al. 2002, Hohla et al. 2009, Pagitz et al. 2023
esc		Adler & Mrkvicka 2006, Hohla 2011a, Pflugbeil & Pils 2013
iesc		iNaturalist 2022, Timaeus unpubl.

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Chamaecyparis lawsoniana</i>	Cupre		c c c c c c	c c c c c c					c c		x							x	1971	NAm					
<i>Chamaecyparis pisifera</i>	Cupre		c c c c c	c c c c c					c									x	2002	Asi-Tem					
<i>Chamaemelum nobile</i>	Aster		c ? c c c	c c c														x	1950	Eur, Afr					
<i>Chasmanthium latifolium</i>	Poace		x c c c c?	c c?							c							x	2008	NAm					
<i>Chenopodium album</i> × <i>C. berlandieri</i>	Amara		c								c							x	1908						
<i>Chenopodium album</i> × <i>C. giganteum</i>	Amara		x c ? c c						c								x	2013							
<i>Chenopodium berlandieri</i>	Amara		x c c c c c	c c c c c						c c							x	1908	NAm						
<i>Chenopodium betaceum</i>	Amara		x e e e e e e e e e e	e e e e e e e e e e											x		x	1850	Eur, Asi-Tem						
<i>Chenopodium giganteum</i>	Amara	t	c c c c c c c c c c	c c c c c c c c c c													x	x	1960	Asi-Tem					
<i>Chenopodium hircinum</i>	Amara		c c c	c c c						c c							x	x	1960	SAm					
<i>Chenopodium missouriense</i>	Amara		c c	c c													x		1992	Eur, Afr, Asi-Tem, NAm					
<i>Chenopodium pratericola</i>	Amara		c c c c	c c c c						c c							x		1920	NAm					
<i>Chenopodium probstii</i>	Amara		e e e e e c c c c c	e e e e e c c c c c													x		1934	Asi-Tem, Asi-Tro					
<i>Chenopodium quinoa</i>	Amara		c x x	c c c c c c c c						c							x		1920	SAm					
<i>Chenopodium striatiforme</i>	Amara		e le?le? e	e ?						c							x		1860	Eur, Asi-Tem					
<i>Chiastophyllum oppositifolium</i>	Crass	x c		c													x		2011	Asi-Tem					
<i>Chorispora tenella</i>	Brass		le c le le		c										x		x	1953	Eur, Asi-Tem, Asi-Tro						
<i>Chrysanthemum ×morifolium</i>	Aster	x c		c						c							x		1915						
<i>Chrysanthemum zawadskii</i>	Aster		c c	c													x		1967	Eur, Asi-Tem					
<i>Cicer arietinum</i>	Fabac	x c		c					c							x		2019	Asi-Tem						
<i>Cichorium calvum</i>	Aster	c c c c c c ?														x		1975	Afr, Asi-Tem, Asi-Tro						
<i>Cichorium endivia</i>	Aster	c	c c c	c c c													x		1912	Afr, Asi-Tem					
<i>Cistus monspeliensis</i>	Cista	c			c											x		1934	Eur, Afr						
<i>Citrullus lanatus</i>	Cucur	c ? c	c c c c c c	c c c c c c												x	x	1918	Afr						
<i>Citrus aurantium</i>	Rutac	c	c													x		1971	Asi-Tem, Asi-Tro						
<i>Cladanthus mixtus</i>	Aster	c	c c	c c												x		1949	Eur, Afr, Asi-Tem						
<i>Clarkia amoena</i>	Onagr	c c c	c c													x		1965	NAm						
<i>Clarkia unguiculata</i>	Onagr	c c c	c c c													x		1970	NAm						
<i>Claytonia perfoliata</i>	Monti	c c c c c c	c c c c c c													x		1992	NAm, SAm						
<i>Clematis glauca</i>	Ranun	c							c							x		1931	Asi-Tem, Asi-Tro						
<i>Clematis orientalis</i>	Ranun	x c		c												x		1966	Eur, Asi-Tem, Asi-Tro						
<i>Clematis tangutica</i>	Ranun	c	c c c c	c c c c												x		1975	Asi-Tem, Asi-Tro						
<i>Clematis viticella</i>	Ranun	c	c													x		1984	Eur, Asi-Tem						
<i>Cleome houtteana</i>	Cleom	c	c c c c c	c c c c c						c						x		1965	SAm						
<i>Cochlearia danica</i>	Brass	x c	c c	c c												x		2007	Eur						
<i>Cochlearia officinalis</i> s.str.	Brass	x c		c												x		1871	Eur						

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
--	---	--------

- rel, esc Forstner & Hübl 1971, Walter et al. 2002, Essl & Stöhr 2006, Hohla et al. 2009, Pflugbeil & Pils 2013, Leonhartsberger 2018, Pagitz et al. 2023, Pachschwöll et al. 2025
- esc Essl 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
- esc Melzer 1954, Walter et al. 2002, Hohla et al. 2009
- hyb Pagitz & Lechner-Pagitz 2015, Englmaier & Münch 2019, Gilli et al. 2020
- Murr 1923, Walter et al. 2002
- hyb Wittmann & Pflugbeil 2017, Raabe & Gilli 2021 unpubl., Schrott-Ehrendorfer 2021 unpubl., Hohla unpubl.
- con Murr 1923, Fischer et al. 2008, Hohla et al. 2009
- Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016, JACQ 2022
- esc Walter et al. 2002, Fischer et al. 2008, Hohla 2013, Pflugbeil & Pils 2013, Gilli et al. 2020, Pagitz et al. 2023, Hohla unpubl.
- sto Polatschek 1999, Fischer et al. 2008, Polatschek & Neuner 2013, Pagitz et al. 2023
- Fischer et al. 2008, JACQ 2022, Walter unpubl.
- con, sto Forstner & Hübl 1971, Walter et al. 2002, Fischer et al. 2008
- sto Fischer et al. 2008, Hohla 2013, Pflugbeil & Pils 2013, Gilli et al. 2019b, JACQ 2022
- esc, con, sto Murr 1923, Walter et al. 2002, Fischer et al. 2008
- sto Fischer et al. 2008, Hohla et al. 2009, JACQ 2022, Walter unpubl.
- Hohla 2011b
- Forstner & Hübl 1971, Fischer et al. 2008
- esc Murr 1923, Walter et al. 2002, Amann 2016
- esc Walter et al. 2002, JACQ 2022
- esc Gilli et al. 2020, JACQ 2022
- Traxler 1979, Fischer et al. 2008, Hohla 2018a
- esc Dalla Torre von Thunberg-Sternhof & Sarnthein 1912, Fischer et al. 2008, Hohla et al. 2009, JACQ 2022, Pagitz et al. 2023
- esc Pflugbeil & Pils 2013
- esc Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
- esc Forstner & Hübl 1971, Walter et al. 2002
- esc Melzer 1954, Walter et al. 2002
- esc Janchen 1966, Walter et al. 2002
- esc Melzer 1980, Hohla et al. 2009
- esc, con, sto Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Eichberger et al. 2015, Sauberer & Till 2015, Vitek et al. 2021, Zernig et al. 2022, Pagitz et al. 2023, Pachschwöll et al. 2025
- esc Murr 1931, Walter et al. 2002
- esc Hohla et al. 2009
- esc Polatschek 1980, Fischer et al. 2008, Hohla 2013, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Gilli & Niklfeld 2018, Leonhartsberger 2018
- esc Melzer & Barta 1994, Walter et al. 2002, ZoBoDat 2022, Hohla unpubl.
- esc Melzer 1968, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
- Fischer & Niklfeld 2008, Hohla & Raabe 2012, Hohla 2014
- Hohla et al. 2009

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Coincyia monensis</i> subsp. <i>cheiranthos</i>	Brass		c c		c													x	1950	Eur, Afr					
<i>Coix lacryma-jobi</i>	Poace	x c	c			c												x	2002	Asi-Tem, Asi-Tro					
<i>Coleostephus myconis</i>	Aster	c				c												x	1950	Eur, Afr, Asi-Tem					
<i>Coleus caninus</i>	Lamia	x c		c													x	2008	Afr, Asi-Tro						
<i>Commelinia communis</i>	Comme	c c	c c c c c c c c c c															x	x 1955	Asi-Tem, Asi-Tro					
<i>Convolvulus dubius</i>	Convo	c	c		c	c	c	c	c	c	c	c	c	c	x		x	1963	Asi-Tem						
<i>Convolvulus sabatius</i>	Convo	x c		c													x	2013	Eur, Afr						
<i>Convolvulus silvaticus</i>	Convo	c	c c				x										x	1992	Eur, Afr, Asi-Tem						
<i>Convolvulus tricolor</i>	Convo	c	c c														x	1971	Eur, Afr						
<i>Coreopsis grandiflora</i>	Aster	c	c c c	c	c c												x	1963	NAm						
<i>Coreopsis lanceolata</i>	Aster	c c c c c	c														x	1970	NAm						
<i>Coreopsis tinctoria</i>	Aster	c c c c	c c c c c c c c														x	1912	NAm						
<i>Coreopsis verticillata</i>	Aster	x c				c c											x	2002	NAm						
<i>Coriandrum sativum</i>	Apiac	c c ? c c c c c c	c c c														x								
<i>Corispermum pallasii</i>	Amara	le	le c	x		x c											x	1872	Eur, Asi-Tem						
<i>Cornus alba</i> s.str.	Corna	x c	? ? ? x ? c	c		c	x									x		1880	Eur, Asi-Tem						
<i>Cornus sanguinea</i> subsp. <i>australis</i>	Corna	e c c	c e c e c e	x x												x	x	1967	Eur, Asi-Tem						
<i>Cornus sericea</i>	Corna	e	le le c e e e	le e	e	le x	x x x									x	x	1934	NAm						
<i>Coronilla scorpioides</i>	Fabac	c		c c													x	1948	Eur, Afr, Asi-Tem						
<i>Cortaderia selloana</i>	Poace	x c				c											x	2019	SAm						
<i>Corydalis cheilanthifolia</i>	Papav	x c	c	c c	c											x	2011	Asi-Tem							
<i>Corydalis ophiocarpa</i>	Papav	x c		c												x	2014	Asi-Tem							
<i>Corylus colurna</i>	Betul	c ? c c c x c c					x									x	1971	Eur, Asi-Tem							
<i>Corylus maxima</i>	Betul	c c c c c c c c	c c		x x											x	2001	Eur							
<i>Cosmos bipinnatus</i>	Aster	c c c c c c c c	c c c c													x	1932	NAm							
<i>Cota altissima</i>	Aster	c ? c														x	1948	Eur, Asi-Tem							
<i>Cota segetalis</i>	Aster	c	c													x	1948	Eur							
<i>Cotoneaster ×suecicus</i>	Rosac	c c c	c c c c													x	2002								
<i>Cotoneaster ×watereri</i>	Rosac	c	c c	c c												x	2002								
<i>Cotoneaster acutifolius</i>	Rosac	c c c		c c		x	x									x	1971	Asi-Tem							
<i>Cotoneaster bullatus</i>	Rosac	e c c	le? c	le	e c	x x										x	2002	Asi-Tem							
<i>Cotoneaster dammeri</i>	Rosac	le	c c c c	le	c c c	c	x									x	1998	Asi-Tem							
<i>Cotoneaster dielsianus</i>	Rosac	e c c c c c c	e	le	e	e	le	x x								x x	1994	Asi-Tem							
<i>Cotoneaster divaricatus</i>	Rosac	e e e	le c e	le e	e e	e	le	x x								x x	2002	Asi-Tem							
<i>Cotoneaster franchetii</i>	Rosac	le	le c	c				x								x	1971	Asi-Tem, Asi-Tro							
<i>Cotoneaster horizontalis</i>	Rosac	e e	le c	le	le e	e	le	x x								x x	1970	Asi-Tem, Asi-Tro							
<i>Cotoneaster integrifolius</i>	Rosac	x c			c	c										x	2008	Asi-Tem							
<i>Cotoneaster laxiflorus</i>	Rosac	le	? le		?											x	2005	Eur, Asi-Tem							
<i>Cotoneaster microphyllus</i>	Rosac	x c		c												x	2015	Asi-Tem, Asi-Tro							

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health Source
esc	Melzer 1954, Fischer et al. 2008
esc	Essl 2003, Hohla 2018a
esc	Melzer 1954, Walter et al. 2002
esc	Vitek et al. 2021, Horak unpubl.
esc	Melzer 1955, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Brandes 2015, Polatschek unpubl.
esc	Janchen 1964, Walter et al. 2002, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Hohla 2018a
esc	Vitek et al. 2021
esc	Fischer & Niklfeld 2003, Pflugbeil & Pils 2013, Sauberer 2020 unpubl., Niklfeld & Schrott-Ehrendorfer 2022, Forum Flora Austria 2022, Forstner unpubl.
esc	Forstner & Hübl 1971, Walter et al. 2002, Niklfeld & Schrott-Ehrendorfer 2022, Sinn unpubl.
esc	Janchen 1964, Walter et al. 2002, Pflugbeil & Pils 2013, Hohla et al. 2019, Pagitz et al. 2023
esc	Traxler 1971, Fischer et al. 2008, Hohla et al. 2009
esc	Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc	Pflugbeil & Pils 2013, Pagitz et al. 2023
esc	Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli unpubl.
esc	Fischer et al. 2008, Fischer & Niklfeld 2008, Hohla et al. 2009, JACQ 2022, Stöhr unpubl.
esc	Forstner & Hübl 1971, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc	Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Stöhr unpubl.
esc	Hamburger 1948, Adler & Mrkvicka 2003a, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Pagitz & Lechner-Pagitz 2015, Amann 2016, Zernig et al. 2017, Gilli et al. 2019b
esc	Melzer 1954, Hartl et al. 1992
esc	JACQ 2022, Pils unpubl.
esc	Scharfetter et al. 2011, Pflugbeil & Pils 2013, Hohla et al. 2015, Gilli et al. 2020
esc	Hohla 2014
esc	Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli et al. 2022
esc	Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013
esc, sto	Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
rel, esc	Melzer 1954, Walter et al. 2002
rel, esc	Janchen 1956–1960, Walter et al. 2002
rel, esc	Schröck et al. 2004, Essl & Stöhr 2006, Stöhr et al. 2006, Schinninger & Rožánek 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Stöhr unpubl.
rel, esc	Hohla 2006c, Stöhr et al. 2007, Dickoré & Kasperek 2010
rel, esc	Forstner & Hübl 1971, Dickoré & Kasperek 2010, Pflugbeil & Pils 2013
esc	Melzer & Barta 2003, Fischer et al. 2008, Schinninger & Rožánek 2008, Hohla et al. 2009, Stöhr et al. 2012, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Amann 2016
rel, esc	Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Amann 2016, Vitek et al. 2021
esc	Schröck et al. 2004, Hohla et al. 2009, Stöhr et al. 2009, 2012, Stöhr 2011, Till 2011, 2021, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Pachschwöll et al. 2025, Essl unpubl., Wittmann unpubl.
rel, esc x?	Stöhr 2002, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Stöhr et al. 2009, Pflugbeil & Pils 2013, Brandes 2015
rel, esc	Forstner & Hübl 1971, Walter et al. 2002, Stöhr et al. 2007, Hohla 2014
rel, esc x?	Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Stöhr et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Brandes 2015, Leonhartsberger unpubl.
rel, esc	Dickoré & Kasperek 2010, Hohla 2014
esc	Fischer et al. 2008, Dickoré & Kasperek 2010, Barta unpubl.
rel, esc	Hohla et al. 2015

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range	
<i>Cotoneaster multiflorus</i>	Rosac		c	c															x	1971	Asi-Tem					
<i>Cotoneaster nitens</i>	Rosac	x c	c	c															x	2003	Asi-Tem					
<i>Cotoneaster salicifolius</i>	Rosac	x c				c	c		c	c									x	2002	Asi-Tem					
<i>Cotula coronopifolia</i>	Aster		c		c														x	1997	Afr					
<i>Crambe hispanica</i>	Brass		c	c	c													x	1998	Eur, Afr, Asi-Tem						
<i>Crambe orientalis</i>	Brass		c	c	c												x	1971	Asi-Tem							
<i>Crassula helmsii</i>	Crass	x c	c													x				2019	Aus					
<i>Crataegus ×gillottii</i>	Rosac	x c	c										x								1920					
<i>Crataegus coccinea</i>	Rosac	x c	c	c	c	c	c		c			x						x	2008	NAm						
<i>Crataegus germanica</i>	Rosac	le	le	c	c	c	c		c		c	x								1872	Eur, Asi-Tem					
<i>Crataegus sanguinea</i>	Rosac		c	c	c											x				1960	Eur, Asi-Tem					
<i>Crepis foetida</i> subsp. <i>foetida</i>	Aster	x c	?	?		c	c												x	2011	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Crepis nicaeensis</i>	Aster		c	c	c		?		x		c							x	1845	Eur						
<i>Crepis pulchra</i>	Aster		e	e	e	c		?	c	x	c						x	1859	Eur, Afr, Asi-Tem, Asi-Tro							
<i>Crepis pygmaea</i>	Aster		le?	le?												x				2002	Eur					
<i>Crepis sancta</i>	Aster	x c							c							x				2014	Eur, Afr, Asi-Tem					
<i>Crepis vesicaria</i> subsp. <i>taraxacifolia</i>	Aster	e?	c	c	c	e?		c		c	c					x				1819	Eur, Afr					
<i>Crepis zacintha</i>	Aster		c		c											x				1948	Eur, Asi-Tem					
<i>Croccosmia ×crocosmiiflora</i>	Irida		c	c		c	c	c		c						x				1967						
<i>Crocus banaticus</i>	Irida		le	le										x						1970	Eur					
<i>Crocus chrysanthus</i>	Irida		c	c					c	c						x				2002	Eur, Asi-Tem					
<i>Crocus flavus</i>	Irida	c	?			c		c	c	c						x				1984	Eur, Asi-Tem					
<i>Crocus heuffelianus</i>	Irida		le	le										x		x				1970	Eur					
<i>Crocus kotschyana</i>	Irida	x c			c	c										x				2008	Asi-Tem					
<i>Crocus neglectus</i>	Irida	x le?				le?		le?	c	c						x				1908	Eur					
<i>Crocus neglectus</i> × <i>C. tommasinianus</i>	Irida	x c						c								x				2006						
<i>Crocus sativus</i>	Irida	x c	f	c											x	x			1859	Eur						
<i>Crocus speciosus</i>	Irida	x c		c	c										x	x			2008	Eur, Asi-Tem						
<i>Crocus tommasinianus</i>	Irida		e	c	c	c	c	le?	c	e			x	x					2002	Eur						
<i>Crupina vulgaris</i>	Aster	x c	c												x	x			x	1851	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Cryptocoryne balansae</i>	Arace		le?					le?							x			x	1992	Asi-Tem, Asi-Tro						
<i>Cryptocoryne wendtii</i>	Arace		le?					le?							x			x	1992	Asi-Tro						
<i>Cryptotaenia canadensis</i>	Apiac		le		le									x						1891	NAm					
<i>Cucumis melo</i>	Cucur	c	c	c	c	c	c	c	c	c					x	x										
<i>Cucumis sativus</i>	Cucur	c	c	?	c	c	c	c	c	c	c				x	x										
<i>Cucurbita ficifolia</i>	Cucur	c		c	c			c							x	x				1971	SAm					
<i>Cucurbita foetidissima</i>	Cucur	c			c					c					x	x				1907	NAm					
<i>Cucurbita maxima</i>	Cucur	c		c	c				c	c	c	c			x	x				1923	SAm					
<i>Cucurbita moschata</i>	Cucur	x c	c	c	c	c	c	c	c	c	c	c			x	x				2015	NAm					
<i>Cucurbita pepo</i>	Cucur	c	c	c	c	c	c	c	c	c	c	c			x	x				1923	NAm					
<i>Cuphea hyssopifolia</i>	Lythr	x c						c							x			x	2016	NAm, SAm						

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
rel, esc		Forstner & Hübl 1971, Walter et al. 2002, Adler & Mrkvicka 2003a, Dickoré & Kasperek 2010
rel, esc		Dickoré & Kasperek 2010
esc		Pflugbeil & Pils 2013, Amann 2016, Hohla 2021, Pagitz et al. 2023
		Melzer & Barta 2001, Walter et al. 2002
		Melzer & Barta 2000, Bernhardt & Laubmann 2006
		Forstner & Hübl 1971, Walter et al. 2002
esc, sto		Sauberer et al. 2020
esc		Neumayer 1922, Janchen 1956–1960, Walter et al. 2002
esc		Pflugbeil & Pils 2013, Gilli et al. 2021, Vitek et al. 2021
esc		Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc		Janchen 1956–1960, Walter et al. 2002
		Fischer et al. 2008, Kleesadl 2017, Gilli et al. 2020
		Forstner & Hübl 1971, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
		Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld 2016, Pagitz et al. 2023
		Saukel 2003
		Eichberger et al. 2015
		Fischer et al. 2008, Hohla et al. 2009, Pachschwöll et al. 2025
		Melzer 1954, Walter et al. 2002
esc		Melzer 1968, Hartl et al. 1992, Walter et al. 2002, Pflugbeil & Pils 2013, Hohla 2014
esc		Weber 2005
esc		Pflugbeil & Pils 2013, Pagitz et al. 2023, Hohla unpubl.
esc		Traxler 1984, Walter et al. 2002, Schröck et al. 2004, Stöhr et al. 2007, Hohla et al. 2009, Pagitz et al. 2023
esc		Traxler 1970, Walter et al. 2002
esc		Fischer et al. 2008
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Pils 2008, Pflugbeil & Pils 2013
		Neilreich 1859, Tkalcsics unpubl.
esc		Fischer et al. 2008
esc		Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Heber & Zernig 2013, Pflugbeil & Pils 2013, Pagitz et al. 2023
		Neilreich 1852, 1859, Janchen 1956–1960, 1977
sto		Hartl et al. 1992
sto		Hartl et al. 1992, Walter et al. 2002
		Hamburger 1948, Melzer 1954, Janchen 1956–1960
esc		Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Barta unpubl., Gilli unpubl.
esc		Forstner & Hübl 1971, Walter et al. 2002, Wittmann unpubl.
esc		Murr 1907, Walter et al. 2002
esc		Fischer et al. 2008, Pflugbeil & Pils 2013, Brandes 2015, Pagitz et al. 2023
esc		Hohla et al. 2015, Sauberer et al. 2020
esc		Walter et al. 2002, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016
esc		JACQ 2022, Pils 2013

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Cuphea lanceolata</i>	Lythr	c	c															x	1971	NAm					
<i>Cuscuta campestris</i>	Convo	e e e e c e?	c c																x	1919	NAm, SAm				
<i>Cuscuta gronovii</i>	Convo	c	c																x	1976	NAm, SAm				
<i>Cyclachaena xanthiifolia</i>	Aster	c c c c c c	c c															x	1947	NAm					
<i>Cyclamen coum</i>	Primu	x le? le?													x				x	2005	Eur, Asi-Tem				
<i>Cyclamen hederifolium</i>	Primu	x c c c																x	2008	Eur, Asi-Tem					
<i>Cydonia oblonga</i>	Rosac	c c c c c c	c c	c	c	c	x										x	1846	Asi-Tem						
<i>Cymbalaria muralis</i>	Plant	a	e e e e e e e e e e														x x	1838	Eur						
<i>Cymbalaria pallida</i>	Plant	x c						c	c								x	2006	Eur						
<i>Cynara cardunculus</i> var. <i>scolymus</i>	Aster	c			c												x	2002	Eur, Afr						
<i>Cynoglossum amabile</i>	Borag	x c	c?					c	c								x	2016	Asi-Tem, Asi-Tro						
<i>Cynoglossum creticum</i>	Borag	x c							c								x	2019	Eur, Afr, Asi-Tem						
<i>Cynoglottis barrelieri</i>	Borag	c	c														x	1889	Eur, Asi-Tem						
<i>Cynosurus echinatus</i>	Poace	c	c c c c c c	c	c	c	c										x	1833	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Cyperus alternifolius</i> subsp. <i>flabelliformis</i>	Cyper	x c	?					c									x	2014	Afr, Asi-Tem						
<i>Cyperus congestus</i>	Cyper	x c						c									x	2014	Afr						
<i>Cyperus eragrostis</i>	Cyper	c c c c	c c c c														x	2003	Pac, NAm, SAm						
<i>Cyperus esculentus</i>	Cyper	e e e? c	e e e? c	e c													x	1987	Eur, Afr, Asi-Tem, Asi-Tro, NAm, SAm						
<i>Cyperus glomeratus</i>	Cyper	c	c c	c									x				x	1868	Eur, Asi-Tem, Asi-Tro						
<i>Cyperus lupulinus</i> subsp. <i>macilentus</i>	Cyper	c							c								x	1901	NAm						
<i>Cyperus rotundus</i>	Cyper	c			c	c											x	1955	Eur, Afr, Asi-Tem, Asi-Tro, Pac						
<i>Cyperus strigosus</i>	Cyper	x c							c								x	2012	NAm, SAm						
<i>Cyrtomium falcatum</i>	Dryop	c		c													x	1971	Asi-Tem, Asi-Tro, Pac						
<i>Cyrtomium fortunei</i>	Dryop	x c	c c a						c								x	1951	Asi-Tem						
<i>Cytisus scoparius</i> subsp. <i>scoparius</i>	Fabac	e e e c	e e e c	e c	c c c e	c c c e	x x x										x	1821	Eur						
<i>Dahlia ×hortensis</i>	Aster	t	c c	c c c c c c	c c c c c c	c c c c c c											x	1967							
<i>Danthonia spicata</i>	Poace	x c c															x	2022	NAm						
<i>Darmera peltata</i>	Saxif	x c						c? c								x	2014	NAm							
<i>Dasiphora fruticosa</i>	Rosac	c c c c c c	c c c c c c	c c c c c c	c c c c c c	c c c c c c											x	1990	Eur, Asi-Tem, NAm						
<i>Dasypyrum villosum</i>	Poace	c		c c	c	c										x	1887	Eur, Asi-Tem							
<i>Datisca cannabina</i>	Datis	x c	c													x	2008	Eur, Asi-Tem, Asi-Tro							
<i>Datura ferox</i>	Solan	c	c													x	2003	NAm							
<i>Datura innoxia</i>	Solan	c c c c c c	c c c c c c	c c c c c c	c c c c c c	c c c c c c											x x	1987	NAm						

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health Source
esc		Forstner & Hübl 1971, Walter et al. 2002
sto		Murr 1923, Fischer et al. 2008, Pflugbeil & Pils 2013, Amann 2016, Kleesadl 2017
sto		Melzer 1991, Walter et al. 2002
(x)		Fischer et al. 2008, Fischer & Niklfeld 2011, Pflugbeil & Pils 2013, Hohla et al. 2019
esc		Fischer & Niklfeld 2008, Till unpubl.
esc		Fischer & Niklfeld 2008, Zernig et al. 2018
esc		Neilreich 1846, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016
esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016
esc		Hohla 2011b, 2022, Pflugbeil & Pils 2013
esc		Walter et al. 2002
		Wittmann & Pflugbeil 2017, Hohla 2018b, Till unpubl. JACQ 2022, Pils unpubl.
		Janchen 1956–1960, Walter et al. 2002
		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc, sto		JACQ 2022, Pils unpubl.
sto		Hohla et al. 2015
esc		Bernhardt et al. 2006, Fischer et al. 2008, Kleesadl & Schröck 2021, Vitek et al. 2021, JACQ 2022
esc, sto, cor	x	Hohla 2012b, Pflugbeil & Pils 2013, Follak et al. 2015, Pagitz & Lechner-Pagitz 2015, Amann 2016, Zernig et al. 2018, Gilli et al. 2019b, Pagitz et al. 2023
		Maly 1868, Hayek 1908–1956, Walter et al. 2002, Melzer & Barta 2005, Fischer et al. 2008
		Dalla Torre von Thunberg-Sternhof & Sarnthein 1906, 1909, Bernhardt & Gregor 2019
sto		Melzer 1955, Hartl et al. 1992, Fischer et al. 2008
sto		Polatschek & Neuner 2013
esc		Walter et al. 2002, Stöhr et al. 2021
esc		Stöhr et al. 2021
rel, esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. unpubl.
esc		Traxler 1967, Walter et al. 2002, Adler & Mrkvicka 2003a, Hohla et al. 2005b, Pflugbeil & Pils 2013, Polatschek & Neuner 2013
esc		Pachschwöll et al. 2025
rel, esc		JACQ 2022, Pflugbeil unpubl., Griebl unpubl. Adler & Mrkvicka 2003a, Schröck et al. 2004, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Pagitz et al. 2023, Pachschwöll et al. 2025
		Forstner & Hübl 1971, Walter et al. 2002
		Stöhr et al. 2009
esc		Bernhardt et al. 2006
		Melzer 1988b, Adler & Mrkvicka 2006, Fischer et al. 2008, Hohla et al. 2009, Stöhr et al. 2009, Eichberger et al. 2015, NAGO 2022, Stöhr unpubl.

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Datura stramonium</i>	Solan		e e e e e e e e e e e e le															x x	1583	NAm					
<i>Datura wrightii</i>	Solan	c c c	c c c															x	2002	NAm					
<i>Daucosma lacinata</i>	Apiac	c	c															x	1953	NAm					
<i>Delairea odorata</i>	Aster	x c								c								x	2011	Afr					
<i>Delosperma cooperi</i>	Aizo	x c c																x	2022	Afr					
<i>Delphinium × cultorum</i>	Ranun	t c c c c	c c c c c								c							x	1971						
<i>Delphinium ajacis</i>	Ranun	c c c c c	c c c c c															x	1846	Eur, Asi-Tem					
<i>Delphinium hispanicum</i>	Ranun	e c e e c	le? c									c c						x	1868	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Deutzia crenata</i>	Hydra	x e? c c c c c	e? c c c															x	1929	Asi-Tem					
<i>Deutzia gracilis</i>	Hydra	c c	c															x	2006	Asi-Tem					
<i>Dianthus giganteus</i>	Caryo	c c c c c	c c c							c								x	1948	Eur, Asi-Tem					
<i>Dianthus gratianopolitanus</i>	Caryo	c	c						c	c								x	1851	Eur					
<i>Dianthus monspessulanus</i> × <i>D. superbus</i>	Caryo	x c							c									x	2007						
<i>Dicentra formosa</i>	Papav	x c						c									x	1995	NAm						
<i>Dichanthelium acuminatum</i>	Poace	x le										le						x	2008	NAm, SAm					
<i>Digitalis ferruginea</i>	Plant	c c																x	1846	Eur, Asi-Tem					
<i>Digitalis lanata</i>	Plant	le c le c															x	1972	Eur, Asi-Tem						
<i>Digitalis purpurea</i>	Plant	e le e c e e c	le c e c x									x x						x	1963	Eur, Afr					
<i>Digitaria ciliaris</i>	Poace	x c						c c ? c									x x	1980	Afr, Asi-Tem, Asi-Tro, NAm, SAm						
<i>Digitaria setigera</i>	Poace	x c						c									x	2010	Afr, Asi-Tem, Asi-Tro, Aus, Pac						
<i>Dimorphotheca ecklonis</i>	Aster	x c						c									x	2010	Afr						
<i>Diplotaxis erucoides</i>	Brass	c ? c c	x							c							x	1971	Eur, Afr, Asi-Tem						
<i>Dipsacus sativus</i>	Capri	c c								c c							x	1971	Eur						
<i>Dipsacus strigosus</i>	Capri	e? c c e? c c	e? le														x	2001	Eur, Asi-Tem						
<i>Dittrichia graveolens</i>	Aster	e e e e e e e e	e c e e														x	2000	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Dittrichia viscosa</i>	Aster	x c x c															x	2008	Eur, Afr, Asi-Tem						
<i>Doronicum orientale</i>	Aster	c c c c c							c								x	1929	Eur, Asi-Tem						
<i>Doronicum pardalianches</i>	Aster	le le le c	le	x						x x							x	1899	Eur						
<i>Draba incana</i> s.str.	Brass	x c						c									x	1947	Eur, Asi-Tem, NAm						
<i>Draba muralis</i>	Brass	e le le c le e c	le c														x	1954	Eur, Afr, Asi-Tem						
<i>Dracocephalum moldavica</i>	Lamia	c c	c														x	1922	Asi-Tem, Asi-Tro						
<i>Dracocephalum thymiflorum</i>	Lamia	c	c c														x	1893	Eur, Asi-Tem						
<i>Dysphania ambrosioides</i>	Amara	c c c c c	? c ? ?														x	1918	NAm, SAm						
<i>Dysphania botrys</i>	Amara	e e e e c e c	c c														x	1756	Eur, Asi-Tem, Asi-Tro						
<i>Dysphania nepalensis</i>	Amara	x c	c														x	1937	Asi-Tem, Asi-Tro						

## Introduction

			Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc	x			(x) Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023, Pagitz et al. unpubl.
esc, sto				Walter et al. 2002, Melzer 2005, Melzer & Barta 2005, Hohla et al. 2009, Pflugbeil & Pils 2013 Baschant 1955, Hohla et al. 2009 JACQ 2022, Pils unpubl.
esc				Pachschwöll et al. 2025
esc				Forstner & Hübl 1971, Walter et al. 2002, Hohla et al. 2009, Pagitz et al. 2023
esc				Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013
esc				Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Amann 2016
esc				Fritsch (jun.) 1929, Janchen 1956–1960, Adler & Mrkvicka 2003a, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Pagitz & Lechner-Pagitz 2015, Pachschwöll et al. 2025, Hohla unpubl., Kniely unpubl., Heber unpubl., Stöhr unpubl., Pils unpubl.
esc				Vitek et al. 2021
esc				Kögeler 1949, Hohla 2012b, Niklfeld 2016, Gilli et al. 2021, Forum Flora Austria 2022, Lefnaer unpubl.
esc				Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013
esc				Pflugbeil & Pils 2013
esc				Hohla 2014 Aschauer & Grabher 2017
esc				Neilreich 1846, Walter et al. 2002
esc				Fischer et al. 2008 Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Vitek et al. 2021, Niklfeld & Schrott-Ehrendorfer 2022, Pagitz et al. 2023
esc				Fischer et al. 2008, Melzer & Ocepek 2009, Wilhalm 2009, Pflugbeil et al. 2017, Kleesadl & Schröck 2022
				Hohla 2011a, b
esc				Hohla 2011a, 2018b
				Forstner & Hübl 1971, Walter et al. 2002, Bernhardt et al. 2008, Fischer et al. 2008, Hohla et al. 2009, Pagitz unpubl.
esc				Forstner & Hübl 1971, Polatschek 1999, Adler & Mrkvicka 2003b, Dörr & Lippert 2004, Fischer et al. 2008, Amann 2016
con, sto				Melzer & Barta 2002, 2008, Hohla 2009, Eichberger et al. 2015, Pagitz & Lechner-Pagitz 2015, Gilli & Niklfeld 2018, Gilli et al. 2021 Hohla 2001, Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Stöhr et al. 2012, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015
esc				Melzer & Ocepek 2009, Gilli et al. 2021
esc				Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. 2023
esc				Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
				Pflugbeil & Pils 2013
esc				Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Thalinger unpubl.
esc				Murr 1923, Melzer & Barta 1992, Fischer et al. 2008, Hohla 2011b
esc				Forstner & Hübl 1971, Walter et al. 2002
				Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pachschwöll et al. 2025
				Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. unpubl.
				Perth 2013

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Dysphania pumilio</i>	Amara	e e? e?	e e? c															x	1960	Aus					
<i>Dysphania schraderiana</i>	Amara	c c	c c	x														x	1880	Afr, Asi-Tem, Asi-Tro					
<i>Echallium elaterium</i>	Cucur	c	c c															x	1926	Eur, Afr, Asi-Tem					
<i>Echinacea purpurea</i>	Aster	c		c	c	c											x	2002	NAm						
<i>Echinochloa colona</i>	Poace	c	c c	c	c												x	x	2002	Afr, Asi-Tem, Asi-Tro					
<i>Echinochloa crus-galli</i> subsp. <i>spiralis</i>	Poace	e c c	e e c c															x	x	2003	Eur, Afr, Asi-Tem, Asi-Tro				
<i>Echinochloa esculenta</i>	Poace	c c c c c c c	c c c c c														x	x	1983	Asi-Tem					
<i>Echinochloa frumentacea</i>	Poace	c c c c c c c	c c c c c														x	x	1988	Asi-Tro					
<i>Echinochloa muricata</i>	Poace	e e	c c ? c														x	x	1993	NAm					
<i>Echinochloa turneriana</i>	Poace	x c	c														x	x	2010	Aus					
<i>Echinocystis lobata</i>	Cucur	e e e	e e c	c e													x	x	1923	NAm					
<i>Echinops bannaticus</i>	Aster	c c c c c	c c c														x	x	1971	Eur					
<i>Echinops exaltatus</i>	Aster	c c c c c	c c c	c													x	x	1947	Eur					
<i>Echium plantagineum</i>	Borag	c c c c	c c c c	c c c c													x	x	1960	Eur, Afr, Asi-Tem					
<i>Eclipta prostrata</i>	Aster	x c c	c														x	x	2013	NAm, SAm					
<i>Egeria densa</i>	Hydro	c c c	c														x	x	1927	SAm					
<i>Elaeagnus angustifolia</i>	Elaea	e e le	c c c c	c c												x	x	x	1971	Eur, Asi-Tem, Asi-Tro					
<i>Elaeagnus umbellata</i>	Elaea	x c		c													x	x	2019	Asi-Tem, Asi-Tro					
<i>Elatine ambigua</i>	Elati	c c c	c													x	x	1992	Asi-Tem, Asi-Tro						
<i>Eleusine indica</i>	Poace	c c c c	c													x	x	1971	Afr, Asi-Tem, Asi-Tro						
<i>Eleusine tristachya</i>	Poace	c c c	c c													x	x	1982	SAm						
<i>Elodea callitrichoides</i>	Hydro	c c														x	x	1998	SAm						
<i>Elodea canadensis</i>	Hydro	e e e e e e e	e e e e e e	e												x	x	1883	NAm						
<i>Elodea nuttallii</i> <sup>EU</sup>	Hydro	e e e	e e e	e e												x	x	2000	NAm						
<i>Elsholtzia ciliata</i>	Lamia	c c c	c c													x	x	1954	Asi-Tem, Asi-Tro						
<i>Elsholtzia stauntonii</i>	Lamia	c	c													x	x	1964	Asi-Tem						
<i>Elymus campestris</i>	Poace	x c	c													x	x	1995	Eur						
<i>Elymus canadensis</i>	Poace	x c		c												x	x	1894	NAm						
<i>Elymus hystrix</i>	Poace	x c		c												x	x	2014	NAm						
<i>Elymus obtusiflorus</i>	Poace	x c c c c	c c	c												x	x	1944	Eur, Asi-Tem						
<i>Emilia coccinea</i>	Aster	x c		c												x	x	2021	Afr						
<i>Epilobium ×floridulum</i> (= <i>E. ciliatum</i> × <i>parviflorum</i> )	Onagr	c	c c c c	c												x	x	1986							
<i>Epilobium ×fossicola</i> (= <i>E. ciliatum</i> × <i>palustre</i> )	Onagr	c		c	c	c	c								x	x	1996								
<i>Epilobium ×interjectum</i> (= <i>E. ciliatum</i> × <i>montanum</i> )	Onagr	c		c	c	c	c								x	x	1997								
<i>Epilobium ×mentiens</i> (= <i>E. ciliatum</i> × <i>tetragonum</i> )	Onagr	c c	c c	c c											x	x	2002								

## Introduction

			Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc, con, sto				Fischer et al. 2008, Hohla et al. 2009, Zernig et al. 2019 Polatschek 1999, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, JACQ 2022
esc sto				Fritsch (jun.) 1926, Fischer et al. 2008 Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023 Fischer et al. 2008, Pagitz et al. 2023
	x			Hohla & Melzer 2003, Melzer & Barta 2003, Stöhr et al. 2006, Hohla et al. 2009, Melzer unpubl.
con, sto				Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, NAGO 2022, Stöhr unpubl.
con, sto				Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
sto				Fischer et al. 2008, Hohla et al. 2009, 2019, Pflugbeil & Pils 2013 Hohla 2011a
esc	x?			Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Pagitz et al. 2023
esc				Fischer et al. 2008, Pflugbeil & Pils 2013, Hohla et al. 2015
				Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009
esc				Walter et al. 2002, Polatschek & Neuner 2013, Brandes 2015, Hohla 2018b, Gilli et al. 2021
sto				Gilli et al. 2019b, JACQ 2022, Pils 2013
esc	x			Hamburger 1948, Fischer et al. 2008 Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. 2023
esc				Vogt unpubl.
sto				Melzer 1996a, Melzer & Barta 2005 Forstner & Hübl 1971, Adler & Mrkvicka 2006, Wallnöfer 2014, Zernig et al. 2019, Pagitz et al. 2023
sto				Fischer et al. 2008, Wallnöfer 2014
sto	xx			Walter et al. 2002 Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Niklfeld 2015, Amann 2016, Pagitz et al. 2023
sto	x			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Amann 2016, Gilli et al. 2020
esc				Fischer et al. 2008, Hohla et al. 2009, Niklfeld & Schratt-Ehrendorfer 2022
esc				Forstner & Hübl 1971, Walter et al. 2002 Hohla & Scholz 2011 Hohla et al. 2009 Hohla 2014
				Hartl et al. 1992, Hohla et al. 2015, Diran 2016 Forum Flora Austria 2022, Waldner unpubl. Melzer 1987, Walter et al. 2002, Pflugbeil & Pils 2013, Hohla unpubl.
				Polatschek 2000, Walter et al. 2002, Polatschek & Neuner 2013
				Hohla et al. 1998, Walter et al. 2002, Pflugbeil & Pils 2013, Hohla unpubl.
				Walter et al. 2002, Pflugbeil & Pils 2013

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Epilobium ×nutantiflorum</i> (= <i>E. ciliatum × roseum</i> )	Onagr	c		c	c	c		c	c	c	c	c	c	c	x			x	x	1985					
<i>Epilobium ×vicinum</i> (= <i>E. ciliatum × obscurum</i> )	Onagr	c	c	c	c										x				x	1966					
<i>Epilobium brunescens</i>	Onagr	x c			c														x	1963	Aus				
<i>Epilobium canum</i>	Onagr	x c				c												x	2002	NAm					
<i>Epilobium ciliatum</i>	Onagr	e e e e e e e e e e											x					x	x	1964	NAm				
<i>Epimedium ×versicolor</i>	Berbe	x c				c												x	2014						
<i>Eragrostis albensis</i>	Poace	e e e	e c e	c e														x	2001	Asi-Tem, Asi-Tro					
<i>Eragrostis cilianensis</i>	Poace	c c c c c	c					c							x		x	x	1870	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Eragrostis curvula</i>	Poace	c	c												x		x	2002	Afr						
<i>Eragrostis frankii</i>	Poace	x c								c					x		x	2007	NAm						
<i>Eragrostis mexicana</i>	Poace	c	c												x		x	1958	NAm, SAm						
<i>Eragrostis minor</i>	Poace	a x e e e e e e e e e e													x		x		Eur, Afr, Asi-Tem, Asi-Tro						
<i>Eragrostis multicaulis</i>	Poace	e e c e e e e e c e e e													x		x	1848	Asi-Tem, Asi-Tro						
<i>Eragrostis pectinacea</i>	Poace	c	c						c						x		x	1949	NAm, SAm						
<i>Eragrostis pilosa</i>	Poace	x e e e e e e e c c c c													x		x	1847	Eur, Afr, Asi-Tem, Asi-Tro, NAm						
<i>Eragrostis planiculmis</i>	Poace	x c		c											x		x	2015	Afr						
<i>Eragrostis trichodes</i>	Poace	c	c	c											x		x	1941	NAm						
<i>Eragrostis virescens</i>	Poace	c c c c c	c	c	c										x		x	1959	NAm, SAm						
<i>Eranthis hyemalis</i>	Ranun	le le le le	c le	c c c c	c	c	c								x		x	1850	Eur, Asi-Tem						
<i>Erechtites hieraciifolius</i>	Aster	e e e e e e e c								x	x				x		x	1885	NAm, SAm						
<i>Erica tetralix</i>	Erica	le	le?	c	le	c	c								x		x	2000	Eur						
<i>Erigeron annuus</i> (incl. subsp. <i>septentrionalis</i> )	Aster	e e e e e e e e e e													x		x	1900	NAm						
<i>Erigeron bonariensis</i> s.str.	Aster	x c	c	c	c	c	c								x		x	2015	NAm, SAm						
<i>Erigeron canadensis</i>	Aster	e e e e e e e e e e													x	x	x	1762	NAm, SAm						
<i>Erigeron karyinskianus</i>	Aster	x c	c c	c	c	c	c								x	x	x	2004	NAm, SAm						
<i>Erigeron philadelphicus</i>	Aster	c	c												x		x	1947	NAm						
<i>Erigeron speciosus</i>	Aster	c	c												x		x	1923	NAm						
<i>Erigeron strigosus</i>	Aster	c ? ? ? ? ?							c						x	x	x	1921	NAm						
<i>Erigeron sumatrensis</i>	Aster	e e?	e	c	c	c	e?								x		x	1954	SAm						
<i>Eriobotrya japonica</i>	Rosac	c x c		c											x		x	2008							
<i>Eriochloa villosa</i>	Poace	x c	c												x		x	2019	Asi-Tem, Asi-Tro						
<i>Erodium ciconium</i>	Geran	le	le	le											x		x	1892	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Erodium malacoides</i>	Geran	c		c				?	c						x		x	1887	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Erodium manescavii</i>	Geran	x c c	c	c											x		x	2015	Eur						
<i>Erodium moschatum</i>	Geran	c ?		c ?	c	c	c	c	c	c	c	c	c	c	x	x	x	1960	Eur, Afr, Asi-Tem						
<i>Eruca sativa</i>	Brass	c c c c c c	c	c	c	c	c	c	c	c	c	c	c	c	x	x	x	1868	Eur, Afr, Asi-Tem, Asi-Tro						

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
			Melzer 1987, Walter et al. 2002, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Hohla unpubl.
			Melzer 1979, Walter et al. 2002, Kleesadl & Brandstätter 2013
esc, sto			Hohla et al. 2009
esc			Pflugbeil & Pils 2013
	xx		Melzer 1979, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc			Wittmann & Pflugbeil 2017
cor			Hohla 2006a, Hohla et al. 2009, Pagitz 2012, Pflugbeil & Pils 2013, Stöhr & Brandes 2014, Niklfeld 2016, Lefnaer 2021
			Adler & Mrkvicka 2003b, Fischer et al. 2008, Pagitz 2012, Amann 2016
			Adler & Mrkvicka 2006
			Pagitz 2012
			Melzer 1959, Englmaier & Wilhalm 2018
			Jacquin 1762, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
cor			Melzer 1959, Fischer et al. 2008, Hohla et al. 2009, Pagitz 2012, Stöhr et al. 2012, Hohla 2013, 2014, Pflugbeil & Pils 2013, Zernig et al. 2018
			Fischer et al. 2008, Polatschek & Neuner 2013, Englmaier & Wilhalm 2018
			Fischer et al. 2008, Hohla et al. 2009, Pagitz 2012, Hohla 2014, JACQ 2022
			Hohla et al. 2015
esc			Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Melzer 1959, Fischer et al. 2008, Hohla et al. 2009, Gilli & Niklfeld 2018, Lefnaer unpubl.
esc			Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Pagitz et al. 2023, Kniely unpubl.
sto			Kornhuber & Heimerl 1885, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
cor			Hohla et al. 2009, Polatschek & Neuner 2013, Niklfeld 2016, Wittmann & Pflugbeil 2017, JACQ 2022
			Hamburger 1948, Hartl et al. 1992, Fischer et al. 2008, Hohla et al. 2009, Polatschek & Neuner 2013
cor			Hohla et al. 2015, Diran 2016, Gilli et al. 2021, Pagitz et al. 2023
			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
			Stöhr et al. 2007, 2009, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli et al. 2019b, Forum Flora Austria 2022, Stöhr unpubl.
			Hamburger 1948, Fischer et al. 2008
			Walter et al. 2002
			Hamburger 1948, Hartl et al. 1992, Fischer et al. 2008, Hohla et al. 2009, Pagitz & Lechner-Pagitz 2015
			Fischer et al. 2008, Melzer & Barta 2008, Pflugbeil & Pils 2013, Gilli & Niklfeld 2018, Kleesadl & Schröck 2022
esc			Vitek et al. 2021
			Follak et al. 2020
esc, cor			Forstner & Hübl 1971, Fischer et al. 2008
esc			Hartl et al. 1992, Walter et al. 2002, Pflugbeil & Pils 2013
esc			Gilli & Niklfeld 2018, Hohla 2022
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli et al. 2022
esc			Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range	
<i>Erucastrum gallicum</i>	Brass		e	e	e	e	e	e	e	e	e	e	e	e		x	x	x	x					1794	Eur	
<i>Eryngium giganteum</i>	Apiac		le	le	le	c					c	c			x									1973	Asi-Tem	
<i>Erysimum aureum</i>	Brass		le		le													x							1913	Eur, Asi-Tem
<i>Erysimum canum</i>	Brass		c	c	c	x												x							1973	Eur, Asi-Tem
<i>Erysimum cheiri</i>	Brass		le	?	le	c	c	c		c		c	c				x	x						1756	Eur	
<i>Erysimum cuspidatum</i>	Brass		le		le													x							1992	Eur, Asi-Tem
<i>Erysimum melicentae</i>	Brass		c	c	c	c	c	c			c						x	x						2000	Asi-Tem	
<i>Erysimum pulchellum</i>	Brass		x	c				c									x							2002	Asi-Tem	
<i>Eschscholzia californica</i>	Papav		c	c	c	c	c	c	c	c	c	c	c	c		x	x						1935	NAm		
<i>Euclidium syriacum</i>	Brass		le?	c	le?	c	c				c						x							1767	Eur, Asi-Tem, Asi-Tro	
<i>Eudianthe coeli-rosa</i>	Caryo		c		c	c											x							1960	Eur, Afr	
<i>Euonymus alatus</i>	Celas		x	c		c			c	c					x								2016	Asi-Tem		
<i>Euonymus fortunei</i>	Celas		x	le	le	c	c	le	le?	c?		x	x			x							2002	Asi-Tem, Asi-Tro		
<i>Euonymus japonicus</i>	Celas		x	c		c		c		c		x				x							2008	Asi-Tem		
<i>Euphorbia acuminata</i>	Epho		le?	c	le?	c										x							1903	Eur, Afr, Asi-Tem, Asi-Tro		
<i>Euphorbia chamaesyce</i>	Epho		c		x	c										x							1960	Eur, Afr, Asi-Tem, Asi-Tro		
<i>Euphorbia characias</i>	Epho		x	c		c			c							x							2020	Eur, Asi-Tem		
<i>Euphorbia glyptosperma</i>	Epho		e		e										x								1964	NAm		
<i>Euphorbia humifusa</i>	Epho		e	c	le	c	e	le	c		c	c				x							1880	Eur, Asi-Tem		
<i>Euphorbia lathyris</i>	Epho		e?	e?	e?	e?	e?	e?	c	e?	c	c	c			x	x	x					1857	Eur, Asi-Tem, Asi-Tro		
<i>Euphorbia maculata</i>	Epho		e	e	e	e	e	e	e	e	e	e	e	e		x							1960	NAm, SAm		
<i>Euphorbia marginata</i>	Epho		c	c	c	c	c	c	c	c					x								1821	NAm		
<i>Euphorbia myrsinoides</i>	Epho		le	c	le	c	le	c	c	c	c	c	c	c	x								1971	Eur, Asi-Tem		
<i>Euphorbia nutans</i>	Epho		c	c	c		c	c	c		c	c			x								1932	NAm, SAm		
<i>Euphorbia prostrata</i>	Epho		e	e	e?	e	c	c	c	e?	c	e	c		x								2002	NAm, SAm		
<i>Euphorbia saratoi</i>	Epho		x	e	e	e	e	e?	e		c	c	c	e?		x							1850	Eur, Asi-Tem		
<i>Euphorbia segetalis</i> s.str.	Epho		x	c	x	?	c									x							1960	Eur, Afr, Asi-Tem		
<i>Euphorbia serpens</i>	Epho		c	c	c	c	c	c	c	c		c	c	c		x							1992	Pac, NAm, SAm		
<i>Euphorbia taurinensis</i>	Epho		le	le	le	le	c	le?								x							1948	Eur, Asi-Tem		
<i>Euthamia graminifolia</i>	Aster		le	c	c	c					c	le				x							1923	NAm		
<i>Fagopyrum esculentum</i>	Polyg		c	c	c	c	c	c	c	c	c	c	c	c		x							1821	Asi-Tem		
<i>Fagopyrum tataricum</i>	Polyg		c	c	c	c	c	c	c	c	c	c	c	c		x	x	x					1848	Asi-Tem, Asi-Tro		
<i>Fallopia baldschuanica</i>	Polyg		x	le	c	le	le	c	c	c	c	c	c	c	x	x	x					1966	Asi-Tem, Asi-Tro			
<i>Fallopia baldschuanica</i> × <i>Reynoutria japonica</i>	Polyg		x	c					c							x							2002			
<i>Fargesia murielae</i>	Poace		x	c		c			c		c	c	c	c	x								2018	Asi-Tem		

## Introduction

	Environmental	Agriculture	Silviculture	Water management	Human health	Animal health	Source
--	---------------	-------------	--------------	------------------	--------------	---------------	--------

- cor Schultes 1794, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld & Schratt-Ehrendorfer 2022  
Stöhr et al. 2012, Zernig et al. 2018, Gilli et al. 2021, Hohla unpubl.  
Fischer et al. 2008, Polatschek 2013  
Walter et al. 2002, Hohla et al. 2009
- esc Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013  
Melzer & Barta 2008  
Walter et al. 2002, Stöhr et al. 2006, Polatschek 2013, Pagitz unpubl.  
Pflugbeil & Pils 2013  
Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015,  
Pagitz unpubl.  
Crantz 1767, Fischer et al. 2008
- esc Fischer et al. 2008  
esc Gilli et al. 2021  
esc Hohla et al. 2009, Stöhr et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Leonhartsberger 2018, Stöhr  
unpubl.  
esc Pflugbeil & Pils 2013, Forum Flora Austria 2022, Griebl unpubl.  
Forstner & Hübl 1971, Fischer et al. 2008, Sauberer & Till 2015
- esc, sto Walter et al. 2002, Rozanek unpubl.
- esc Gilli et al. 2021, Forum Flora Austria 2022  
Walter et al. 2002
- esc Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016  
Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
- esc Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016, Pagitz et al.  
unpubl.  
esc Hamburger 1948, Fischer et al. 2008, Hohla 2012b, Pflugbeil & Pils 2013  
Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Gilli et al.  
2021, Till unpubl., Leonhartsberger unpubl., Stöhr unpubl.
- sto Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Brandes 2015, Forum Flora Austria 2022, Pachschwöll  
et al. 2025, Stöhr unpubl.
- esc Adler et al. 2008, Fischer et al. 2008, Till 2011, Pflugbeil & Pils 2013, Hohla 2014, 2018b, Stöhr &  
Brandes 2014, Pagitz & Lechner-Pagitz 2015, Zernig et al. 2018  
Niklfeld 2015, Amann 2016, Reichert et al. 2018, Stöhr 2021  
Walter et al. 2002, Pachschwöll et al. 2025, Barta unpubl.  
Hügin & Starlinger 1997, Hohla 2013, Pflugbeil & Pils 2013, Diran 2016, Gilli et al. 2019b, Rozanek  
unpubl.
- esc Fischer et al. 2008, Hohla et al. 2009  
esc, con, sto Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Amann 2016  
Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
- con, sto Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016  
esc, cor Fischer et al. 2008, Stöhr et al. 2012, Pflugbeil & Pils 2013, Brandes 2015, Niklfeld & Schratt-  
Ehrendorfer 2022, Leonhartsberger & Wendelin unpubl.
- cor, hyb Pflugbeil & Pils 2013
- esc Forum Flora Austria 2022, Lefnaer unpubl., Pagitz unpubl., Stöhr unpubl.

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range	
<i>Fargesia robusta</i>	Poace	x c							c			x											2018	Asi-Tem	
<i>Ferula communis</i>	Apiac	x c							c														x	2008	Eur, Afr, Asi-Tem
<i>Ferulago campestris</i>	Apiac	c c																					x	1965	Eur, Afr, Asi-Tem
<i>Festuca arundinacea</i> subsp. <i>mediterranea</i>	Poace	x c				c																	x	2007	Eur, Afr, Asi-Tem, Asi-Tro
<i>Festuca arundinacea</i> subsp. <i>uechtritziana</i>	Poace	e c c c c e c c c c											x										x	1958	Eur, Afr, Asi-Tem, Asi-Tro
<i>Festuca cinerea</i>	Poace	x c					c																x	2010	Eur
<i>Festuca danthonii</i>	Poace	x e e? e e e e e?																					x	2012	Eur, Afr, Asi-Tem, Asi-Tro
<i>Festuca geniculata</i>	Poace	x c					c																x	2020	Eur, Afr
<i>Festuca rubra</i> subsp. <i>litoralis</i>	Poace	x c		c c c c																			x	2015	Eur, Afr, Asi-Tem, Asi-Tro, NAm
<i>Ficus carica</i>	Morac	c c c c c c c c c c c																					x	1923	Eur, Afr, Asi-Tem, Asi-Tro
<i>Filipendula rubra</i>	Rosac	x c						c					x											2019	NAm
<i>Flueggea suffruticosa</i>	Phyll	x c		c																			x	2018	Asi-Tem
<i>Foeniculum vulgare</i>	Apiac	a, c c c c c c c c c c c																					x	1756	Eur, Afr, Asi-Tem, Asi-Tro
<i>Forsythia ×intermedia</i>	Oleac	le le c c c le? c c								x x												x x	2002		
<i>Forsythia suspensa</i>	Oleac	c c c c c c c c										x											x	1965	Asi-Tem
<i>Forsythia viridissima</i>	Oleac	c c							a?														x	1912	Asi-Tem
<i>Fragaria ×ananassa</i>	Rosac	c c c c c c c c							c														x	1964	
<i>Fraxinus americana</i>	Oleac	x c c c									x x												x	1984	NAm
<i>Fraxinus pennsylvanica</i>	Oleac	e e? e e? c c								x x													x	1965	NAm
<i>Fritillaria imperialis</i>	Lilia	c c c						c				x												2004	Eur, Asi-Tem, Asi-Tro
<i>Froelichia gracilis</i>	Amara	x c c																					x	1996	NAm
<i>Fumaria capreolata</i>	Papav	c c c c						c c		c			x										x	1908	Eur, Afr, Asi-Tem
<i>Fumaria parviflora</i> s.str.	Papav	x c c						c c	x														x	1871	Eur, Afr, Asi-Tem
<i>Gaillardia ×grandiflora</i>	Aster	c c c c						c c c															x	1966	
<i>Gaillardia aristata</i>	Aster	c ? c																					x	1966	NAm
<i>Gaianthus elwesii</i>	Amary	le le le		c				c		x x												x	2002	Eur, Asi-Tem	
<i>Gaianthus plicatus</i>	Amary	x c		c																		x	2021	Eur, Asi-Tem	
<i>Gaianthus woronowii</i>	Amary	x c c c						c		x												x	2013	Asi-Tem	
<i>Galega orientalis</i>	Fabac	c							c													x	1960	Asi-Tem	
<i>Galeobdolon argentatum</i>	Lamia	e e e le e e e e e e						e c	x x x			x										x	1977	Eur	
<i>Galinsoga parviflora</i>	Aster	e e e e e e e e e e e e																				x x	1810	NAm, SAm	
<i>Galinsoga quadriradiata</i>	Aster	e e e e e e e e e e e e																				x x	1900	NAm	
<i>Galium verrucosum</i>	Rubia	c c		x																		x	1954	Eur, Afr, Asi-Tem	
<i>Gastridium ventricosum</i>	Poace	c c		c																		x	1954	Eur, Afr, Asi-Tem	
<i>Gaudinia fragilis</i>	Poace	c c		c																		x	1954	Eur, Afr, Asi-Tem	
<i>Gazania ×hybrida</i>	Aster	c c		c																		x	2003		
<i>Geranium ×cantabrigiense</i>	Geran	x c		c																		x	2008		
<i>Geranium ×magnificum</i>	Geran	c c		c																		x	2002		
<i>Geranium ×oxonianum</i>	Geran	x c		c																		x	2012		
<i>Geranium aequale</i>	Geran	c c c c											x									x	1999	Eur	

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Stöhr unpubl. Pflugbeil & Pils 2013 Fischer et al. 2008
rel, esc		Hohla 2011a
rel, esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
		Hohla 2021 Wittmann & Pflugbeil 2017, Gilli & Niklfeld 2018, Reich et al. 2018, Gilli et al. 2019b, Hohla et al. 2019, Vogt unpubl.
		Hohla 2021
esc		Gilli & Niklfeld 2018, Zernig et al. 2018, Hohla 2021, Englmaier unpubl.
esc		Walter et al. 2002, Hartl 2007, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Forum Flora Austria 2022, Pachschwöll et al. 2025, Stöhr unpubl.
esc		Forum Flora Austria 2022, Stöhr unpubl.
esc		Gilli et al. 2019b
esc		Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, 2015, Pflugbeil & Pils 2013, Forum Flora Austria 2022, Stöhr unpubl.
esc, sto		Essl 2008, Hohla et al. 2009, Stöhr et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Pagitz et al. 2023, Essl unpubl., Hofbauer unpubl.
esc		Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Stöhr et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016, Pagitz et al. 2023
esc		Walter et al. 2002, Pagitz unpubl.
esc		Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013
rel, esc		Adler & Mrkvicka 2003a, Niklfeld & Schrott-Ehrendorfer 2022, Leopoldinger unpubl.
rel, esc xx		Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. 2023, Pachschwöll et al. 2025
esc		Stöhr et al. 2012, Pagitz et al. 2023, Barta unpubl.
		Gilli et al. 2019b
		Walter et al. 2002, Hohla et al. 2009, Pagitz et al. 2023
		Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Fischer et al. 2008, Pflugbeil & Pils 2013, Gilli et al. 2019b, Pagitz et al. 2023
		Walter et al. 2002
esc		Melzer & Barta 2002, Fischer et al. 2008, Hohla 2014, Pagitz et al. 2023
esc		ZoBoDat 2022, Hohla unpubl.
esc		Gilli & Niklfeld 2018, Forum Flora Austria 2022, Griebl unpubl., Stöhr unpubl.
esc		Walter et al. 2002
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Pagitz et al. unpubl.
x		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
x		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
		Walter et al. 2002, Hohla et al. 2009
		Walter et al. 2002
		Walter et al. 2002
esc		Hohla 2006c, 2022, Hohla et al. 2009
esc		Hohla 2012b
esc		Hohla 2006c, Hohla et al. 2009, JACQ 2022
esc		Hohla 2012b
esc		Melzer & Barta 2000, Barta 2010, Pachschwöll et al. 2025



## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Walter et al. 2002, Fischer et al. 2008, Pflugbeil & Pils 2013
esc			Dörr & Lippert 2004, Amann 2016, Griebl 2020, Forum Flora Austria 2022, ZoBoDat 2022, Pflugbeil unpubl., Pils 2022, Stöhr unpubl.
esc			Melzer & Barta 2008, Barta 2012
esc			Melzer 1980, Walter et al. 2002
esc, cor			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Stöhr & Brandes 2014, Amann 2016
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, JACQ 2022
esc			Fischer et al. 2008, Brandes 2010, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, JACQ 2022, Pagitz et al. 2023
esc			Stöhr et al. 2007, Pflugbeil & Pils 2013
esc			Walter et al. 2002, Amann 2016, Wittmann & Pflugbeil 2017, Stöhr unpubl.
			Walter et al. 2002
			Amann 2016
			Wallnöfer et al. 2015, Forum Flora Austria 2022
esc			Fritsch (jun.) 1930, Hartl et al. 1992, Adler & Mrkvicka 2003a, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Clusius et al. 1601, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013
			Walter et al. 2002, Fischer et al. 2008, Hohla 2011a, Pagitz & Lechner-Pagitz 2015
			Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla 2011a, Pflugbeil & Pils 2013
esc			Fischer et al. 2008, Pflugbeil & Pils 2013, Forum Flora Austria 2022, Pachschwöll et al. 2025, Stöhr unpubl.
			Hohla 2012a, Pflugbeil & Pils 2013, Englmaier & Wilhalm 2018, Gilli et al. 2019b, Pagitz et al. 2023
			Pflugbeil & Pils 2013
			Hohla 2018a
			Melzer 1966, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Zernig et al. 2016, Pagitz et al. 2023
esc			Hohla 2006b, Pagitz et al. 2023
esc			Walter et al. 2002
			Walter et al. 2002
			Hartl et al. 1992, Walter et al. 2002
sto			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld 2016
			Walter et al. 2002
			Fischer et al. 2008, Hohla et al. 2019, Vitek et al. 2021, Forum Flora Austria 2022, Stöhr unpubl.
			Forstner & Hübl 1971, Fischer et al. 2008, Melzer & Barta 2008
esc			Adler & Mrkvicka 2006
esc			Zernig et al. 2022
esc			Vitek et al. 2021
esc			Vitek et al. 2021
esc			Fischer et al. 2008, Pflugbeil & Pils 2013, ZoBoDat 2022, Hohla unpubl.
esc			Leonhartsberger unpubl.
esc			Polatschek 1997, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. 2023
esc			Polatschek 1997, Pagitz et al. 2023
esc, sto	x?		Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009
esc			Walter et al. 2002

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Cärinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Helianthus debilis</i>	Aster		c	c	c	c	c		c	c								x	1909	NAm					
subsp. <i>cucumerifolius</i>																									
<i>Helianthus decapetalus</i>	Aster		c c	c c	c c	c							x						x	1954	NAm				
<i>Helianthus giganteus</i>	Aster	x c								c									x	x	2017	NAm			
<i>Helianthus microcephalus</i> -	Aster	x c				c													x	x	2009				
hybrids																									
<i>Helianthus mollis</i>	Aster		c			c													x	x	2003	NAm			
<i>Helianthus pauciflorus</i>	Aster		le? c	c c	c c	le? c	c	c	c										x		1960	NAm			
<i>Helianthus petiolaris</i>	Aster		c			c	?												x	x	1960	NAm			
<i>Helianthus salicifolius</i>	Aster	x c		c															x	x	2021	NAm			
<i>Helianthus tuberosus</i>	Aster		e e	e e	e e	e e	e e	e e	e e	e e	e e	e e	x						x		1947	NAm			
<i>Helichrysum petiolare</i>	Aster	x c				c	c												x		2007	Afr			
<i>Heliopsis helianthoides</i>	Aster	x c			c	c c	c c	c											x		1995	NAm			
subsp. <i>scabra</i>																									
<i>Helleborus ×hybridus</i>	Ranun		le	le	le	c c		c c	c c	c c	c c	x x						x		1994					
<i>Helleborus argutifolius</i>	Ranun	x c		c															x		2009	Eur			
<i>Helleborus foetidus</i>	Ranun		le	le	le	c c	c c	c	x x												1879	Eur, Afr			
<i>Helleborus viridis</i>	Ranun	x c			c		c	x x													1860	Eur			
subsp. <i>occidentalis</i>																									
<i>Helminthotheca echioides</i>	Aster		e e	e e	c c	c	le	x x	x x										x	x	1842	Eur, Afr, Asi-Tem			
<i>Hemerocallis fulva</i>	Aspho		e e	e c	e e	e e	e e	e e	c x x										x	x	1797	Asi-Tem, Asi-Tro			
<i>Heracleum mantegazzianum</i> <sup>EU</sup>	Apiac		e c	le	c e	le	c	c e e	x x	x x	x x	x x	x	x	x	x	x	x	x	1950	Asi-Tem				
<i>Heracleum mantegazzianum</i> × <i>H. sphondylium</i>	Apiac	x c		c														x	x		2017				
<i>Heracleum pubescens</i>	Apiac	c		c														x		1947	Eur				
<i>Hesperis matronalis</i>	Brass	e e	e c	e e	e e	e c	e c	e c	x x x									x		1804	Eur, Asi-Tem				
subsp. <i>matronalis</i>																									
<i>Heteranthera zosterifolia</i>	Ponte	c			c								x					x		1983	SAm				
<i>Heuchera micrantha</i>	Saxif	x c			c													x		2019	NAm				
<i>Heuchera sanguinea</i>	Saxif	c			c													x		1992	NAm				
<i>Hibiscus syriacus</i>	Malva	c c	c c	c c	c c	c	c	c										x		2002	Asi-Tem				
<i>Hieracium peleterianum</i>	Aster	x c	c															x		1829	Eur				
<i>Hippophae rhamnoides</i>	Elaea	x e? e?	e? e?	e? e?	e? e?	e e?	e?	c e?	x									x		1950	Eur				
subsp. <i>rhamnoides</i>																									
<i>Hirschfeldia incana</i>	Brass	c c	c c	c c	c c	c c	c c	c c										x		1954	Eur, Afr, Asi-Tem				
<i>Honorius boucheanus</i>	Aspar	x c		c														x		1975					
× <i>H. nutans</i> s.str.																									
<i>Hordeum distichon</i>	Poace	c	c	c c	c c	c c	c c	c c	c c	c c	c c	c c						x	x						
<i>Hordeum jubatum</i>	Poace		e e	c	c c	c e	c e	c e	c e									x		1932	Asi-Tem, NAm				
<i>Hordeum leporinum</i>	Poace	c			c		c											x	x	1989	Eur, Afr, Asi-Tem				
<i>Hordeum marinum</i> s.str.	Poace	c			c		c											x	x	1843	Eur, Afr, Asi-Tem, Asi-Tro				
<i>Hordeum secalinum</i>	Poace	c				?		c	c									x	x	2001	Eur, Afr, Asi-Tem				

## Introduction

						Source
	Environmental	Agriculture	Silviculture	Water management	Human health	Animal health
esc					Murr 1923, Walter et al. 2002, Amann 2016, Hohla et al. 2019	
esc					Walter et al. 2002, Adler & Mrkvicka 2006, Pflugbeil 2020	
esc					Pflugbeil unpubl.	
esc					Hohla 2009	
esc					Hohla 2006c, Hohla et al. 2009	
esc					Walter et al. 2002, Hohla 2006c, Fischer et al. 2008, Brandes 2015, Amann 2016, Forum Flora Austria 2022, Stöhr unpubl.	
esc					Fischer et al. 2008	
esc					Forum Flora Austria 2022, Lefnaer unpubl.	
esc	xx	x?			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	
esc					JACQ 2022, Pachschwöll et al. 2025	
esc					Hohla et al. 2009, Pflugbeil & Pils 2013, Hohla 2014, Pagitz et al. 2023	
esc					Fischer et al. 2008, Kleesadl 2009, Melzer & Ocepek 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023, Thalinger unpubl.	
esc					Gilli et al. 2020	
esc					Walter et al. 2002, Fischer et al. 2008, Pflugbeil & Pils 2013, Hohla 2014, Amann 2016, Stöhr unpubl.	
esc					Hohla 2006b, Forum Flora Austria 2022, Stöhr unpubl.	
sto					Dolliner 1842, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. unpubl.	
esc					Host 1797, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015	
esc	x	x			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. unpubl.	
esc					Hohla 2018a	
esc					Hamburger 1948, Walter et al. 2002	
esc					Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023	
sto					Hartl et al. 1992, Walter et al. 2002	
esc					Hohla et al. 2019	
esc					Walter et al. 2002	
esc					Hohla et al. 2009, Stöhr et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023, Pachschwöll et al. 2025	
esc					Niklfeld 2016	
esc					Hohla et al. 2009, Pagitz et al. 2023	
sto					Fischer et al. 2008, Hohla et al. 2009, Pflugbeil et al. 2017	
esc					Melzer 1975	
esc					Neilreich 1859, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Stöhr & Brandes 2014, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022	
cor					Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023, Brandes & Stöhr unpubl.	
					Fischer et al. 2008, Pflugbeil & Pils 2013	
					Adler & Mrkvicka 2003b, Fischer et al. 2008	
					Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013	

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Hordeum vulgare</i>	Poace	c	c c c c c																x x						
<i>Hosta ×fortunei</i>	Aspar	x c			c		c		c			x							x	2002					
<i>Hosta lancifolia</i>	Aspar	c c			c							x							x	1998	Asi-Tem				
<i>Hosta plantaginea</i>	Aspar	c	c									c							x	1971	Asi-Tem				
<i>Houttuynia cordata</i>	Sauru	c c	c		c a c														x	2004	Asi-Tem, Asi-Tro				
<i>Humulus japonicus</i> <sup>EU</sup>	Canna	c		c c c			c c					x							x	1931	Asi-Tem, Asi-Tro				
<i>Hyacinthoides ×massartiana</i>	Aspar	x c			c c	c													x	2009					
<i>Hyacinthoides hispanica</i>	Aspar	x c					c											x	2009	Eur					
<i>Hyacinthoides italicica</i>	Aspar	le le ?					c											x	1862	Eur					
<i>Hyacinthoides non-scripta</i>	Aspar	c c	c		c c	c		c	c		c	x						x	1960	Eur					
<i>Hyacinthus orientalis</i>	Aspar	le le c		c	c c	c c						x						x	1958	Asi-Tem					
<i>Hydrangea anomala</i> subsp. <i>petiolaris</i>	Hydra	x c					c											x	2002	Asi-Tem					
<i>Hydrangea arborescens</i>	Hydra	c		c c			c	c c c c		c								x	2000	NAm					
<i>Hydrangea macrophylla</i>	Hydra	c	c c		c c c c c													x	1971	Asi-Tem					
<i>Hydrangea paniculata</i>	Hydra	x c			c													x	2019	Asi-Tem					
<i>Hydrangea sargentiana</i>	Hydra	x c	c			c						x						x	2020	Asi-Tem					
<i>Hydrilla verticillata</i>	Hydro	c		c		c												x	1968	Eur, Afr, Asi-Tem, Asi-Tro, Aus					
<i>Hygrophila polysperma</i>	Acant	le				le												x	1968	Asi-Tem, Asi-Tro					
<i>Hylotelephium ewersii</i>	Crass	x c					c											x	2015	Asi-Tem, Asi-Tro					
<i>Hylotelephium sieboldii</i>	Crass	c	c	c	c	c		c										x	1960	Asi-Tem					
<i>Hylotelephium spectabile</i>	Crass	c	c c c c	c	c	c												x	1971	Asi-Tem					
<i>Hylotelephium spectabile</i> × <i>H. telephium</i> s.str.	Crass	x c	c	c	c	c		c c										x	2019						
<i>Hyoscyamus albus</i>	Solan	c	c c		c													x	1895	Eur, Afr, Asi-Tem					
<i>Hypericum androsaemum</i>	Hyper	c		c ? c	c	c												x	1868	Eur, Afr, Asi-Tem					
<i>Hypericum calycinum</i>	Hyper	c	c c		c													x	1992	Eur, Asi-Tem					
<i>Hypericum densiflorum</i>	Hyper	x c			c													x	2010	NAm					
<i>Hypericum kouytchense</i>	Hyper	x c				c												x	2008	Asi-Tem					
<i>Hypericum olympicum</i>	Hyper	x le		le													x x	2013	Eur, Asi-Tem						
<i>Hyssopus officinalis</i>	Lamia	le le	c c c c c c c c															x	1859	Eur, Afr, Asi-Tem					
<i>Iberis amara</i>	Brass	c c c c c c c c c c																x	1859	Eur					
<i>Iberis pinnata</i>	Brass	e e e c															x	1859	Eur						
<i>Iberis sempervirens</i>	Brass	c c c c	c	c c	c c												x	1987	Eur, Afr, Asi-Tem						
<i>Iberis umbellata</i>	Brass	le c	c c c c c c	le	c c c c c c												x x	1859	Eur						
<i>Ibicella lutea</i>	Marty	x c	c															x	2022	SAm					
<i>Ilex ×altaclerensis</i>	Aquif	x c			c													x	2020						
<i>Impatiens balfourii</i>	Balsa	c c c c				c											x x	1971	Asi-Tro						
<i>Impatiens balSamina</i>	Balsa	c c	c c c	c	c c c												x	1971	Asi-Tro						
<i>Impatiens cristata</i>	Balsa	x c		c	c	c											x	1925	Asi-Tro						
<i>Impatiens glandulifera</i> <sup>EU</sup>	Balsa	e e e e e e e e e e	e	e e e e e e e e e x	x x x x	x											x	1898	Asi-Tro						
<i>Impatiens parviflora</i>	Balsa	e e e e e e e e e e	e	e e e e e e e e e x	x x x	x										x	1930	Asi-Tem							
<i>Impatiens walleriana</i>	Balsa	x c		c													x	2003	Afr						
<i>Inula helenium</i>	Aster	le? c le? c le? c	le? c c c c	le? c c c c	c c c c								x x				x	1859	Eur, Asi-Tem						

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health Source	
esc, sto	Neilreich 1859, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016	
esc	Melzer & Barta 2003, Kleesadl 2009, Pagitz et al. 2023	
esc	Hohla et al. 2009, Kniely unpubl.	
esc	Walter et al. 2002, Amann 2016	
esc	Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Moosbrugger 2016, Hohla 2018b	
esc	Fischer et al. 2008, Hohla et al. 2009, Polatschek & Neuner 2013	
esc	Hohla 2012b, Pflugbeil & Pils 2013, Pagitz et al. 2023	
esc	Pflugbeil & Pils 2013	
esc	Walter et al. 2002, Pflugbeil & Pils 2013, Gilli et al. 2020	
esc	Stöhr et al. 2012, Pflugbeil & Pils 2013, Amann 2016, Adler unpubl.	
esc	Traxler 1958, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Sauberer & Till 2015, Pagitz et al. 2023	
esc	Pflugbeil & Pils 2013	
esc	Amann 2016	
esc	Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Follak et al. 2020, Stöhr unpubl.	
esc	Griebl 2020, Forum Flora Austria 2022, Griebl unpubl.	
sto	Forum Flora Austria 2022, Observation International 2022, Lampl unpubl., ReitSAmer unpubl.	
sto	Hartl et al. 1992, Walter et al. 2002, Pall et al. 2013	
sto	Hartl et al. 1992, Walter et al. 2002	
esc	Brandes 2015	
esc	Walter et al. 2002, Pflugbeil & Pils 2013, Amann 2016, Hohla 2018b	
esc	Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	
esc	Sauberer et al. 2020, Forum Flora Austria 2022, Hohla unpubl., Stöhr unpubl.	
esc	Forstner & Hübl 1971, Walter et al. 2002	
esc	Maly 1868, Stöhr et al. 2007, Pflugbeil & Pils 2013, Essl unpubl.	
esc	Hartl et al. 1992, Gilli & Niklfeld 2018, Prinz unpubl.	
esc	Hohla 2014	
esc	Pflugbeil & Pils 2013	
esc	Leonhartsberger unpubl.	
esc	Walter et al. 2002, Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	
esc	Neilreich 1859, Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	
esc	Neilreich 1859, Adler & Mrkvicka 2003b, Fischer et al. 2008	
esc	Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023	
esc	Neilreich 1859, Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	
esc	Pachschwöll et al. 2025	
esc	JACQ 2022, Pils 2013	
esc	Fischer et al. 2008, Pflugbeil & Pils 2013	
esc	Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023	
esc	Hohla et al. 2009, Pagitz & Lechner-Pagitz 2015	
esc, cor xx	Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	
esc x	Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	
esc	Pflugbeil & Pils 2013	
esc	Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Inula magnifica</i>	Aster	x c	c																		x	2019	Eur, Asi-Tem		
<i>Inula racemosa</i>	Aster	x c	c																		x	2009	Asi-Tem, Asi-Tro		
<i>Ionopsidium acaule</i>	Brass	c		c																	x	1897	Eur		
<i>Ipheion uniflorum</i>	Amary	x c										c									x	2009	SAm		
<i>Ipomoea coccinea</i>	Convo		c		c																x	1971	SAm		
<i>Ipomoea hederacea</i>	Convo		c	c	c	c	c													x	1954	Afr, NAm, SAm			
<i>Ipomoea purpurea</i>	Convo		c	c	c	c	c	c	c	c	c	c	c	c						x	1926	NAm, SAm			
<i>Ipomoea tricolor</i>	Convo		c									c								x	2004	NAm, SAm			
<i>Iris germanica</i> s.str.	Irida		e e e c c c c e c c c													x					x	1859	Eur, Asi-Tem		
<i>Iris pallida</i>	Irida		c c c c																	x	1971	Eur			
<i>Iris reticulata</i>	Irida	x c										c								x	2021	Asi-Tem			
<i>Iris SAMbucina</i> s.str.	Irida		le le? c c c le									c	c		x						x	1878			
<i>Iris sanguinea</i>	Irida	x c	c		c							c								x	2007	Asi-Tem			
<i>Iris sanguinea</i> × <i>I. sibirica</i>	Irida		c c																	x	1989				
<i>Jasminum nudiflorum</i>	Oleac	x c	c		c							c	c							x	2002	Asi-Tem			
<i>Juglans cinerea</i>	Jugla	x c										c								x	2014	NAm			
<i>Juglans nigra</i>	Jugla		e c e c c c c c												x						x	1971	NAm		
<i>Juglans regia</i>	Jugla	x e e e e e e e e e e e e x x x																		x	1800	Eur, Asi-Tem, Asi-Tro			
<i>Juncus dudleyi</i>	Junca		le									le			x						x	1962	NAm		
<i>Juncus ensifolius</i>	Junca		le		c c	le	le		c c						x					x	1989	Asi-Tem, NAm			
<i>Juncus tenuis</i> subsp. <i>dichotomus</i>	Junca	x c			c															x	2013	NAm, SAm			
<i>Juncus tenuis</i> subsp. <i>tenuis</i>	Junca	x e e e e e e e e e e e e													x					x	x	1893	NAm, SAm		
<i>Juniperus ×pfitzneriana</i>	Cupre	x c		c																x	2010	Asi-Tem			
<i>Juniperus chinensis</i>	Cupre	x c										c								x	2018	Asi-Tem, Asi-Tro			
<i>Juniperus excelsa</i>	Cupre	x c										c								x	2020	Eur, Asi-Tem			
<i>Kalmia angustifolia</i>	Erica	le			le											x					x	1966	NAm		
<i>Kerria japonica</i>	Rosac	c c c c c c			c c c c c										x					x	1911	Asi-Tem			
<i>Kitaibela vitifolia</i>	Malva	c c	c c																	x	1948	Eur			
<i>Klasea quinquefolia</i>	Aster	le	le												x					x	1880	Asi-Tem			
<i>Klasea radiata</i>	Aster	x c	c																	x	1822	Eur, Asi-Tem			
<i>Knautia macedonica</i>	Capri	x c		c c	c															x	2018	Eur			
<i>Koelreuteria paniculata</i>	Sapin	c c c c c		c c c c	c							c	x							x	1948	Asi-Tem			
<i>Koenigia polystachya</i> <sup>EU</sup>	Polyg	e	le	c e c c	c	le	c		x			x			x					x	1923	Asi-Tem, Asi-Tro			
<i>Koenigia weyrichii</i>	Polyg	x c			c															x	2019	Asi-Tem			
<i>Kolkwitzia amabilis</i>	Capri	x c	c c	c		c		c c												x	2005	Asi-Tem			
<i>Laburnum ×watereri</i>	Fabac	x c		f		c													x	2003					
<i>Laburnum anagyroides</i>	Fabac		e e e e e	c	le	le	c	e	x x						x x					x x	1756	Eur			
<i>Lactuca sativa</i>	Aster	c	c	c c c c c c	c	c	c c c c c	c												x					
<i>Lactuca tatarica</i>	Aster	le?	le?			c?		a	c											x	1990	Eur, Asi-Tem			
<i>Lagarosiphon major</i> <sup>EU</sup>	Hydro		c		c?			a	c						x					x	1938	Afr			

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Forum Flora Austria 2022, Griebl unpubl., Pflugbeil unpubl. Hohla 2011b Walter et al. 2002, Pagitz et al. 2023 JACQ 2022, Pilsl unpubl.
esc		Walter et al. 2002
esc, sto		Walter et al. 2002
esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, NAGO 2022, Stöhr unpubl.
esc		Pagitz & Lechner Pagitz 2005
esc		Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Forum Flora Austria 2022, Stöhr unpubl.
esc		Walter et al. 2002, Kleesadl 2009
esc		Forum Flora Austria 2022, Stöhr unpubl.
esc		Hamburger 1948, Fischer et al. 2008, Kleesadl 2009, Pagitz et al. 2023
esc		Kleesadl 2011, Gilli et al. 2020, Gilli et al. 2021
esc		Walter et al. 2002
esc		Essl 2008, Pflugbeil & Pilsl 2013, Hohla 2022, Pagitz et al. 2023
rel, esc		Pflugbeil & Moosbrugger 2016
rel, esc		Forstner & Hübl 1971, Walter et al. 2002, Essl 2008, Hohla et al. 2009, Gilli et al. 2021, Wallnöfer et al. unpubl.
rel, esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016, Pagitz et al. unpubl., Stöhr unpubl.
		Amann 2016
		Hohla et al. 2009, Polatschek & Neuner 2013, Zernig et al. 2015, Gilli & Niklfeld 2018, Gilli et al. 2021
		Kleesadl 2017, Hohla 2018b
esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013
esc		Vitek et al. 2021
esc		Stöhr unpubl.
esc		Stöhr unpubl.
esc		Hohla et al. 2009
esc		Hohla et al. 2009, Stöhr 2011, Smettan 2012, Pflugbeil & Pilsl 2013, Amann 2016, Leonhartsberger 2018, Follak et al. 2020, Pachschwöll et al. 2025
esc		Hamburger 1948, Fischer et al. 2008
		Forstner & Hübl 1971, Adler & Mrkvicka 2003a
		Neilreich 1852, 1859, Wagenitz 1979
esc		Hohla 2021, Vitek et al. 2021, JACQ 2022, Pilsl unpubl.
		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. 2023
		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016, Essl unpubl., Pagitz et al. unpubl.
esc		Hohla et al. 2019
esc		Stöhr et al. 2007, Hohla et al. 2009, Stöhr et al. 2009, Pagitz & Lechner-Pagitz 2015, Pachschwöll et al. 2025, Stöhr unpubl.
esc		Adler & Mrkvicka 2003a, Pflugbeil & Pilsl 2013
esc		Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Polatschek & Neuner 2013, Brandes 2015, Pagitz et al. 2023
esc, con, sto		Neilreich 1859, Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Niklfeld & Schrott-Ehrendorfer 2022, Pagitz et al. 2023
		Melzer & Barta 1997, JACQ 2022
		Hartl et al. 1992, Walter et al. 2002, Fischer et al. 2008, Pall et al. 2013

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Lagurus ovatus</i>	Poace		c		c	c	c		c			c	c					x	1960	Eur, Afr, Asi-Tem					
<i>Lamprocapnos spectabilis</i>	Papav	x c	c	c	c	c	c		c	c	c	c	c	c				x	x 2004	Asi-Tem					
<i>Lantana camara</i>	Verbe	x c							c									x	2003	NAm, SAm					
<i>Lappula patula</i>	Borag	c	c															x	1912	Eur, Afr, Asi-Tem					
<i>Lapsana communis</i> subsp. <i>adenophora</i>	Aster	c								c								x	1982	Eur, Asi-Tem					
<i>Lapsana communis</i> subsp. <i>intermedia</i>	Aster	c	?	?							c							x	1923	Eur, Asi-Tem					
<i>Laser archangelica</i>	Apiac	le			le											x			1960	Eur					
<i>Lathyrus annuus</i>	Fabac	c	c														x		1966	Eur, Afr, Asi-Tem					
<i>Lathyrus cicera</i>	Fabac	c		c													x		1954	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Lathyrus odoratus</i>	Fabac	c	c	c	c	c	c										x		1859	Eur					
<i>Lathyrus sativus</i>	Fabac	c	c	e	c	c	c	x		c	c					x									
<i>Lathyrus sphaericus</i>	Fabac	c x c														x			1969	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Laurus nobilis</i>	Laura	c							c								x		2000	Eur, Afr, Asi-Tem					
<i>Lavandula angustifolia</i>	Lamia	c ? c c c c	c	c	c	c	c	c	c	c	c	c	c	c		x		x	1892	Eur					
<i>Legousia hybrida</i>	Campa	c c			c		c										x		1960	Eur, Afr, Asi-Tem					
<i>Lemna minuta</i>	Arace	e e e? c	e													x			2003	Eur, Asi-Tem, NAm, SAm					
<i>Lemna turionifera</i>	Arace	le le?le?	le	le?												x			1993	Eur, Asi-Tem, Asi-Tro, NAm					
<i>Leonurus cardiaca</i> subsp. <i>villosum</i>	Lamia	e c e e c e?	c	c	c	c	c	c							x		x	1960	Eur, Asi-Tem						
<i>Lepidium densiflorum</i>	Brass	e e e e e e e	e	e	e	e	e	e	e	e	e	e	e	e			x		1933	NAm					
<i>Lepidium didymum</i>	Brass	x e e? e? c c	c	c	c	c	c	c	e	c						x		x	1909	SAm					
<i>Lepidium graminifolium</i>	Brass	c c c	c	c	c					c						x		x	1865	Eur, Afr, Asi-Tem					
<i>Lepidium heterophyllum</i>	Brass	c c	c	c			?		c	c						x		x	1936	Eur					
<i>Lepidium neglectum</i>	Brass	x c c c c c	c	c	c	c	c	c	c	c	c	c	c	c		x		x	1906	NAm					
<i>Lepidium sativum</i>	Brass	c c c c c c	c	c	c	c	c	c	c	c	c	c	c	c		x		x	1756	Afr, Asi-Tem, Asi-Tro					
<i>Lepidium texanum</i>	Brass	c								c						x		x	1898	Eur, Asi-Tem					
<i>Lepidium virginicum</i>	Brass	e c e le e e le	e	c	e	le	e	e	le	e	c	e	e			x		x	1887	NAm, SAm					
<i>Lepydriodilis holosteoides</i>	Caryo	c			c	c										x		x	1985	Asi-Tem, Asi-Tro					
<i>Leucanthemella serotina</i>	Aster	c			c				c				c	c		x		x	1971	Eur					
<i>Leucanthemum ×superbum</i>	Aster	x c c c c c	c	c	c	c	c	c	c	c	c	c	c	c		x		x	2003						
<i>Levisticum officinale</i>	Apiac	c ? c c c c	c	c	c	c	c	c	c	c	c	c	c	c		x		x	1909	Asi-Tem					
<i>Leymus arenarius</i>	Poace	x c c c c c	c	c	c	c	c	c	c	c	c	c	c	c		x		x	1997	Eur					
<i>Liatris pilosa</i>	Aster	x c			c					c						x		x	2008	NAm					
<i>Liatris spicata</i>	Aster	x c	c	c	c	c	c	c	c	c	c	c	c	c		x		x	2005	NAm					
<i>Ligularia dentata</i>	Aster	le	c	le						c						x		x	1960	Asi-Tem, Asi-Tro					
<i>Ligularia fischeri</i>	Aster	c							c							x		x	2005	Asi-Tem, Asi-Tro					
<i>Ligularia przewalskii</i>	Aster	c						c	c	c						x		x	1997	Asi-Tem					
<i>Ligustrum obtusifolium</i>	Oleac	x c		c												x		x	1970	Asi-Tem					
<i>Ligustrum ovalifolium</i>	Oleac	c	c	c	c	c	c	c	c	c	c	c	c	c		x		x	1960	Asi-Tem					
<i>Lilium candidum</i>	Lilia	c	c	c	c											x		x	1844	Eur, Asi-Tem					

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health Source
esc, sto		Walter et al. 2002, Amann 2016, Pagitz unpubl. Hohla 2006c, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Polatschek & Neuner 2013, Leonhartsberger 2018, Forum Flora Austria 2022, Griebl unpubl., Stöhr unpubl.
esc		Pflugbeil & Pilsl 2013 Walter et al. 2002 Polatschek 1999, Walter et al. 2002
		Murr 1923, Adler & Mrkvicka 2003a, Fischer et al. 2008, Amann 2016
		Hohla et al. 2009 Walter et al. 2002 Walter et al. 2002
con, sto		Adler & Mrkvicka 2003b, Fischer et al. 2008, Pflugbeil & Pilsl 2013, Kleesadl & Schröck 2022 Neilreich 1859, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016 Melzer & Barta 2005, Fischer & Niklfeld 2011
esc		Fischer et al. 2008
esc		Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Hohla 2014, Brandes 2015, Leonhartsberger 2018, Pagitz et al. 2023
esc		Fischer et al. 2008, Pagitz et al. 2023
sto		Hohla et al. 2009, 2015, Gilli unpubl., Hofbauer unpubl., Schratt-Ehrendorfer unpubl.
sto		Fischer et al. 2008, Hohla 2012b, Amann 2016, Diran 2016, Stöhr unpubl.
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016, Pagitz et al. 2023
cor		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016 Fischer et al. 2008, Hohla et al. 2009, Hohla 2013, 2014, Pagitz et al. 2023, Pagitz et al. unpubl. Adler & Mrkvicka 2003a, Fischer et al. 2008 Walter et al. 2002, Fischer et al. 2008, Pflugbeil & Pilsl 2013 Murr 1923, Fischer et al. 2008, Hohla et al. 2009, Wittmann & Pflugbeil 2017, Gilli & Raabe unpubl. Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013
cor		Dalla Torre von Thunberg-Sternhof & Sarnthein 1909, Walter et al. 2002 Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016, Pagitz et al. 2023
esc		Melzer 1987, Walter et al. 2002, Hohla et al. 2009 Polatschek 1997, Hohla 2009, Amann 2016
esc		Adler & Mrkvicka 2003a, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013 Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Pagitz et al. 2023, Gilli unpubl. Hohla et al. 2009, Zernig et al. 2022, Sauberer unpubl. Polatschek & Neuner 2013
esc		Melzer & Barta 2008, Niklfeld 2015, Hohla et al. 2019, Forum Flora Austria 2022, Pagitz et al. 2023, Stöhr unpubl.
esc		Forstner & Hübl 1971, Fischer et al. 2008, Pagitz et al. 2023
esc		Pflugbeil & Pilsl 2013
esc		Fischer et al. 2008, Wittmann & Pflugbeil 2017
esc		Forstner & Hübl 1971, Adler & Mrkvicka 2003a
esc		Walter et al. 2002, Hohla et al. 2009, Pflugbeil et al. 2017, Pagitz et al. 2023
esc		Adler & Mrkvicka 2003a, Hohla et al. 2009, Prinz unpubl.

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Lilium lancifolium</i>	Lilia		c	c	c	c	c	c	c									x	1960	Asi-Tem					
<i>Limnanthes douglasii</i>	Limna		c						c										x	2002	NAm				
<i>Limonium gmelini</i>	Plumb	x	c	c	c	c	c												x	2015	Eur, Asi-Tem				
<i>Limonium sinuatum</i>	Plumb		c	c				c										x	1963	Eur, Afr, Asi-Tem					
<i>Linaria angustissima</i>	Plant		c	c	c						c							x	1845	Eur					
<i>Linaria angustissima</i> × <i>L. vulgaris</i> s.str.	Plant		c							c								x	1923						
<i>Linaria bipartita</i> s.lat.	Plant	x	c	c		c	c	c	c	c	c	c	c	c			x	1973	Eur, Afr						
<i>Linaria caesia</i>	Plant		e				c	e	c								x	1946	Eur						
<i>Linaria dalmatica</i>	Plant		e				c			e							x	1955	Eur, Asi-Tem						
<i>Linaria purpurea</i>	Plant		c	c		c	c	c	c	c	c	c	c	c			x	1912	Eur						
<i>Linaria repens</i>	Plant		le	c	c	le	c	c	c	c	c	c	c	c			x	1958	Eur						
<i>Linaria supina</i> agg. × <i>L. vulgaris</i> s.str.	Plant	x	c					c									x	2006							
<i>Linaria supina</i> s.lat. (incl. <i>L. caesia</i> )	Plant	x	e			c	e	c	c								x	1946	Eur						
<i>Linaria supina</i> s.str.	Plant	x	c				c										x	2017	Eur						
<i>Lindernia dubia</i>	Linde	x	le	le	c			c									x	2013	NAm, SAm						
<i>Linum grandiflorum</i>	Linac		c	c	c	c	c			c	c						x	1960	Afr						
<i>Linum usitatissimum</i>	Linac	a	c	c	c	c	c	c	c	c	c	c	c	c	c	x	x		Asi-Tem						
<i>Liriodendron tulipifera</i>	Magno		c		c	c		c									x	2002	NAm						
<i>Lobelia erinus</i>	Campa		c	c	c	c	c	c	c	c	c	c	c	c			x	1927	Afr						
<i>Lobelia inflata</i>	Campa		c	c	c	c				c							x	1927	NAm						
<i>Lobelia siphilitica</i>	Campa		c			c			c		c	c					x	1960	NAm						
<i>Lobularia maritima</i>	Brass		c	c	c	c	c	c	c	c	c	c	c	c		x	x	1797	Eur, Afr, Asi-Tem						
<i>Lolium ×boucheanum</i>	Poace	x	c	c	c	c	c	c	c	c	c	c	c	c	x		x	1900							
<i>Lolium lolium</i>	Poace		c			c			c	c						x	x	1948	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Lolium multiflorum</i>	Poace		e	e	e	e	e	e	e	e	e	e	e	e	x	x	x	1843	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Lolium rigidum</i>	Poace		c	c	c	c		c		?					x	x	x	1946	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Lomelosia palaestina</i>	Capri	x	c						c								x	2016	Afr, Asi-Tem						
<i>Lonicera fragrantissima</i>	Capri	x	le		le											x		2021	Asi-Tem						
<i>Lonicera henryi</i>	Capri		c			c		c	c	c	c				x			2002	Asi-Tem, Asi-Tro						
<i>Lonicera involucrata</i>	Capri		c			c									x			1925	NAm						
<i>Lonicera japonica</i>	Capri		c	c	c	c	c	c	c	c	c	c	c	c	x			1998	Asi-Tem						
<i>Lonicera nitida</i>	Capri		c		c	c	c	c	c	c	c	c	c	c	x		x	2000	Asi-Tem						
<i>Lonicera pileata</i>	Capri	x	le?	c	c	c	c	le?	c	c	x				x	x	x	2002	Asi-Tem						
<i>Lonicera tatarica</i>	Capri		le?	c	le?	le?	c	c		c	c	c	c	c	x			1971	Eur, Asi-Tem						
<i>Lopezia racemosa</i>	Onagr		c			c									x	x	x	1946	NAm, SAm						
<i>Lotus ornithopodioides</i>	Fabac		c	c											x	x	x	1980	Eur, Afr, Asi-Tem						
<i>Ludwigia grandiflora</i> <sup>EU</sup>	Onagr	x	le				le								x	x	x	2016	NAm, SAm						
<i>Ludwigia repens</i>	Onagr		c				c								x	x	x	1992	NAm, SAm						

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Hartl et al. 1992, Walter et al. 2002, Stöhr 2011
esc			Hohla 2002, Hohla et al. 2009
esc, cor,			Hohla et al. 2015, 2019, Hohla 2018a
una			
esc			Walter et al. 2002
			Fischer et al. 2008, JACQ 2022, Pachschwöll et al. 2025
			Walter et al. 2002, Pachschwöll et al. 2025, Danihelka & Pachschwöll unpubl.
esc			Hartl et al. 1992, Walter et al. 2002, Hohla 2008, Zidorn 2010, JACQ 2022, Adler unpubl.
cor			Fischer et al. 2008, Hohla et al. 2009
			Hohla et al. 2009, Pagitz unpubl.
esc			Walter et al. 2002, Pflugbeil & Pils 2013, Amann 2016, Gilli et al. 2021, Hohla 2021
cor			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
			Pflugbeil & Pils 2013
			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
			Hohla 2018a
			Gilli et al. 2019b, Raabe 2019, Kleesadl & Schröck 2021
			Walter et al. 2002, Brandes 2015, Niklfeld 2016, Wittmann unpubl.
esc, con,			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
sto			
esc			Pflugbeil & Pils 2013, Leonhartsberger 2015, Vitek et al. 2021
esc			Janchen 1977, Melzer 1988b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc			Janchen 1977, Melzer 1988b, Walter et al. 2002
esc			Janchen 1956–1960, Walter et al. 2002, Hohla 2011a, Gilli & Niklfeld 2018
esc			Host 1797, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
			Dalla Torre von Thunberg-Sternhof 1928, Hohla 2011a, Barta unpubl., Gilli unpubl.
			Melzer 1954, Walter et al. 2002, Pagitz et al. 2023
			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
			Dalla Torre von Thunberg-Sternhof & Sarnthein 1906, Walter et al. 2002, Fischer et al. 2008, Englmaier & Wilhalm 2018, Gilli et al. 2019b, JACQ 2022
			JACQ 2022, Pils unpubl.
esc			Gutermann & Gilli unpubl., Gutermann unpubl.
esc			Hohla 2006c, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Forum Flora Austria 2022, Pagitz et al. 2023, Stöhr unpubl.
esc			Hamburger 1948, Walter et al. 2002
esc			Melzer & Barta 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld 2015
esc			Walter et al. 2002, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023
esc			Hohla 2006c, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz unpubl.
esc	x?		Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc			Hamburger 1948
			Traxler 1980
esc	x?		Kleesadl & Schröck 2021
esc			Fischer et al. 2008

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range		
<i>Lunaria annua</i>	Brass		e e e e e e	c c c c c c	c c c c c c	c c c c c c	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	x x x x x x	1859	Eur			
<i>Lupinus albus</i>	Fabac	c c	c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	x	1925	Eur, Asi-Tem	
<i>Lupinus angustifolius</i>	Fabac	c ? c	c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	x	1965	Eur, Afr, Asi-Tem	
<i>Lupinus gussoneanus</i>	Fabac	x c	c	?																				x	1921	Eur, Afr, Asi-Tem	
<i>Lupinus luteus</i>	Fabac	c c	c	c a																				x	1985	Eur, Afr	
<i>Lupinus polyphyllus</i>	Fabac	e e e c	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	x	1949	NAm	
<i>Lychnis chalcedonica</i>	Caryo	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	x	1960	Eur, Asi-Tem	
<i>Lychnis coronaria</i>	Caryo	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	x	1883	Eur, Asi-Tem, Asi-Tro	
<i>Lychnis flos-jovis</i>	Caryo	x c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	1989	Eur	
<i>Lycium barbarum</i>	Solan	e e e e	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	x	1794	Asi-Tem	
<i>Lycium chinense</i>	Solan	c	c	c	?																			x	1914	Asi-Tem, Asi-Tro	
<i>Lycopsis orientalis</i>	Borag	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	x	2001	Eur, Afr, Asi-Tem	
<i>Lysichiton americanus</i>	Arace	x c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	2020		
<i>Lysimachia ciliata</i>	Primu	x c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	2001	NAm	
<i>Lysimachia clethroides</i>	Primu	x c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	2007	Asi-Tem	
<i>Lythrum junceum</i>	Lythr	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	1917	Eur, Afr, Asi-Tem	
<i>Macleaya ×kewensis</i>	Papav	x c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	2004		
<i>Macleaya cordata</i>	Papav	t c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x		Asi-Tem, Asi-Tro	
<i>Madia sativa</i>	Aster	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	1963	NAm, SAm	
<i>Magnolia kobus</i>	Magno	x c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	2015	Asi-Tem	
<i>Malcolmia maritima</i>	Brass	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	x	1946	Eur	
<i>Malope trifida</i>	Malva	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	x	1909	Eur, Afr	
<i>Malus domestica</i>	Rosac	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	c e c c c c	x			
<i>Malva ×clementii</i>	Malva	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	2000		
<i>Malva nicaeensis</i>	Malva	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	1868	Eur, Afr, Asi-Tem	
<i>Malva parviflora</i>	Malva	x le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	le?	x	2017	Eur, Afr, Asi-Tem	
<i>Malva punctata</i>	Malva	x c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	2015	Eur, Afr, Asi-Tem	
<i>Malva setigera</i>	Malva	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	e c e le	x	1762	Eur, Afr, Asi-Tem	
<i>Malva sylvestris</i> var. <i>mauritiana</i>	Malva	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	x	1860	Eur, Afr, Asi-Tem, Asi-Tro	
<i>Malva trimestris</i>	Malva	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	x	1971	Eur, Afr, Asi-Tem	
<i>Malva verticillata</i>	Malva	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	x	1872	Asi-Tem	
<i>Mantisalca salmantica</i>	Aster	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	1948	Eur, Afr, Asi-Tem	
<i>Matricaria discoidea</i>	Aster	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	e e e e e e	x	1855	NAm
<i>Matthiola incana</i>	Brass	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	x	1977	Eur	
<i>Matthiola longipetala</i> subsp. <i>bicornis</i>	Brass	x c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	x	1924	Eur, Afr, Asi-Tem	
<i>Mauranthemum paludosum</i>	Aster	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	c c c c c	x	1993	Eur, Afr	
<i>Mazus miquelianus</i>	Mazac	x c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	c c c c	x	1974	Asi-Tem	
<i>Medicago ×varia</i>	Fabac	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	x	1842		
<i>Medicago arabica</i>	Fabac	le?	c	le?	c	le?	c	le?	c	le?	c	le?	c	le?	c	le?	c	le?	c	le?	c	le?	c	x	1994	Eur, Afr, Asi-Tem	
<i>Medicago disciformis</i>	Fabac	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	x	1994	Eur, Afr, Asi-Tem		
<i>Medicago polymorpha</i>	Fabac	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	x	1931	Eur, Afr, Asi-Tem		
<i>Medicago sativa</i> s.str.	Fabac	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	e e e e	x	1756	Eur, Afr, Asi-Tem, Asi-Tro	

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Fischer et al. 2008, Hohla et al. 2009, Amann 2016
esc, con, sto		Fischer et al. 2008, Hohla et al. 2009, Niklfeld & Schrott-Ehrendorfer 2022, Gilli unpubl.
esc		Janchen 1956–1960, 1977
esc		Drescher & Magnes 2001, Walter et al. 2002, Niklfeld & Schrott-Ehrendorfer 2022, ZoBoDat 2022, Hohla unpubl.
rel, esc	x	Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, JACQ 2022
esc		Fischer et al. 2008, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Brandes 2015, Kniely unpubl.
esc		Hartl et al. 1992, Walter et al. 2002, Leute 2003, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015
esc		Hohla et al. 2009, Polatschek & Neuner 2013, Pagitz et al. 2023
esc		Schultes 1814, Adler & Mrkvicka 2003b, Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016, Pagitz et al. 2023
esc		Hamburger 1948, Fischer et al. 2008
		Fischer et al. 2008, Melzer & Barta 2008, Lefnaer 2018, Pagitz et al. 2023
		Pagitz et al. 2023, Plattner unpubl.
		Adler unpubl.
		Pflugbeil & Pils 2013
esc		Amann 2016
esc		Pflugbeil & Pils 2013, Hohla 2016
esc		
esc		Walter et al. 2002, Pflugbeil & Pils 2013
esc		Stöhr unpubl.
esc		Walter et al. 2002, Hohla 2012b, Pflugbeil & Pils 2013, Forum Flora Austria 2022
esc		Walter et al. 2002, Fischer et al. 2008, Pflugbeil & Pils 2013, Vitek et al. 2021
rel, esc		Walter et al. 2002, Stöhr 2007, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc		Polatschek 2000, Walter et al. 2002
esc		Schur 1868, Walter et al. 2002
esc		Zernig et al. 2022
esc		Kleesadl & Schröck 2021
esc		Jacquin 1762, Fischer et al. 2008, Niklfeld 2016, Raabe unpubl.
esc		Bayer 1860, Handel-Mazzetti 1957, Melzer 2005, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2009, Pflugbeil & Pils 2013, Amann 2016, Sauberer & Till 2017, Niklfeld & Schrott-Ehrendorfer 2022
esc		Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Erdinger 1872, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
		Melzer 1954, Walter et al. 2002
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc		Polatschek 1999, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022
esc		Neumayer 1930, Janchen 1956–1960, 1977, Forstner & Hübl 1971, Walter et al. 2002, Adler & Mrkvicka 2003a, Pflugbeil & Pils 2013
esc		Fischer et al. 2008, Hohla et al. 2009, Gilli et al. 2021
		Traxler 1975, Pflugbeil & Moosbrugger 2016, Gilli et al. 2021, Hohla unpubl.
esc		Dolliner 1842, Fischer et al. 2008, Pagitz et al. unpubl.
esc		Fischer et al. 2008, Fischer & Niklfeld 2011, iNaturalist 2022
esc		Walter et al. 2002
esc		Hamburger 1948, Fischer et al. 2008, Amann 2016
esc		Adler & Mrkvicka 2003b, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Medicago scutellata</i>	Fabac		c	c	c													x	1954	Eur, Afr, Asi-Tem					
<i>Melampodium montanum</i>	Aster	x	c					c	c			c							x	2003	NAm, SAM				
<i>Melilotus indicus</i>	Fabac		c			c												x	1954	Eur, Afr, Asi-Tem, Asi-Tro, SAM					
<i>Melilotus infestus</i>	Fabac		c			c												x	1978	Eur, Afr					
<i>Melilotus sulcatus</i>	Fabac		c			c												x	1954	Eur, Afr, Asi-Tem					
<i>Melissa officinalis</i>	Lamia	e	e?	e?	e?	e	e?	c	e	c	e	c	x	x		x	x	x	1797	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Mentha ×carinthiaca</i> s.str.	Lamia		c					c	c						x			x		1831					
<i>Mentha ×dalmatica</i>	Lamia		c					c	c	c	c				x			x		1960					
<i>Mentha ×gracilis</i>	Lamia		c	c	c		c	c	c	c	c	c						x	1973						
<i>Mentha ×piperita</i> s.str.	Lamia	x	c	c		c	c	c	c	c	c	c	c	c	x			x		1859					
<i>Mentha ×rotundifolia</i>	Lamia	x	c			?		c	c	c								x	1956						
<i>Mentha ×smithiana</i>	Lamia		c	?		c	c	c	c	c	c		x				x		1948						
<i>Mentha ×villosa</i>	Lamia		le				c	c	c	le	c	x					x		2001						
<i>Mentha ×villosonervata</i>	Lamia	x	c					c										x	2007						
<i>Mentha spicata</i> s.str.	Lamia		c	c	c	c	c	c	c	c	c	c	c	c			x		1859	Eur, Asi-Tem, Asi-Tro					
<i>Mentha suaveolens</i>	Lamia		c	c		c	c	c	c	c	c						x		1912	Eur, Afr, Asi-Tem					
<i>Microrrhinum litorale</i>	Plant		le	le	le	c	le	c	le?	c	c						x		1948	Eur, Asi-Tem					
<i>Mimulus cupreus</i>	Phrym		c				c										x	x	1960	SAM					
<i>Mimulus guttatus</i>	Phrym		e	c	c	c	e	e	e	e	le?	e	e				x		1958	NAm					
<i>Mimulus moschatus</i>	Phrym		le	c	c	c	c	le	c			c					x		1907	NAm					
<i>Mimulus ringens</i>	Phrym	x	c	c				c									x		2009	NAm					
<i>Mirabilis jalapa</i>	Nycta		c	c	c	c	c	c	c	c	c	c					x	x	1971	NAm, SAM					
<i>Mirabilis nyctaginea</i>	Nycta		c	c	c		c										x		1973	NAm					
<i>Misanthus ×giganteus</i>	Poace	x	c			c	c	c							x			x		2007					
<i>Misanthus sacchariflorus</i>	Poace		c	c	c	c	c	c	c	c	c	c					x	x	1986	Asi-Tem					
<i>Misanthus sinensis</i>	Poace		c	c	c	c	c	c	c	c	c	c	c	c			x		1990	Asi-Tem, Asi-Tro					
<i>Monarda didyma</i>	Lamia		c			c	c	c		c	c	c					x		1912	NAm					
<i>Monarda fistulosa</i>	Lamia	x	c				c										x		1844	NAm					
<i>Monarda punctata</i>	Lamia		c							c							x		1912	NAm					
<i>Morus alba</i>	Morac		le?	le?	le?	c	c	c	c	c	c					x		x	1859	Asi-Tem, Asi-Tro					
<i>Morus nigra</i>	Morac		c	c	c	c	c	c	c	c	c					x		x	1960	Asi-Tem					
<i>Muehlenbeckia axillaris</i>	Polyg	x	c					c									x		2014	Aus					
<i>Muhlenbergia mexicana</i>	Poace	x	c			c	c	c	c								x		2008	NAm					
<i>Mummenhoffia alliacea</i>	Brass	x	e	e	c	c	e	e	e		c						x		1830	Eur, Afr, Asi-Tem					
<i>Musa basjoo</i>	Musac	x	c			c											x		2022	Asi-Tem, Asi-Tro					
<i>Muscari armeniacum</i>	Aspar		le	le	le	c	le	c	le	c	c		x			x	x	1993	Eur, Asi-Tem						
<i>Muscari aucheri</i>	Aspar	x	le?				le?										x		2011	Asi-Tem					

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Walter et al. 2002
esc, con			Hohla 2012b, 2014, Pflugbeil & Pils 2013
			Walter et al. 2002
esc			Walter et al. 2002
esc			Walter et al. 2002
esc, sto			Host 1797, Hamburger 1948, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. unpubl., Stöhr unpubl.
esc			Host 1831, Janchen 1956–1960
esc			Walter et al. 2002, Fischer et al. 2008, Polatschek & Neuner 2013
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Niklfeld & Schrott-Ehrendorfer 2022
esc			Polatschek 2000, Walter et al. 2002, Adler & Mrkvicka 2003b, Hohla et al. 2009, Stöhr 2009, Pflugbeil & Pils 2013, Amann 2016, Kniely unpubl.
esc			Hayek 1908–1956, Janchen 1956–1960, Fischer et al. 2008, Pflugbeil & Pils 2013, Stöhr unpubl.
esc			Polatschek 2000, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld & Schrott-Ehrendorfer 2022, Pagitz et al. 2023
esc			Hohla 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Forum Flora Austria 2022, Pagitz et al. 2023
esc			Pflugbeil & Pils 2013
esc			Adler & Mrkvicka 2003b, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Niklfeld & Schrott-Ehrendorfer 2022, Lefnaer unpubl.
esc			Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Sauberer et al. 2020
cor			Adler et al. 2008, Fischer et al. 2008, Melzer & Barta 2008, Pflugbeil & Pils 2013, Stöhr & Brandes 2014, Kleesadl & Schröck 2021
			Fischer et al. 2008
			Melzer & Barta 2001, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Gilli et al. 2019b, Zernig et al. 2019, Pagitz et al. unpubl., Stöhr unpubl.
			Forstner & Hübl 1971, Melzer & Barta 2001, Fischer et al. 2008, Hohla 2014, Pagitz et al. 2023
			Hohla 2009, Pachschwöll et al. 2025
esc			Forstner & Hübl 1971, Walter et al. 2002, Fischer et al. 2008, Pflugbeil & Pils 2013, Sauberer & Till 2017, Hohla et al. 2019, Stöhr unpubl.
			Fischer et al. 2008
hyb	(x) x?		Hohla 2008, Hohla et al. 2009, Vitek et al. 2021, Wittmann unpubl.
esc	(x) x?		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Vitek et al. 2021, Forum Flora Austria 2022, Stöhr unpubl.
esc	(x) x?		Hartl et al. 1992, Hohla et al. 2009, Pflugbeil & Pils 2013, Englmaier & Wilhalm 2018, Gilli et al. 2019b, Pagitz et al. 2023, Gilli unpubl., Hohla unpubl.
esc			Walter et al. 2002, Hohla 2011b, Stöhr et al. 2012, Pagitz et al. 2023
esc			Hohla 2009, Hohla et al. 2009
esc			Walter et al. 2002
esc			Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld & Schrott-Ehrendorfer 2022
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			JACQ 2022
			Stöhr et al. 2009, Pflugbeil & Pils 2013, Niklfeld 2016, Hohla 2018b, Zernig et al. 2020
			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
			Essl & Follak unpubl.
esc			Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Smettan 2012, Pflugbeil & Pils 2013, Gilli et al. 2020, Niklfeld & Schrott-Ehrendorfer 2022
esc			Hohla 2011b

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Muscari azureum</i>	Aspar		le	le	le														x	1994	Asi-Tem				
<i>Muscari latifolium</i>	Aspar	x	c		c														x	2006	Asi-Tem				
<i>Mutarda nigra</i>	Brass	e?	c	e?	c	c	c	c	c	c	c								x	1814	Eur, Afr, Asi-Tem				
<i>Myriophyllum aquaticum</i> <sup>EU</sup>	Halor		le					c	le									x	1980	SAm					
<i>Myriophyllum heterophyllum</i> <sup>EU</sup>	Halor		le	c		le	c											x	1973	NAm					
<i>Narcissus ×hybridus</i>	Amary		c				c											x	2003						
<i>Narcissus ×incomparabilis</i>	Amary		c	c	c	c		c	c	c							x		1844						
<i>Narcissus cyclamineus</i>	Amary	x	c						c									x	2020	Eur					
<i>Narcissus minor</i>	Amary		c	c	c	c		c	c								x	x	2003	Eur					
<i>Narcissus poeticus</i> s.str.	Amary		e	c	c	c	c	c	c	c	e	c	c			x			1859	Eur					
<i>Narcissus pseudonarcissus</i>	Amary		le	c	le	c	le	le	c	le	c	c	c		x	x			1821	Eur, Asi-Tem					
<i>Nassella tenuissima</i>	Poace	x	c	c	c	c		c		c								x	2013	NAm, SAm					
<i>Neillia incisa</i>	Rosac	x	c					c		c	c							x	2004	Asi-Tem					
<i>Nemesia melissifolia</i>	Scrop	x	c			c												x	2007	Afr					
<i>Nemesia-hybrids</i>	Scrop	x	c				c											x	2005						
<i>Nemophila maculata</i>	Borag	x	c							c								x	1989	NAm					
<i>Nepeta ×faassenii</i>	Lamia	t	x	c	c	c	c		c	c						x		x	1954						
<i>Nepeta grandiflora</i>	Lamia	x	c				c	a									x	x	2009	Eur, Asi-Tem					
<i>Nepeta racemosa</i>	Lamia		le	le	c	c	c	c	c	c	c	c	c					x	1994	Asi-Tem					
<i>Nerium oleander</i>	Apocy	x	c	c														x	2022	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Nicandra physalodes</i>	Solan		c	c	c	c	c	c	c	c	c	c	c	c			x	x	1912	SAm					
<i>Nicotiana ×sanderae</i>	Solan		c	c	c	c	c										x		1971						
<i>Nicotiana alata</i>	Solan		c			c	c			c	c						x		1923	SAm					
<i>Nicotiana langsdorffii</i>	Solan		c				c										x		2003	SAm					
<i>Nicotiana rustica</i>	Solan		c	c	c	c	c	c	c	c	c	c	c	c			x		1922	SAm					
<i>Nicotiana tabacum</i>	Solan		c	c	c	c	c	c	c	c	c	c	c	c			x		1969	SAm					
<i>Nigella damascena</i>	Ranun		c	c	c	c	c	c	c	c	c	c	c	c			x		1870	Eur, Afr, Asi-Tem					
<i>Nigella sativa</i>	Ranun		c		c	c	c										x		1992	Asi-Tem					
<i>Nonea lutea</i>	Borag		c		c	c											x		1960	Eur, Asi-Tem					
<i>Nuphar advena</i>	Nymph	x	le		le												x		1929	NAm, SAm					
<i>Nymphaea odorata</i> s.lat.	Nymph	x	c				c										x		2020	NAm, SAm					
<i>Nymphoides peltata</i>	Menya	x	e	c	e	e	le	e	c	e		le	c			x			1814	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Ocimum basilicum</i>	Lamia	x	c				c										x		2018	Asi-Tem, Asi-Tro					
<i>Odontarrhena muralis</i>	Brass		le	c	le	c	le	le	c							x		x	1960	Eur, Asi-Tem					
<i>Oenanthe javanica</i>	Apiac	x	c	c													x		2020	Asi-Tem, Asi-Tro, Aus					
<i>Oenothera acutifolia</i>	Onagr	x	c				c										x		2005						
<i>Oenothera albipervcura</i>	Onagr	x	c			c	c										x		2011						
<i>Oenothera ammophila</i>	Onagr		c		c												x		1982	NAm					

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Fischer et al. 2008, Gilli et al. 2020
esc		Fischer & Niklfeld 2008
esc		Schultes 1814, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc, sto		Hartl et al. 1992, Hohla et al. 2015
esc, sto		Fischer et al. 2008, Pall et al. 2013, Forum Flora Austria 2022
esc		Hohla 2006c, Hohla et al. 2009
esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Stöhr unpubl.
esc		Hohla 2006c, Hohla et al. 2009, Stöhr et al. 2012, Pflugbeil & Pils 2013, Forum Flora Austria 2022, Stöhr unpubl.
esc		Neilreich 1859, Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Hamburger 1948, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Pflugbeil 2015, Gilli & Niklfeld 2018, Hohla 2018b
esc		Hohla 2006b, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Vitek et al. 2021
esc		Hohla 2022
esc		Dörr & Lippert 2004
esc		Melzer & Barta 2005, Hohla et al. 2009, Polatschek & Neuner 2013, Vitek et al. 2021, Pagitz et al. 2023
esc		Hohla 2011a
esc		Melzer & Barta 2005, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Stöhr et al. 2012, Pflugbeil & Pils 2013, Gilli et al. 2019b
esc		Nadler unpubl.
esc, sto		Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Niklfeld & Schratt-Ehrendorfer 2022
esc		Walter et al. 2002, Hohla et al. 2009
esc		Fischer et al. 2008, Polatschek & Neuner 2013
esc		Hohla 2006c, Hohla et al. 2009
esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Forstner & Hübl 1971, Walter et al. 2002, Hohla 2011a, Niklfeld 2016, Pagitz et al. 2023
esc		Walter et al. 2002, Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc, con, sto		Fischer et al. 2008, Hohla et al. 2009
		Walter et al. 2002
		Gilli et al. 2021
esc, sto		Diewald unpubl.
esc, sto		Schultes 1814, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Gilli et al. 2022, Kniely unpubl., Pagitz et al. unpubl.
esc		Hohla 2021
		Fischer et al. 2008, Hohla et al. 2009, Gilli et al. 2020, Leonhartsberger unpubl.
		Barta et al. unpubl.
		Kleesadl 2009
		Kleesadl 2011, Pflugbeil unpubl.
		Fischer et al. 2008

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Oenothera angustissima</i>	Onagr		c	c						c								x	1982	NAm					
<i>Oenothera biennis</i> s.str.	Onagr		e	e	e	e	e	e	e	e	e	e	e	e	le				x	x	1795	NAm			
<i>Oenothera cambrica</i>	Onagr	x	c							c									x	2017					
<i>Oenothera canovirens</i>	Onagr		c					c	c	c	c	c						x	1982	NAm					
<i>Oenothera carinthiaca</i>	Onagr		c			c	c	c	c	c	x	x						x	1982						
<i>Oenothera casimiri</i>	Onagr	x	c					c	c									x	2001						
<i>Oenothera compacta</i>	Onagr	x	c						c									x	2003						
<i>Oenothera cruciata</i>	Onagr		c					c										x	1982	NAm					
<i>Oenothera deflexa</i>	Onagr		e?					c	e?	c	e?	c	c					x	1982	NAm					
<i>Oenothera depressa</i>	Onagr		c			c	c	x	c			c					x	1960	NAm						
<i>Oenothera fallax</i> s.str.	Onagr		e?	?	e?	e?	e?	e?	e?	e?	e?	e?	e?					x	1971						
<i>Oenothera flaemingina</i>	Onagr	x	c						c									x	2020						
<i>Oenothera fruticosa</i>	Onagr	x	c					c	c									x	2003	NAm					
<i>Oenothera glazioviana</i> s.str.	Onagr		e	e	e	e	e	e	e?	e	e?	e	e?	e	e?			x	1909						
<i>Oenothera heiniana</i>	Onagr		c			c				x								x	1870						
<i>Oenothera hoelscheri</i>	Onagr		c			c	c	c		?								x	1971						
<i>Oenothera inconspecta</i>	Onagr	x	c					c										x	2008						
<i>Oenothera issleri</i>	Onagr		c			c												x	1971	NAm					
<i>Oenothera laciniata</i>	Onagr		c			c				c								x	1954	NAm					
<i>Oenothera lindheimeri</i> (syn. <i>Gaura lindheimeri</i> )	Onagr	t	x	c		c		c										x	2014	NAm					
<i>Oenothera macrocarpa</i>	Onagr	x	c					c										x	2017	NAm					
<i>Oenothera mollissima</i>	Onagr	x	c					c										x	1840	SAm					
<i>Oenothera oakesiana</i> s.str.	Onagr		c			c	c	x	x		c						x	1888	NAm						
<i>Oenothera oehlkersii</i>	Onagr	x	c					c										x	2021						
<i>Oenothera paradoxa</i>	Onagr	x	c					c	c									x	2017						
<i>Oenothera parviflora</i> s.str.	Onagr		c			c		x		c							x	1982	NAm						
<i>Oenothera perangusta</i>	Onagr	x	c						c									x	2017	NAm					
<i>Oenothera perennis</i>	Onagr	x	c					c										x	2004	NAm					
<i>Oenothera punctulata</i>	Onagr	x	c			c	c	c	c									x	1994						
<i>Oenothera pycnocarpa</i>	Onagr		e		c	le	c	e	c	e	c	c				x		x	1973	NAm					
<i>Oenothera rosea</i>	Onagr		c			c	c											x	1921	NAm, SAm					
<i>Oenothera roylefraseri</i>	Onagr	x	c			c	c	c	c	c								x	1980	NAm					
<i>Oenothera rubricaulis</i>	Onagr		e?	?	e?	e?	e?	e?	e?	e?	e?	e?	e?	e?				x	1960	NAm					
<i>Oenothera scandinavica</i>	Onagr	x	c					c		c								x	2017						
<i>Oenothera stucchii</i>	Onagr	x	c						c									x	2017	NAm					
<i>Oenothera suaveolens</i>	Onagr		c			c	c	c										x	1982	NAm					
<i>Oenothera subterminalis</i>	Onagr		c					c	x									x	1960	NAm					
<i>Oenothera victorinii</i>	Onagr	x	c					c	c	c								x	2002	NAm					
<i>Oenothera wienii</i>	Onagr		c					c										x	1982						
<i>Oloptum miliaceum</i> s.str.	Poace	x	c			c		x	c									x	1846	Eur, Afr, Asi-Tem					
<i>Onobrychis viciifolia</i> s.str.	Fabac		e	e	e	e	e	e	e	e	e	e	e	e	e	x		x	1700	Eur					
<i>Onoclea sensibilis</i>	Onocl	x	c					c?	c									x	2011	Asi-Tem					
<i>Ononis mitissima</i>	Fabac		c							c								x	2000	Eur, Afr, Asi-Tem					
<i>Onopordum illyricum</i>	Aster		c			c												x	1892	Eur, Asi-Tem					
<i>Onopordum tauricum</i>	Aster		c			c												x	1954	Eur, Asi-Tem					

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
			Fischer et al. 2008, Pflugbeil 2018
esc			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Amann 2016, Pflugbeil 2018, Pagitz et al. 2023
			Pflugbeil 2018
			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil 2018, Pagitz et al. 2023
			Fischer et al. 2008, Hohla et al. 2009, Vitek et al. 2021, Pflugbeil unpubl.
			Stöhr et al. 2012, Pflugbeil 2018
			Pflugbeil 2018
			Walter et al. 2002
			Fischer et al. 2008, Hohla et al. 2009, Stöhr et al. 2012, Polatschek & Neuner 2013, Pflugbeil 2018
			Rostański & Forstner 1982, Maurer 1996, Fischer et al. 2008, Hohla et al. 2009
			Walter et al. 2002, Fischer et al. 2008, Kleesadl 2009, Pflugbeil 2018
			Trávníček unpubl.
			Hohla 2012b, Stöhr et al. 2012, Pflugbeil 2018
esc			Fischer et al. 2008, Hohla et al. 2009, Amann 2016, Pflugbeil 2018, Pagitz et al. 2023
			Forstner & Hübl 1971, Fischer et al. 2008, Pflugbeil unpubl.
			Walter et al. 2002, Fischer et al. 2008, Kleesadl 2009, Pflugbeil 2018
			Kleesadl 2011
			Fischer et al. 2008
			Walter et al. 2002
			Pflugbeil & Moosbrugger 2016, Vitek et al. 2021
			Hohla 2018a
			Rostański & Forstner 1982
			Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Amann unpubl., Pflugbeil unpubl.
			Schwab unpubl.
			Pflugbeil 2018, Hohla et al. 2019
			Fischer et al. 2008, Hohla et al. 2009, Polatschek & Neuner 2013
			Pflugbeil 2018
			Hohla 2011a
			Hohla 2005, Hohla et al. 2005a, Hohla 2012b, Pflugbeil 2018
			Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil 2018
			Forstner & Hübl 1971, Walter et al. 2002
			Rostański & Forstner 1982, Hohla et al. 2005a, Pflugbeil 2018, Pflugbeil unpubl.
			Rostański & Forstner 1982, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil 2018, Pflugbeil unpubl.
			Hassler 2020
			Hassler 2020, Hohla unpubl.
			Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla 2008, Hohla et al. 2009, Till unpubl.
			Fischer et al. 2008, Hohla et al. 2009
			Hohla 2011a, Pflugbeil 2018
			Fischer et al. 2008
			Neilreich 1846, Walter et al. 2002, Hohla et al. 2009
			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Niklfeld & Schrott-Ehendorfer 2022, Pagitz et al. unpubl.
			Hohla 2011c, Stöhr et al. 2021
			Dörr & Lippert 2004
			Forstner & Hübl 1971, Walter et al. 2002
			Walter et al. 2002

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Opuntia humifusa</i>	Cacta	x le	c									le c					x		1995	NAm					
<i>Opuntia phaeacantha</i>	Cacta	x le	le c														x		1980	NAm					
<i>Orchis anthropophora</i>	Orchi	x c	c			c										x		1985	Eur, Afr, Asi-Tem						
<i>Origanum majorana</i>	Lamia	c	c	c	c	c	c										x	1956	Eur, Asi-Tem						
<i>Origanum rotundifolium</i> x <i>O. vulgare</i>	Lamia	x c				c											x	2018							
<i>Origanum vulgare</i> subsp. <i>megastachyum</i>	Lamia	x c							c								x	2016	Eur, Asi-Tem						
<i>Ornithogalum</i> <i>oligophyllum</i>	Aspar	x c	c						c								x	2012	Eur, Asi-Tem						
<i>Ornithopuss perpusillus</i>	Fabac	c		?	c	c											x	1768	Eur, Afr						
<i>Ornithopuss sativus</i>	Fabac	c	c	c	c	c	?			c	c						x	2000	Eur, Afr						
<i>Osmunda regalis</i>	Osmun	x c							c								x	2011	Eur, Afr, Asi-Tem						
<i>Othocallis amoena</i>	Aspar	c	c	c	c	?			?	c	c						x	1859	Asi-Tem						
<i>Othocallis</i> <i>mischtschenkoana</i>	Aspar	x le	c	le	c												x	1997	Asi-Tem						
<i>Othocallis siberica</i>	Aspar		le	c	c	c	c	c	le	c	c			x x		x	x	1954	Eur, Asi-Tem						
<i>Oxalis corniculata</i>	Oxali	e	e	e	e	e	e	e	e	e	e						x	x	1821	Asi-Tro					
<i>Oxalis dillenii</i>	Oxali	e	e	e	e	e	e	e	e	e	e						x		1910	NAm					
<i>Oxalis latifolia</i>	Oxali	x c							c								x	2018	NAm, SAm						
<i>Oxalis stricta</i>	Oxali		e	e	e	e	e	e	e	e	e					x	x	1821	NAm						
<i>Oxalis tetraphylla</i>	Oxali	x c						c	c								x	2019	NAm						
<i>Oxalis triangularis</i>	Oxali	x c						c									x	2003	SAm						
<i>Oxybasis rhombifolia</i>	Amara	x c	x	c	c	c	c										x	1871	Eur						
<i>Pachysandra terminalis</i>	Buxac	e?	c	le	c	c	c	c	e?								x	2002	Asi-Tem						
<i>Paeonia lactiflora</i>	Paeon	x c			c				c								x	2003	Asi-Tem						
<i>Paeonia mascula</i>	Paeon	le	le											x x					1960	Eur, Afr, Asi-Tem					
<i>Paeonia officinalis</i>	Paeon	c	c	c	c	c	c	c	c	c	c						x	1960	Eur						
<i>Pallenis maritima</i>	Aster	x c	c														x	2022	Eur, Afr						
<i>Panicum barbipulvinatum</i>	Poace	e	e	e	c	c	e	c	e	c	e				x		x	x	1878	NAm, SAm					
<i>Panicum capillare</i> s.str.	Poace	e	e	e	e	e	e	e	c	e	e						x	x	1794	NAm, SAm					
<i>Panicum dichotomiflorum</i>	Poace	e	e	c	c	e	e	e	e?		e	le					x	x	1949	NAm, SAm					
<i>Panicum hillmanii</i>	Poace	e	e	e	e	c	c	c	c								x	x	1976	NAm					
<i>Panicum miliaceum</i> subsp. <i>agricola</i>	Poace	e	e	e	e	c	c	c	c	c	c					x	x	1976	Asi-Tem, Asi-Tro						
<i>Panicum miliaceum</i> subsp. <i>miliaceum</i>	Poace	c?	c	c	c	c	c	c	c	c	c					x	x	1756	Asi-Tem, Asi-Tro						
<i>Panicum miliaceum</i> subsp. <i>ruderale</i>	Poace	e	e	e	e	c	e	c	c	e	e					x	x	1971	Asi-Tem, Asi-Tro						
<i>Panicum philadelphicum</i>	Poace	c	c	c	c	c	c	c	c	c	c					x	x	1996	NAm						
<i>Panicum schinzii</i>	Poace	e	c			c	e	c									x	x	1969	Afr					
<i>Panicum virgatum</i>	Poace	c	c	c	c	c	c	c	c	c	c					x	x	2002	NAm, SAm						

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Pagitz 2007, Polatschek & Neuner 2013, Tod unpubl.
esc			Essl 2007b, Fischer & Niklfeld 2011, Lefnaer unpubl.
			Janecek et al. 2003
esc			Hohla et al. 2009, JACQ 2022, Pagitz et al. 2023, Adler unpubl.
esc			Hohla 2018b
esc			Stöhr unpubl.
			Gilli et al. 2020, Forum Flora Austria 2022, Stöhr unpubl.
			Wallnöfer et al. 2015, Hohla 2022
			Walter et al. 2002, Niklfeld 2015, Wallnöfer et al. 2015, Amann 2016
esc			Stöhr et al. 2021
esc			Neilreich 1859, Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
			Adler & Mrkvicka 2003a, Gilli et al. 2020, JACQ 2022
esc			Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, 2016, Smettan 2012, Pflugbeil & Pils 2013
esc, sto			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Amann 2016
			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Amann 2016
			JACQ 2022, Pils & Wittmann unpubl.
			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
			Hohla et al. 2019, Pflugbeil unpubl.
			Pils et al. 2008, Pflugbeil & Pils 2013
esc			Hayek 1908–1956, Janchen 1956–1960, 1977, Traxler 1969, JACQ 2022
			Melzer & Barta 2002, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Zernig et al. 2017, Gilli et al. 2021, Pagitz et al. 2023
esc			Adler & Mrkvicka 2003a, Pagitz et al. 2023
esc			Fischer et al. 2008
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
	x		Forum Flora Austria 2022, Pachschwöll et al. 2025
			Hohla et al. 2009, 2015, Pflugbeil & Pils 2013, Niklfeld 2015, Pagitz & Lechner-Pagitz 2015, Amann 2016, JACQ 2022, Stöhr unpubl.
			Schultes 1794, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz unpubl., Pagitz et al. unpubl.
con, sto	x?		Melzer 1954, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Gilli et al. 2019b, Pagitz et al. unpubl.
	x?		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, JACQ 2022
			Scholz & Mikolás 1991, Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Gilli & Niklfeld 2018, Pagitz et al. 2023, Pagitz et al. unpubl.
esc, sto			Kramer 1756, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013
	x?		Melzer 1983, Fischer et al. 2008, Hohla et al. 2009, Zernig et al. 2018, Niklfeld & Schrott-Ehrendorfer 2022, Observation International 2022, Pagitz et al. 2023, Pagitz et al. unpubl.
			Melzer 1997, Melzer & Barta 2008, Hohla et al. 2015, Zernig et al. 2018, Pagitz et al. unpubl.
			Fischer et al. 2008, Hohla et al. 2009, JACQ 2022
esc			Schröck et al. 2004, Hohla 2011a, Pflugbeil & Pils 2013, Gilli & Niklfeld 2018, Gilli et al. 2020, Pachschwöll et al. 2025

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Scenical habitats	First record	Native Range
<i>Papaver atlanticum</i>	Papav	c		c	c	c			c		c						x		1971	Afr					
<i>Papaver bracteatum</i>	Papav	c		c	c	c												x		1971	Asi-Tem				
<i>Papaver cambricum</i>	Papav	le	c	le	c				c	c	c	c						x		2000	Eur				
<i>Papaver commutatum</i>	Papav	c			c												x		1991	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Papaver croceum</i>	Papav	c		c	c	c			c	c	c	c					x		1971	Asi-Tem, NAm					
<i>Papaver hybridum</i>	Papav	c c c		?													x x		1992	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Papaver orientale</i> s.str.	Papav	x c				c			c	c							x		2003	Asi-Tem					
<i>Papaver pilosum</i>	Papav	c			c	c											x		1979	Asi-Tem					
<i>Papaver somniferum</i> subsp. <i>setigerum</i>	Papav	c		c	c	c			c	c							x x		2002	Eur, Afr					
<i>Papaver somniferum</i> subsp. <i>somniferum</i>	Papav	c x c c c c c c c c c c c c c															x x								
<i>Parietaria judaica</i>	Urtic	e	c	e	e	c	c	c	e								x		1827	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Paronychia kapela</i> subsp. <i>serpyllifolia</i>	Caryo	x c c	c	c	c				c								x		1998	Eur					
<i>Parthenocissus inserta</i>	Vitac	e e e e e e	le	e	e	e	e	e	e	e	x x						x		1892	NAm					
<i>Parthenocissus quinquefolia</i> s.str.	Vitac	c	c	c	x	c											x		1859	NAm, SAm					
<i>Parthenocissus tricuspidata</i>	Vitac	c ? c c c c		c	c	c			c	c	c						x		1891	Asi-Tem					
<i>Paspalum distichum</i>	Poace	c		c	c												x		1948	NAm, SAm					
<i>Pastinaca sativa</i> subsp. <i>urens</i>	Apiac	c	c	c												x			1960	Eur, Asi-Tem					
<i>Paulownia tomentosa</i>	Paulo	le c c le le le c c		c	c	c			c c		x			x		x	x		1965	Asi-Tem					
<i>Penstemon campanulatus</i>	Plant	x c					c										x		2008	NAm					
<i>Periploca graeca</i>	Apocy	c c c							c								x		1923	Eur, Asi-Tem					
<i>Perovskia ×superba</i>	Lamia	x c c	c	c					c								x		2016						
<i>Perovskia abrotanoides</i>	Lamia	x c c c	c	c	c				c c								x		2010	Asi-Tem, Asi-Tro					
<i>Perovskia atriplicifolia</i>	Lamia	x c c		c	c				c								x		2015	Asi-Tem, Asi-Tro					
<i>Persicaria capitata</i>	Polyg	c		c	c										x		x		1993	Asi-Tem, Asi-Tro					
<i>Persicaria orientalis</i>	Polyg	c c c c c c c c c c c c ? c															x		1920	Asi-Tem, Asi-Tro, Aus					
<i>Persicaria pensylvanica</i>	Polyg	x c		c													x		2013	NAm					
<i>Petroselinum crispum</i>	Apiac	c ? c c c c c c c c c c															x		1821	Eur, Afr					
<i>Petunia ×hybrida</i>	Solan	c c c c c c c c c c c c															x x		1923						
<i>Phacelia campanularia</i>	Borag	x c c	c	c	c				c								x		2015	NAm					
<i>Phacelia congesta</i>	Borag	c ? ? ?								c							x x		1917	NAm					
<i>Phacelia tanacetifolia</i>	Borag	c c c c c c c c c c c c								c c c c c c							x x		1923	NAm					
<i>Phalaris arundinacea</i> var. <i>picta</i>	Poace	e e e e e e e e e e e e											x	x			x		1960	Eur, NAm					
<i>Phalaris brachystachys</i>	Poace	c		c					c								x x		1954	Eur, Afr, Asi-Tem					
<i>Phalaris canariensis</i>	Poace	c c c c c c c c c c c c										x					x x		1795	Eur, Afr					
<i>Phalaris minor</i>	Poace	c		c													x x		1954	Eur, Afr, Asi-Tem, Asi-Tro					

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Fischer et al. 2008, Pflugbeil & Pils 2013
esc			Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Zernig et al. 2017, Pagitz et al. 2023
esc			Fischer et al. 2008
esc			Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Walter et al. 2002, Hohla et al. 2009, Raabe & Gilli 2020, 2021 unpubl.
esc			Hohla 2013, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc			Fischer et al. 2008, Hohla et al. 2009
esc, con			Hohla et al. 2002, 2009, Adler & Mrkvicka 2003a, Fischer et al. 2008, Forum Flora Austria 2022, Stöhr unpubl.
esc, con			Neilreich 1846, Walter et al. 2002, Hohla et al. 2009, Stöhr 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016
			Essl 2008, Fischer & Niklfeld 2008, Fischer et al. 2008, Hohla 2011b, JACQ 2022, Leonhartsberger unpubl., Pagitz et al. unpubl.
			Hohla 2005, Gilli et al. 2019b, Vitek et al. 2021, Forum Flora Austria 2022
esc	x?		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc	x?		Neilreich 1859, Adler & Mrkvicka 2003a, Hohla et al. 2009, Pflugbeil & Pils 2013, Schrammel et al. 2019
esc	x?		Essl 2006, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Pagitz et al. 2023, Gilli unpubl.
	x?		Melzer 1954, Hartl et al. 1992, Fischer et al. 2008
	x?		Walter et al. 2002, Heimel unpubl.
esc	x?		Fischer et al. 2008, Pflugbeil & Pils 2013, Amann 2016, Zernig et al. 2017, Kleesadl & Schröck 2021, Hofbauer unpubl., Pagitz et al. unpubl.
esc	x?		Pflugbeil & Pils 2013
esc	x?		Walter et al. 2002, Amann 2016
esc	x?		Niklfeld 2016, JACQ 2022
esc	x?		Hohla 2011a, Niklfeld 2016, Gilli et al. 2019b, Pachschwöll et al. 2025
esc	x?		Gilli et al. 2019b, JACQ 2022, Pils unpubl.
esc	x?		Melzer 2006, Fischer et al. 2008, Hohla 2014
esc	x?		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Zernig et al. 2015, Pagitz et al. 2023
esc	x?		Hohla 2013
esc	x?		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli unpubl.
esc	x?		Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc	x?		Hohla et al. 2015, Hohla 2018b, Pagitz et al. 2023
esc	x?		Walter et al. 2002, Amann 2016
esc	x?		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc	x?		Janchen 1956–1960, 1977, Traxler 1977, 1984, Speta 1990, Adler et al. 1994, Müllner et al. 2000, Hohla 2000, Maier et al. 2001
esc	x?		Walter et al. 2002, Pagitz et al. 2023
esc, con,	x?		Forstner & Hübl 1971, Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
sto	x?		
esc	x?		Walter et al. 2002

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & screes	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Phalaris paradoxa</i>	Poace		c	c	c	c						c						x	1954	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Phaseolus coccineus</i>	Fabac		c	c	c	c	c	c	c	c	c	c	c	c				x	1923	NAm, SAm					
<i>Phaseolus vulgaris</i>	Fabac		c	c	c	c	c	c	c	c	c	c	c	c				x	1960	NAm, SAm					
<i>Phedimus aizoon</i>	Crass		c					c	c	c								x	1973	Asi-Tem					
<i>Phedimus diffusus</i>	Crass		x	c						c								x	2014	Asi-Tem					
<i>Phedimus ellacombeanus</i>	Crass		x	le?	c	c	le?	c	c	c								x	1993	Asi-Tem					
<i>Phedimus hybridus</i>	Crass		e	c	c	c	c	c	c	c	c	c	e	le				x	1960	Eur, Asi-Tem					
<i>Phedimus kamtschaticus</i>	Crass		x	c		c	c	c	c	c	c	c	c	c			x	2003	Asi-Tem						
<i>Phedimus middendorffianus</i>	Crass		x	c				c	c	c		c					x	1998	Asi-Tem						
<i>Phedimus spurius</i>	Crass		e	le	e	le	e	e	e	e	e	e	e	le		x	x	x	1867	Asi-Tem					
<i>Phedimus stolonifer</i>	Crass		x	e	c	le	le	c	le	c	le	e			x	x	x	x	2001	Asi-Tem					
<i>Philadelphus pubescens</i>	Hydra		c		c													x	1971	NAm					
<i>Phleum arenarium</i>	Poace		c		c													x	1879	Eur, Afr, Asi-Tem					
<i>Phleum paniculatum</i>	Poace		le	c	c		le					c					x	1802	Eur, Asi-Tem, Asi-Tro						
<i>Phleum subulatum</i>	Poace		c		c	c											x	1826	Eur, Asi-Tem, Asi-Tro						
<i>Phlomis russeliana</i>	Lamia		x	c				c									x	2018	Asi-Tem						
<i>Phlox drummondii</i>	Polem		c	c	c	c	c					c	c				x	1960	NAm						
<i>Phlox paniculata</i>	Polem		c	c	c	c	c	c	c	c	c	c	c	c			x	1960	NAm						
<i>Phlox stolonifera</i>	Polem		x	c								c					x	2009	NAm						
<i>Phlox subulata</i>	Polem		c	c	c	c	c	c	c	c	c	c	c	c			x	1977	NAm						
<i>Phoenix dactylifera</i>	Areca		c		c	c					c						x	1971	Asi-Tem						
<i>Phuopsis stylosa</i>	Rubia		c	c	c	c						c					x	1891	Asi-Tem						
<i>Phyla nodiflora</i>	Verbe		x	c	c												x	2017	Eur, Afr, Asi-Tem, Asi-Tro, Aus, Pac, NAm, SAm						
<i>Phyllostachys aureosulcata</i>	Poace		x	c				c	c						x			2015	Asi-Tem						
<i>Phyllostachys nigra</i>	Poace		x	c	?			c							x			2010	Asi-Tem						
<i>Phyllostachys viridiglaucescens</i>	Poace		x	c		c	c								x			2013	Asi-Tem						
<i>Physalis angulata</i>	Solan		le	c	le	c											x	1991	NAm, SAm						
<i>Physalis grisea</i>	Solan		x	c	c	c	c	c	c								x	2017	NAm						
<i>Physalis longifolia</i>	Solan		le?				le?			c							x	1960	NAm						
<i>Physalis peruviana</i>	Solan		c	c	c	c	c	c	c	c	c	c	c	c			x	1912	SAm						
<i>Physalis philadelphica</i>	Solan		c	c	c	c	c	c	c	c	c	c	c	c			x	2001	NAm, SAm						
<i>Physocarpus opulifolius</i>	Rosac		le?	c	le?	c	c	le?	c	le?	c	c	c	x		x	x	1913	NAm						
<i>Physostegia virginiana</i>	Lamia		c	c	c	c	c	c	c	c	c	c	c	c			x	1971	NAm						
<i>Phytolacca acinosa</i>	Phyto		e	e	e	e	c	le	c	c	c	c	c	c	x	x	x	x	1821	Asi-Tem					
<i>Phytolacca americana</i>	Phyto		e	le	e	c	e	c	le	c	c	c	c	c			x	x	1893	NAm					
<i>Picea jezoensis</i>	Pinac		x	c						c							x	2002	Asi-Tem, NAm						
<i>Picea omorika</i>	Pinac		x	c		c											x	2008	Eur						

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Walter et al. 2002, Prinz & Sauberer 2020 unpubl., Forum Flora Austria 2022
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld & Schratt-Ehrendorfer 2022
esc		Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Niklfeld & Schratt-Ehrendorfer 2022, Pagitz et al. 2023
esc		Hohla 2011b, Pflugbeil & Pils 2013, Polatschek & Neuner 2013
esc		JACQ 2022, Pils unpubl.
esc		Hohla 2016, Kleesadl 2017, Gilli et al. 2019b, JACQ 2022
rel, esc		Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Schinninger & Rožánek 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023
rel, esc		Pils 2008, Schinninger & Rožánek 2008, Pflugbeil & Pils 2013, Hohla 2022, Pagitz et al. 2023
esc		Hohla et al. 1998, JACQ 2022, Stöhr unpubl.
rel, esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc		Hohla 2013, 2014, Pflugbeil & Pils 2013, Gilli & Niklfeld 2018, Follak et al. 2020, Pagitz et al. 2023, Stöhr unpubl.
esc		Walter et al. 2002
		Forstner & Hübl 1971, Walter et al. 2002
		Forstner & Hübl 1971, Amann 2016, Gilli et al. 2019b, Kleesadl & Schröck 2021
		Hamburger 1948, Walter et al. 2002
		Hohla et al. 2019
esc		Traxler 1959, Fischer et al. 2008, Amann 2016, Pagitz et al. 2023
esc		Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Leonhartsberger & Wendelin unpubl., Stöhr unpubl.
esc		Neuner 2009, Polatschek & Neuner 2013
esc		Polatschek 2000, Fischer et al. 2008, Hohla 2011b, Pflugbeil & Pils 2013, Amann 2016
esc		Forstner & Hübl 1971, Walter et al. 2002
esc		Hamburger 1948, Walter et al. 2002, Stöhr et al. 2007, Pagitz et al. 2023, Lefnaer unpubl.
esc		Gilli et al. 2019b
esc		Hohla et al. 2015, Pils unpubl.
esc		Walter et al. 2002, Hohla 2011a, b
esc		Barta unpubl.
esc		Walter et al. 2002, Adler & Mrkvicka 2003b, Barta unpubl.
esc		Hohla 2018b, Gilli et al. 2019b, 2021, Pachschwöll et al. 2025
esc		Walter et al. 2002, Szabó et al. unpubl.
esc		Franz 1993, Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc, sto		Walter et al. 2002, Essl 2003, Hohla et al. 2009, Vitek et al. 2021
esc		Hamburger 1948, Polatschek 2000, Walter et al. 2002, Hohla 2011a, Pflugbeil & Pils 2013, Amann 2016, Forum Flora Austria 2022, Barta unpubl., Stöhr unpubl.
esc		Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz unpubl.
esc		Hamburger 1948, Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, NAGO 2022, Stöhr unpubl.
esc	x x	Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Pflugbeil & Pils 2013
esc		Stöhr et al. 2009

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Picea pungens</i>	Pinac	x c				c c														x	2008	NAm			
<i>Pimpinella anisum</i>	Apiac	c		c c								c c									x	1868	Asi-Tem		
<i>Pimpinella peregrina</i>	Apiac	le?le?le?le?	c c c	c c c								c									x	2001	Eur, Asi-Tem		
<i>Pinellia ternata</i>	Arace	c		c c c	c c c	c c														x	1960	Asi-Tem			
<i>Pinus strobus</i>	Pinac	c	c c	c c c	c c c	c c	a		x x															1978	NAm, SAm
<i>Pinus wallichiana</i>	Pinac	x c			c		?													x	2017	Asi-Tem, Asi-Tro			
<i>Pistia stratiotes</i>	Arace	le	c c			le	c												x		1980	Afr, Asi-Tem, Asi-Tro, Aus, NAm, SAm			
<i>Pisum sativum</i>	Fabac	c	c c c c c	c c c c c	c c c c c	c c c c c									x			x							
<i>Plagiobothrys scouleri</i>	Borag	x c			c		c												x	1982	NAm				
<i>Plantago aristata</i>	Plant		c c x																x	1908	NAm				
<i>Plantago coronopus</i>	Plant	c c c c	c c c c	c c c c	c c c c	c c c c													x	1866	Eur, Afr, Asi-Tem, Asi-Tro				
<i>Plantago holosteum</i>	Plant	c		c															x	1931	Eur, Afr, Asi-Tem				
<i>Plantago lagopus</i>	Plant	x c		c														x	1866	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Plantago sempervirens</i>	Plant	c	c															x	1846	Eur					
<i>Plantago virginica</i>	Plant	le?	le?															x	1995	NAm					
<i>Platanus ×hispanica</i>	Plata	c c c c	c c c c	c c c c	c c c c	c c c c	x								x	x		x		1971					
<i>Platycladus orientalis</i>	Cupre	e c e e	le c c	x c c	c c c										x	x		x		1929	Asi-Tem				
<i>Platycodon grandiflorus</i>	Campa	x c	c		c													x	2015	Asi-Tem					
<i>Poa bigelovii</i>	Poace	x c			c													x	2008	NAm					
<i>Poa infirma</i>	Poace		c		c													x	1971	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Poa trivialis</i> subsp. <i>sylvicola</i>	Poace	c			c													x	1995	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Polycarpon tetraphyllum</i>	Caryo	e c c e	c c c									c c						x	1992	Eur, Afr, Asi-Tem					
<i>Polypogon monspeliensis</i>	Poace	c	c c c c	c c c	c													x	1879	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Polypogon viridis</i>	Poace	x c		c c														x	2014	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Pontederia cordata</i>	Ponte	x c	c		a	c?									x				2007	NAm, SAm					
<i>Populus ×canadensis</i>	Salic	e le e le	c e le?	c c e c	x										x			x		1960					
<i>Populus ×jackii</i>	Salic	x c	c	c	c	c									x			x		2002					
<i>Populus balsamifera</i>	Salic	le	c c c c	c	le	c le							x		x	x		x	1994	NAm					
<i>Populus simonii</i>	Salic	x c	c		c	c c c									x	x		x		1989	Asi-Tem				
<i>Populus trichocarpa</i>	Salic	x c			c										x			x		2007	NAm				
<i>Portulaca grandiflora</i>	Portu	c c c c	c c c c	c c c	c										x			x		1971	SAm				
<i>Potentilla anglica</i> s.str.	Rosac	t	c	?	c	x	?										x	1954	Eur						
<i>Potentilla atrosanguinea</i>	Rosac	c			c							x			x		x	1960	Asi-Tem, Asi-Tro						
<i>Potentilla chrysantha</i>	Rosac	c		c									x		x		x	2005	Eur, Asi-Tem						

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Pflugbeil & Pils 2013, Forum Flora Austria 2022, Stöhr unpubl.
esc		Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009
rel		Fischer et al. 2008, Niklfeld 2016, Hohla 2018b, Leonhartsberger unpubl., Thalinger unpubl.
rel, esc	x?	Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
rel, esc		Essl 2007a, 2008, Hohla et al. 2009, Essl & Follak 2010, Pflugbeil & Pils 2013, Pachschwöll et al. 2025, Pagitz unpubl.
rel, esc		Hohla 2018a, Observation International 2022
esc, sto		Pall et al. 2013, Pflugbeil & Pils 2013, Gilli & Niklfeld 2018, Forum Flora Austria 2022, Griebl unpubl.
esc		Neilreich 1846, Polatschek 2000, Fischer et al. 2008, Hohla et al. 2009, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022
		Wallnöfer & Adler 2015
		Hanausek 1908, Janchen 1977, Walter et al. 2002, Pachschwöll et al. 2025
		Neilreich 1866, Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla 2012b, 2018b, Amann 2016, Diran 2016, Pachschwöll et al. 2025
		Fritsch (jun.) 1931, Fischer et al. 2008
		Neilreich 1866
		Neilreich 1846, 1859, Neumayer 1930, Janchen & Neumayer 1942, Janchen 1956–1960, 1977, Walter et al. 2002
		Walter et al. 2002
rel, esc		Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015
esc		Hamburger 1948, Polatschek 1997, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Essl & Follak 2010, Pagitz et al. 2023
esc		Hohla et al. 2015, Sauberer & Prinz unpubl.
		Hohla 2009
		Forstner & Hübl 1971, Walter et al. 2002, Diran 2016
		Melzer 1996b, Walter et al. 2002
		Spitaler & Zidorn 2005, Hohla et al. 2009, Fischer & Niklfeld 2011, Hohla 2014, Niklfeld 2016, Gilli & Niklfeld 2018, Zernig et al. 2019
		Forstner & Hübl 1971, Hohla et al. 2009, Amann 2016, Wittmann & Pflugbeil 2017, Englmaier & Wilhalm 2018, Gilli & Niklfeld 2018
		Hohla 2014, Zernig et al. 2015
esc, sto		Essl 2008, Hohla 2011c, Gilli et al. 2019b, Forum Flora Austria 2022, Nadler unpubl.
rel, esc	xx	Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016, Pagitz et al. 2023
rel, esc		Schröck et al. 2004, Hohla et al. 2009, Pflugbeil & Pils 2013, Sauberer et al. 2020
rel, esc		Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023, Pagitz et al. unpubl.
esc		Schröck et al. 2004, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Pflugbeil & Pils 2013
esc		Forstner & Hübl 1971, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, NAGO 2022, Stöhr unpubl.
esc		Melzer 1954, Leute 1973, Walter et al. 2002, Hohla et al. 2009
esc		Amann 2016
esc		Kniely et al. 2006

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Potentilla indica</i>	Rosac	x e e e e e e e e e e c e e x x x																		x	1918	Asi-Tem, Asi-Tro			
<i>Potentilla intermedia</i>	Rosac	c c c c c x c c																		x	1946	Eur, Asi-Tem			
<i>Potentilla nepalensis</i>	Rosac	x c c c c c c c c c c																		x	1874	Asi-Tem, Asi-Tro			
<i>Primula ×pruhonicensis</i>	Primu	c c c c c c c c c c																		x	2003				
<i>Primula amoena</i>	Primu	x c c c c c c c c c c																		x	2003	Asi-Tem			
<i>Primula juliae</i>	Primu	le le le le le le le le																		x	2006	Asi-Tem			
<i>Prunus armeniaca</i>	Rosac	c c c c c c c c c c c c c c																		x					
<i>Prunus cerasifera</i>	Rosac	x e e? e e? e e? e e? e e? e e?																		x	1971	Eur, Asi-Tem, Asi-Tro			
<i>Prunus cerasus</i> s.str.	Rosac	c le? le? c c c c c c c c																		x					
<i>Prunus domestica</i> subsp. <i>domestica</i>	Rosac	c c c c c c c c c c c c c c																		x					
<i>Prunus domestica</i> subsp. <i>insititia</i>	Rosac	c e c e c c c c c c c c c c																		x					
<i>Prunus dulcis</i>	Rosac	c c c c c c c c c c c c c c																		x	1968				
<i>Prunus laurocerasus</i>	Rosac	le c le? le? c le c c c c c c x x																		x	1999	Eur, Asi-Tem			
<i>Prunus persica</i>	Rosac	c c c c c c c c c c c c c c														x	x			x					
<i>Prunus serotina</i>	Rosac	e e e e e? e e c c c c c c														x	x			x	1984	NAm, SAm			
<i>Prunus virginiana</i>	Rosac	c c c c c c c c c c c c c c																		x	2000	NAm			
<i>Psephellus dealbatus</i>	Aster	x c c c? c c c c c c c c																		x	2019	Asi-Tem			
<i>Pseudofumaria alba</i>	Papav	c c c c c c c c c c c c c c																		x	1908	Eur			
<i>Pseudofumaria lutea</i>	Papav	e e le e e le e le c e																		x	1882	Eur			
<i>Pseudosasa japonica</i>	Poace	x c c c c c c c c c c c c x																		2017	Asi-Tem				
<i>Pseudotsuga menziesii</i>	Pinac	le c c c c c c c c c c c c x x																		x	1960	NAm			
<i>Ptelea trifoliata</i>	Rutac	c ? c c c c c c c c c c c c																		x	1890	NAm			
<i>Pteris multifida</i>	Pteri	c c c c c c c c c c c c c c																		x	1921	NAm, SAm			
<i>Pterocarya fraxinifolia</i>	Jugla	c c c c c c c c c c c c c c																		x	2005	Asi-Tem			
<i>Punica granatum</i>	Lythr	x c c c c c c c c c c c c c c																		x	2022	Asi-Tem, Asi-Tro			
<i>Puschkinia scilloides</i>	Aspar	c c c c c c c c c c c c c c																		x	1994	Asi-Tem			
<i>Pyracantha coccinea</i>	Rosac	le c c le c c c c c c c c x																	x	x	1971	Eur, Asi-Tem			
<i>Pyrus austriaca</i>	Rosac	x c c c c c c c c c c c c x x																		x	1977				
<i>Pyrus communis</i> s.str.	Rosac	c c c c c c c c c c c c c c x																		x					
<i>Quercus frainetto</i>	Fagac	c c c c c c c c c c c c c c																		x	2006	Eur, Asi-Tem			
<i>Quercus rubra</i>	Fagac	le c le c c c c c c c c c c c c x																		x	1951	NAm			
<i>Ranunculus pedatus</i>	Ranun	c c c c c c c c c c c c x																		x	1971	Eur, Asi-Tem			
<i>Raphanus sativus</i>	Brass	c c c c c c c c c c c c c c c c																		x x					
<i>Rapistrum rugosum</i>	Brass	t x le le c c c c c c c c c c c c																		x x	1911	Eur, Afr, Asi-Tem			
<i>Reseda alba</i>	Resed	c c c c c c c c c c c c c c																		x	1954	Eur, Afr, Asi-Tem			
<i>Reseda odorata</i>	Resed	c c c c c c c c c c c c c c																		x	1960	Eur, Afr			

Introduction	Environmental Agriculture Silviculture Water management Human health Animal health	Source	
esc	x?	Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Amann 2016	
esc		Adler et al. 2008, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013	
esc		Pflugbeil & Pils 2013	
esc		Hohla 2006c, Pagitz et al. 2023	
esc		Pflugbeil & Pils 2013	
esc		Stöhr et al. 2007	
esc		Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld & Schratt-Ehrendorfer 2022	
		Forstner & Hübl 1971, Polatschek 2000, Walter et al. 2002, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Amann 2016	
esc		Hamburger 1948, Polatschek 2000, Walter et al. 2002, Stöhr et al. 2009, Pflugbeil & Pils 2013, Hohla 2014, Amann 2016	
esc		Polatschek 2000, Walter et al. 2002, Hohla et al. 2009, Amann 2016	
esc		Walter et al. 2002, Adler & Mrkvicka 2003b, Hohla et al. 2009, Sauberer & Till 2015, Amann 2016	
esc		Walter et al. 2002, Adler & Mrkvicka 2003a, Essl 2008	
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Leonhartsberger 2018, Pachschwöll et al. 2025, Pagitz unpubl., Stöhr unpubl.	
esc		Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Forum Flora Austria 2022, Leonhartsberger unpubl., Pagitz unpubl., Stöhr unpubl.	
rel, esc	x	Walter et al. 2002, Pagitz 2004, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023, Pagitz unpubl.	
esc		Walter et al. 2002, Pflugbeil & Pils 2013	
esc		Gilli et al. 2020, Herbarium WU 2022, iNaturalist 2022, Timaeus unpubl.	
esc		Forstner & Hübl 1971, Walter et al. 2002, Hohla 2014, Zernig et al. 2020, Herbarium WU 2022, JACQ 2022	
esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. unpubl., Stöhr unpubl.	
esc		Hohla 2018a	
rel, esc	x	Adler & Mrkvicka 2003a, Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. 2023	
		Fischer et al. 2008	
esc		Neumayer 1922, Forstner & Hübl 1971, Stöhr et al. 2021	
esc		Hohla et al. 2005a, Essl & Stöhr 2006, Pflugbeil & Moosbrugger 2016, Vitek et al. 2021	
esc		iNaturalist 2022, Pachschwöll et al. 2025	
esc		Walter et al. 2002, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Gilli et al. 2020	
esc		Fischer et al. 2008, Hohla 2011b, Pflugbeil & Pils 2013, Gilli et al. 2019b, Pagitz et al. 2023, Barta unpubl.	
esc		Király 2000, Fischer et al. 2008	
esc		Walter et al. 2002, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Niklfeld & Schratt-Ehrendorfer 2022	
esc		Schinninger 2008, Schinninger & Rožánek 2008	
rel, esc	(x)	Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011 unpubl., Pflugbeil & Pils 2013, Amann 2016, Essl unpubl., Pagitz unpubl.	
esc		Walter et al. 2002, Hohla et al. 2009	
		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	
		Hayek 1908–1956, Polatschek 1999, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Raabe & Gilli unpubl.	
esc		Fischer et al. 2008, Pflugbeil & Pils 2013	
esc		Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013	

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range		
<i>Reynoutria ×bohemica</i>	Polyg		e e e e e e e e e e le	e	x x x x x	x	x																	1997			
<i>Reynoutria japonica</i> s.str.	Polyg		e e e e e e e e e e e e	e	x x x x x	x																		1891	Asi-Tem		
<i>Reynoutria sachalinensis</i>	Polyg		e e e c e e e e e e e	e	le x	x x	x																	1961	Asi-Tem		
<i>Rhagadiolus edulis</i>	Aster	c		c																				x	1992	Eur, Afr, Asi-Tem	
<i>Rhaponticum repens</i>	Aster	c		c																				x	1946	Eur, Asi-Tem, Asi-Tro	
<i>Rheum ×rhabarbarum</i>	Polyg	c	c c	c c c c c																				x	1971		
<i>Rheum palmatum</i>	Polyg	x c	c		c c																			x	1975	Asi-Tem	
<i>Rhododendron catawbiense</i>	Erica	x c				c																		x	2018	NAm	
<i>Rhododendron japonicum</i>	Erica		le		le																			x	1983	Asi-Tem	
<i>Rhododendron luteum</i>	Erica		le	le	le	le																	x	1960	Eur, Asi-Tem		
<i>Rhododendron ponticum</i>	Erica		le	c		le	c																x	1983	Eur, Asi-Tem		
<i>Rhodotypos scandens</i>	Rosac	x le	le	c																			x	2011	Asi-Tem		
<i>Rhus ×pulvinata</i>	Anaca	x c			c																		x	2002			
<i>Rhus typhina</i>	Anaca		le	c	le	c	le	c	le	c	c	c	x	x									x	1859	NAm		
<i>Ribes aureum</i> agg.	Gross	a, x c c c c			c											x							x	1942	NAm		
		c																									
<i>Ribes multiflorum</i>	Gross	x c c c		c c																			x	2004	Eur, Asi-Tem		
<i>Ribes nigrum</i>	Gross	a, e c c c c	le	c le	e e	e le	x x																x	1859	Eur, Asi-Tem		
		c																									
<i>Ribes rubrum</i> s.str.	Gross	a, x e le le c	le e le	e e e e x x												x							x	1963	Eur		
		c																									
<i>Ribes sanguineum</i>	Gross	x c c		c c												x							x	2002	NAm		
<i>Ribes spicatum</i>	Gross	le c c	le	c le	c le	?	x x																x	1971	Eur, Asi-Tem		
<i>Ricinus communis</i>	Eupho	c c c c c c	c c	c c																			x	1971	Afr		
<i>Ridolfia segetum</i>	Apiac	c	c																				x	1954	Eur, Afr, Asi-Tem		
<i>Robinia pseudoacacia</i>	Fabac	e e e e e e e e e e	e e e e e e e e x x x x																				x x	1850	NAm		
<i>Robinia viscosa</i>	Fabac	c		c c	c c										x							x	1992	NAm			
<i>Rodgersia pinnata</i>	Saxif	x c			c																		x	2003	Asi-Tem		
<i>Roemeria refracta</i>	Papav	c		c	?																		x	1971	Asi-Tem		
<i>Rorippa lippizensis</i>	Brass	c			c																		x	1938	Eur		
<i>Rorippa pyrenaica</i>	Brass	c			c											x							x	1992	Eur		
<i>Rosa ×damascena</i>	Rosac	x c			c																		x	2003			
<i>Rosa ×francofurtana</i>	Rosac	c c c c	c c	c c	c																		x	1859			
<i>Rosa acicularis</i>	Rosac	c		c																			x	1960	Eur, Asi-Tem, NAm		
<i>Rosa alba</i>	Rosac	c	c c	c c												x							x	1960	Eur		
<i>Rosa altaica</i>	Rosac	c	c c	c											x								x	2003	Asi-Tem		
<i>Rosa blanda</i>	Rosac	c	c c																				x	1960	NAm		
<i>Rosa centifolia</i>	Rosac	x c			c																		x	1844			
<i>Rosa chinensis</i>	Rosac	c		c																			x	1971	Asi-Tem		
<i>Rosa foetida</i>	Rosac	c c c			c																		x	1960	Asi-Tem, Asi-Tro		
<i>Rosa hugonis</i>	Rosac	x c			c											x	x	x	x	x	x	x	x	2002	Asi-Tem		
<i>Rosa multiflora</i>	Rosac	e c e e e e e c e?	c e c	e c e c	x x x x x x											x	x	x	x	x	x	x	x	1985	Asi-Tem		
<i>Rosa nitida</i>	Rosac	x c			c											x							x	2002	NAm		

## Introduction

	Environmental	Agriculture	Silviculture	Water management	Human health	Animal health	Source
cor, hyb	xx	x	xx				Essl 2008, Fischer et al. 2008, Stöhr 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc, cor	xx	x	xx				Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc, cor	xx	x	xx				Forstner & Hübl 1971, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
							Walter et al. 2002
							Forstner & Hübl 1971, Walter et al. 2002
esc							Walter et al. 2002, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Niklfeld & Schratt-Ehrendorfer 2022, Pagitz et al. 2023
esc							Stöhr et al. 2012, Niklfeld & Schratt-Ehrendorfer 2022
esc							Forum Flora Austria 2022, Stöhr unpubl.
esc							Krisai & Schmidt 1983, Hohla et al. 2009
esc							Fischer et al. 2008
esc							Krisai & Schmidt 1983, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc							Essl 2019a, Forum Flora Austria 2022, Pachschwöll et al. 2025
esc							Pflugbeil & Pils 2013
esc							Adler & Mrkvicka 2003b, Pagitz & Lechner Pagitz 2005, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Zernig et al. 2015
							Janchen 1977, Fischer et al. 2008, Pflugbeil & Pils 2013
esc							Pils 2008, Pflugbeil & Pils 2013, Hohla 2018b, Pachschwöll et al. 2025, Essl unpubl.
esc							Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Niklfeld & Schratt-Ehrendorfer 2022, Pagitz et al. 2023
esc							Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023
esc							Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Essl unpubl.
esc							Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016
esc							Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
							Walter et al. 2002
rel, esc, xx	xx						Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
cor							
esc							Kniely et al. 2006, Fischer et al. 2008, Pflugbeil & Pils 2013
							Pflugbeil & Pils 2013
							Walter et al. 2002
							Walter et al. 2002
							Hartl et al. 1992
esc							Pils 2008, Pflugbeil & Pils 2013
esc							Walter et al. 2002, Adler & Mrkvicka 2003b, Hohla et al. 2009
esc							Walter et al. 2002
esc							
esc							Walter et al. 2002, Adler & Mrkvicka 2003a, Hohla et al. 2009
esc							Adler & Mrkvicka 2003a, ZoBoDat 2022, Kleesadl unpubl., Sauberer unpubl.
esc							Walter et al. 2002
esc							Hohla et al. 2009
esc							Walter et al. 2002
esc							Walter et al. 2002
esc							Pils 2008, Pflugbeil & Pils 2013
esc							Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Leonhartsberger 2015, Amann 2016, Niklfeld & Schratt-Ehrendorfer 2022, Pagitz et al. 2023
esc							Pils 2008, Pflugbeil & Pils 2013

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range		
<i>Rosa rugosa</i>	Rosac		c c c c c c					c	c c c c			x	x		x	x		x	x					1960	Asi-Tem		
<i>Rosa virginiana</i>	Rosac		c c						c c			c							x	x					1960	NAm	
<i>Rostraria cristata</i>	Poace		c c c c						c c											x	x					1882	Eur, Afr, Asi-Tem, Asi-Tro
<i>Rubia tinctorum</i>	Rubia		c c																	x	x					1960	Eur, Asi-Tem, Asi-Tro
<i>Rubus allegheniensis</i>	Rosac	x le		x le								x													2020	NAm	
<i>Rubus armeniacus</i>	Rosac	e e e e le	e le e le e le e	e x x																x	x					1971	Eur, Asi-Tem
<i>Rubus canadensis</i>	Rosac	x le		le								x													2019	NAm	
<i>Rubus illecebrosus</i>	Rosac	x c							c										x	x					1930	Asi-Tem	
<i>Rubus laciniatus</i>	Rosac	e le e e c e c e?	c e le	x x															x	x					1994	Eur	
<i>Rubus occidentalis</i>	Rosac	c	c c																x	x					1945	NAm	
<i>Rubus odoratus</i>	Rosac	c	c c c c c c																x	x					1932	NAm	
<i>Rubus parviflorus</i>	Rosac	x le? c le?										x							x	x					2008	NAm	
<i>Rubus phoenicolasius</i>	Rosac	e le c c e c le c c e le x																	x	x					1923	Asi-Tem	
<i>Rubus ulmifolius</i>	Rosac	c c		c															x	x					1977	Eur, Afr	
<i>Rudbeckia fulgida</i>	Aster	le c c c c c c c le c																	x	x					1971	NAm	
<i>Rudbeckia hirta</i>	Aster	e? c e? c e? e? e? e? c c e?		x x x															x	x					1919	NAm	
<i>Rudbeckia laciniata</i>	Aster	e e e e e e e c c le e x x x x		x x x x															x	x					1830	NAm	
<i>Rudbeckia triloba</i>	Aster	c c c c c c c c																	x	x					1971	NAm	
<i>Rumex brownii</i>	Polyg	c c																	x	x					1971	Aus	
<i>Rumex bucephalophorus</i>	Polyg	c c c																	x	x					1948	Eur, Afr, Asi-Tem	
<i>Rumex confertus</i>	Polyg	c c c c c c																	x	x					1949	Eur, Asi-Tem	
<i>Rumex confertus</i> × <i>R. crispus</i>	Polyg	c c																	x	x					1949		
<i>Rumex confertus</i> × <i>R. patientia</i> s.str.	Polyg	x c c																	x	x					2005		
<i>Rumex crispus</i>	Polyg	x c	c																x	x					2017		
<i>Rumex crispus</i> × <i>R. cristatus</i>	Polyg	c c c		?	?													x	x					1946	Eur, Asi-Tem		
<i>Rumex cristatus</i>	Polyg	x c c	c c															x	x					1946			
<i>Rumex cristatus</i> × <i>R. patientia</i> s.str.	Polyg	le? c le? c c le? le?																x	x					1929	Eur		
<i>Rumex kernerii</i>	Polyg	x c c	c															x	x					2005			
<i>Rumex longifolius</i>	Polyg	e c c c c c e										x						x	x					1972	Eur, Asi-Tem		
<i>Rumex patientia</i> subsp. <i>orientalis</i>	Polyg	c c c c							c c									x	x					1966	Eur, Asi-Tem		
<i>Rumex pulcher</i> subsp. <i>divaricatus</i>	Polyg	c c																x	x					1971	Eur, Afr, Asi-Tem		
<i>Rumex pulcher</i> subsp. <i>pulcher</i>	Polyg	c c c c		c														x	x					1915	Eur, Afr, Asi-Tem		
<i>Rumex rugosus</i>	Polyg	x c c	c c	c														x	x					2012	Eur		

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Adler & Mrkvicka 2003a, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc			Walter et al. 2002, Pflugbeil & Pils 2013, Amann 2016 Forstner & Hübl 1971, Fischer et al. 2008, Pagitz et al. 2023
			Walter et al. 2002
	(x)		Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. unpubl. Fischer et al. 2008, Pagitz 2013, Pflugbeil & Pils 2013, Sauberer & Till 2015, Amann 2016, Pagitz et al. 2019a, Király unpubl. Pagitz unpubl.
esc			Niklfeld & Schrott-Ehrendorfer 2022, Ortner unpubl. Fischer et al. 2008, Essl & Föllak 2010, Pflugbeil & Pils 2013, Sauberer & Till 2015, Pagitz 2016, Pagitz et al. 2019a,b, Barta unpubl.
esc			Forstner & Hübl 1971, Fischer et al. 2008, Pagitz et al. 2019b
esc			Fischer et al. 2008, Hohla 2012b, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Pagitz et al. 2019a,b, Pagitz et al. 2020
esc			Fischer et al. 2008, Pagitz et al. 2016, 2019, Gilli et al. 2021
esc			Hamburger 1948, Traxler 1975, Pagitz 2002, Fischer et al. 2008, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2016, 2019a,b, 2020, 2023, Király unpubl.
esc	xx		Walter et al. 2002, Pagitz 2008
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023, Melzer unpubl.
esc			Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc	xx		Forstner & Hübl 1971, Adler & Mrkvicka 2003a, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013, Amann 2016
esc			Fischer et al. 2008, Hohla 2011a, Pflugbeil & Pils 2013, Sauberer & Till 2015
			Forstner & Hübl 1971, Walter et al. 2002
			Melzer 1954, Walter et al. 2002, Stöhr et al. 2009
			Rechinger 1950, Fischer et al. 2008, Barta unpubl.
			Rechinger 1950, Walter et al. 2002
			Barta unpubl.
			Barta unpubl.
			Rechinger 1950, Walter et al. 2002, Adler & Mrkvicka 2006, Fischer et al. 2008
			Rechinger 1950, Walter et al. 2002, Barta unpubl.
			Forstner & Hübl 1971, Melzer 1995, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009
			Barta unpubl.
			Polatschek 2000, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Pagitz et al. unpubl.
			Janchen 1966, Melzer & Barta 2008, JACQ 2022, Barta unpubl., Pagitz unpubl.
			Forstner & Hübl 1971, Walter et al. 2002
			Janchen 1956–1960, Fischer et al. 2008
			Hohla 2013, Gilli unpubl.

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range	
<i>Rumex thrysiflorus</i>	Polyg	x e e e e e e							e c c c	c c	c c	c c	c c	c c		x		x	x					1800	Eur, Asi-Tem	
<i>Rumex triangulivalvis</i>	Polyg	c c c c c c										c							x	x					1949	NAm
<i>Ruta graveolens</i>	Rutac	c c c c c c c c										c							x	x					1859	Eur
<i>Sabulina tenuifolia</i>	Caryo	le c						c	le			c							x	x					1960	Eur, Afr, Asi-Tem, Asi-Tro
<i>Sagittaria latifolia</i>	Alism	e c?						c c c c		e						x									1968	NAm, SAm
<i>Saintpaulia ionantha</i>	Gesne	c							c									x	x						2002	Afr
<i>Salix ×holosericea</i>	Salic	t c c						?	c c							x									1956	
<i>Salix ×pendulina</i>	Salic	c							c								x		x						1960	
<i>Salix ×sepulcralis</i>	Salic	x c								c c							x		x						1993	
<i>Salix babylonica</i>	Salic	x c						c	c							x		x							2013	Asi-Tem
<i>Salix udensis</i>	Salic	x c							c	c c						x		x							2019	Asi-Tem
<i>Salpiglossis sinuata</i>	Solan	x c								c							x		x						2006	SAm
<i>Salvia farinacea</i>	Lamia	c c															x		x						1988	NAm
<i>Salvia hispanica</i>	Lamia	x c c c						c	c c c							x		x						2014	NAm, SAm	
<i>Salvia officinalis</i>	Lamia	a c c						c	c c c							x		x							Eur	
<i>Salvia reflexa</i>	Lamia	c c								?						x		x							1912	NAm
<i>Salvia sclarea</i>	Lamia	c c c c c						c	c							x		x							1960	Eur, Afr, Asi-Tem
<i>Salvia splendens</i>	Lamia	x c c														x		x							1988	SAm
<i>Salvia viridis</i>	Lamia	c c								c c c						x		x							1914	Eur, Afr, Asi-Tem
<i>Salvinia molesta</i> <sup>EU</sup>	Salvi	c c c														x		x							1958	
<i>Salvinia natans</i>	Salvi	le le le							c							x		x							1966	NAm, SAm
<i>Sanguisorba dodecandra</i>	Rosac	c c														x		x							1920	Eur
<i>Santolina chamaecyparissus</i>	Aster	x le c														x		x							2013	Eur
<i>Satureja hortensis</i>	Lamia	le? c c c c le? c						le? c	c c c							x x	x x							1859	Eur, Asi-Tem, Asi-Tro	
<i>Satureja montana</i> s.str.	Lamia	c c c c c x c c c c														x		x							1973	Eur, Asi-Tem
<i>Saxifraga ×arendsii</i>	Saxif	c c							c c							x	x	x							1989	
<i>Saxifraga ×geum</i>	Saxif	le c c le						c	c c							x	x	x							1843	
<i>Saxifraga ×urbium</i>	Saxif	e e														x		x							1845	
<i>Saxifraga stolonifera</i>	Saxif	c c								c						x		x							1993	Asi-Tem
<i>Schizanthus pinnatus</i>	Solan	c c														x		x							1971	SAm
<i>Scilla forbesii</i>	Aspar	x c c								c						x		x							2012	Asi-Tem
<i>Scilla luciliae</i> s.str.	Aspar	x le c c le c							c c							x		x							1976	Asi-Tem
<i>Scilla sardensis</i>	Aspar	c c c c c c							c							x	x	x							1988	Eur, Asi-Tem
<i>Scilla siehei</i>	Aspar	le c c c le						c c c								x	x	x							1999	Asi-Tem
<i>Scilla tmoli</i>	Aspar	c c							c							x		x							2003	Asi-Tem
<i>Scirpus atrovirens</i>	Cyper	x e								e						x		x							2022	NAm
<i>Scirpus georgianus</i>	Cyper	x e							e	le						x		x							1986	NAm
<i>Scolymus hispanicus</i>	Aster	c c														x	x	x							1797	Eur, Afr, Asi-Tem
<i>Scopolia carniolica</i>	Solan	x le c c le x x														x x		x x							1890	Eur, Asi-Tem

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Janchen 1956–1960, Fischer et al. 2008, Hohla et al. 2009, Wittmann & Pflugbeil 2017, Pagitz unpubl., Stöhr unpubl.
esc		Rechinger 1950, Fischer et al. 2008, Hohla et al. 2009, Fischer & Niklfeld 2011, Polatschek & Neuner 2013
esc		Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023, Pachschwöll et al. 2025
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Smettan 2012, Pflugbeil & Pils 2013, Hohla et al. 2015, Niklfeld 2016, Zernig et al. 2018, Pagitz et al. 2023, Barta unpubl.
esc		Pflugbeil & Pils 2013
esc		Hayek 1908–1956, Stöhr et al. 2006, Hohla et al. 2009, Niklfeld & Schratt-Ehrendorfer 2022
esc		Hartl et al. 1992
esc		Pflugbeil & Pils 2013, Pagitz et al. 2023
esc		Gilli et al. 2020, 2021
esc		Forum Flora Austria 2022, ZoBoDat 2022, Hohla unpubl., Stöhr unpubl.
esc		Wittmann & Pflugbeil 2017
esc		Melzer & Barta 2008
esc		Sauberer & Till 2015, Hohla 2016, Forum Flora Austria 2022, JACQ 2022, Gilli unpubl., Stöhr unpubl.
esc		Walter et al. 2002, Hohla 2011b, Stöhr et al. 2012, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023
esc		Walter et al. 2002, Pagitz et al. 2023
esc		Fischer et al. 2008, Hohla et al. 2009, Pagitz et al. 2023
esc		Melzer & Barta 2008
esc, sto		Murr 1923, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016, Eichberger et al. 2021a
esc, sto		Melzer 1962a, Stöhr et al. 2021
esc		Neumayer 1922, Janchen 1966, Leute et al. 1975, Stöhr et al. 2021, Gilli unpubl.
esc		Janchen 1977, Walter et al. 2002
esc		Niklfeld & Schratt-Ehrendorfer 2022, JACQ 2022, Leonhartsberger unpubl.
esc		Neilreich 1859, Polatschek 2000, Walter et al. 2002, Adler & Mrkvicka 2003b, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Vitek et al. 2021, Niklfeld & Schratt-Ehrendorfer 2022
esc		Essl 1999, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Essl 2004b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Essl 2004b, Hohla et al. 2009
esc		Pils 2008, Pflugbeil & Pils 2013
esc		Forstner & Hübl 1971, Walter et al. 2002
esc		Smettan 2012
esc		Speta 1976, Hohla et al. 2009, Pflugbeil & Pils 2013, Leonhartsberger 2015, Niklfeld & Schratt-Ehrendorfer 2022, Stöhr unpubl.
esc		Melzer 1988b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Stöhr 2011, Pflugbeil & Pils 2013
esc		Hohla 2006c, Hohla et al. 2009
esc		Pagitz et al. 2023
esc		Niklfeld 2015
esc		Host 1797, Schultes 1814, Neilreich 1846, 1859, Walter et al. 2002
esc		Walz 1890, Janchen 1977, Hartl et al. 1992, Fischer et al. 2008, Hohla et al. 2009, Hainrich unpubl.

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range	
<i>Scrophularia canina</i> subsp. <i>canina</i>	Scrop	x	le	le	c		x													x					1890	Eur, Afr, Asi-Tem
<i>Scutellaria altissima</i>	Lamia		le	le	le	le	le					x													1891	Eur, Asi-Tem
<i>Secale cereale</i>	Poace	c	c	c	c	c	c	c	c	c	c	c	c	c						x						
<i>Sedum pallidum</i>	Crass	x	le					le	c											x					1996	Eur, Asi-Tem
<i>Sedum sarmentosum</i>	Crass																			x					1947	Asi-Tem, Asi-Tro
<i>Sedum sediforme</i>	Crass	x	c							c									x					1982	Eur, Afr, Asi-Tem	
<i>Selinum silaifolium</i>	Apiac	x	c					c											x					2019	Eur, Asi-Tem	
<i>Sempervivum arachnoideum</i> subsp. <i>tomentosum</i>	Crass	x	c			c													x					2016	Eur	
<i>Sempervivum arachnoideum</i> subsp. <i>tomentosum</i> × <i>S. tectorum</i>	Crass	x	c		c													x						2016		
<i>Sempervivum marmoreum</i>	Crass	x	c					c										x						2011	Eur	
<i>Senecio cineraria</i>	Aster	x	c		c	c		c										x						2003	Eur, Afr, Asi-Tem	
<i>Senecio inaequidens</i>	Aster		e	e	e	e	e	e	e	e	e	e	c	e	e	x	x	x	x					1984	Afr	
<i>Senecio vernalis</i>	Aster		e	e	e	e	c	le	c	c	c	e				x		x						1870	Eur, Asi-Tem	
<i>Senecio vernalis</i> × <i>S. vulgaris</i>	Aster	x	c					c									x		x					2021		
<i>Seseli campestre</i>	Apiac		le	le	le													x						1970	Eur, Asi-Tem	
<i>Setaria faberi</i>	Poace		e	e	c	c	e	e	e	e?	c	c	c	c	x	x	x	x	x	x	x	x	1980	Asi-Tem		
<i>Setaria grisebachii</i>	Poace		c		c													x						1999	NAm, SAm	
<i>Setaria italica</i>	Poace	c	c	c	c	c	c	c	c	c	c	c	c	c				x								
<i>Setaria parviflora</i>	Poace		c		c													x						2001	NAm, SAm	
<i>Setaria viridis</i> var. <i>major</i>	Poace	c	e	c	c	c	c	le	c	c		e	c				x	x	x	x	x	x	x	1981		
<i>Setaria viridis</i> var. <i>weinmannii</i>	Poace	c	x	le				le	c	c							x							1999		
<i>Shinnersia rivularis</i>	Aster		le					le									x							2000	NAm	
<i>Sicyos angulatus</i>	Cucur		le	?	le	c	c	c	le	c		?	c		x									1859	NAm	
<i>Sida hermaphrodita</i>	Malva	x	le		le												x							2017	NAm	
<i>Sida spinosa</i>	Malva		c									c					x							1909	Afr, Asi-Tro, NAm, SAm	
<i>Sigesbeckia serrata</i>	Aster		c					c									x							1906	SAm	
<i>Silene bupleuroides</i>	Caryo		c					c									x							1884	Eur, Asi-Tem	
<i>Silene conoidea</i>	Caryo		c	c	c	c	c	c									x							1954	Eur, Afr, Asi-Tem, Asi-Tro	
<i>Silene cretica</i>	Caryo		c					c									x							1960	Eur, Asi-Tem	
<i>Silene csereii</i>	Caryo		c	c		c											x							1946	Eur, Asi-Tem	
<i>Silene dichotoma</i>	Caryo		e	e?	e	e?	c	c	c	c	c	c	c	c	x		x						1842	Eur, Asi-Tem		
<i>Silene flavescens</i>	Caryo		le	le													x							1999	Eur	
<i>Silene latifolia</i> subsp. <i>latifolia</i>	Caryo		c		c							c					x							1960	Eur, Afr, Asi-Tem	
<i>Silene mucipula</i>	Caryo		c					c									x							1948	Eur, Afr, Asi-Tem	
<i>Silene pendula</i>	Caryo		c		c												x							1859	Eur, Asi-Tem	

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health Source
		Janchen 1977, Hartl et al. 1992, Fischer et al. 2008
esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Leonhartsberger 2015
esc, sto		Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc		Hohla 2018b, Kleesadl & Schröck 2021, Pils unpubl.
esc		Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Gilli et al. 2019b, Pagitz et al. 2023
esc		Hartl et al. 1992, Niklfeld & Schrott-Ehrendorfer 2022
		Gilli et al. 2020
esc		Gilli et al. 2019b
		Gilli et al. 2019b
esc		Hohla 2011b
		Hohla 2009, Vitek et al. 2021, Gilli unpubl.
cor	x?	Polatschek 1984, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Stöhr & Brandes 2014, Leonhartsberger 2015, Amann 2016
		Adler & Mrkvicka 2003a, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz unpubl. JACQ 2022
		Adler & Mrkvicka 2003b, Fischer et al. 2008
con, sto		Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Amann 2016, Gilli et al. 2019b, Pagitz et al. 2023
		Walter et al. 2002
con, sto		Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
		Walter et al. 2002
x?		Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli et al. 2019b, Pagitz unpubl.
x?		Hohla et al. 2000, 2009, Stöhr et al. 2009, Pflugbeil & Pils 2013
esc		Walter et al. 2002
x?		Neilreich 1859, Erdinger 1872, Adler & Mrkvicka 2003b, Follak 2010, Pagitz et al. 2023
esc		Gilli et al. 2020
		Amann 2016
		Hamburger 1948, Walter et al. 2002
		Hamburger 1948, Walter et al. 2002
		Fischer et al. 2008, Hohla et al. 2009, Vitek et al. 2021
		Walter et al. 2002
		Forstner & Hübl 1971, Wallnöfer et al. 2012
		Dolliner 1842, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Zernig et al. 2018
rel		Fischer & Niklfeld 2001, Fischer 2001
		Walter et al. 2002, Barta unpubl.
		Melzer 1954, Walter et al. 2002
		Walter et al. 2002, Adler & Mrkvicka 2003b

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range							
<i>Silene schafta</i>	Caryo	x c					c												x	2016	Asi-Tem											
<i>Silphium perfoliatum</i>	Aster	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	c c	x			x	1960	NAm											
<i>Silybum marianum</i>	Aster	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c				x	1859	Eur, Afr, Asi-Tem, Asi-Tro										
<i>Sinacalia tangutica</i>	Aster	le	le	c								c			x x										1972	Asi-Tem						
<i>Sinapis alba</i> subsp. <i>alba</i>	Brass	a, c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	x	x	x	x	x	x	x	x	x	1756							
<i>Sinapis alba</i> subsp. <i>dissecta</i>	Brass	c		c		c			c		c		c		c					x	x	1909	Eur, Afr									
<i>Sisymbrium pallescens</i>	Brass	x e							e							x	x	x	x	x	x	x	x	x	1999	Eur						
<i>Sisymbrium volgense</i>	Brass	c c c																		x	x	1966	Eur									
<i>Sisyrinchium montanum</i>	Irida	x e c le	e c e le	c e e												x				x	x	x	x	x	1894	NAm						
<i>Smallanthus sonchifolius</i>	Aster	x c		c															x	x	x	x	x	x	2017	SAm						
<i>Smyrnium perfoliatum</i>	Apiac	le le c le c c c c														x	x								1911	Eur, Asi-Tem						
<i>Solanum abutiloides</i>	Solan	x c		c															x	x	x	x	x	x	2018	SAm						
<i>Solanum capsicoides</i>	Solan	c													c				x	x	x	x	x	x	1907	SAm						
<i>Solanum carolinense</i>	Solan	x e c e c e													c				x	x	x	x	x	x	1998	NAm						
<i>Solanum laciniatum</i>	Solan	x c												c				x	x	x	x	x	x	2021	Aus							
<i>Solanum laxum</i>	Solan	c c		c												x	x	x	x	x	x	x	x	x	1924	SAm						
<i>Solanum lycopersicum</i>	Solan	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	x	x	x	x	x	x	x	x	x	SAm						
<i>Solanum mammosum</i>	Solan	c												c				x	x	x	x	x	x	1929	NAm, SAm							
<i>Solanum melongena</i>	Solan	c c ?						c								x	x	x	x	x	x	x	x	x	Asi-Tro							
<i>Solanum nitidibaccatum</i>	Solan	c c c c c c														x	x	x	x	x	x	x	x	x	1977	SAm						
<i>Solanum pimpinellifolium</i>	Solan	x c c c c c														x	x	x	x	x	x	x	x	x	2012	SAm						
<i>Solanum pseudocapsicum</i>	Solan	c c c												c				x	x	x	x	x	x	x	1992	NAm, SAm						
<i>Solanum retroflexum</i>	Solan	x c c												c				x	x	x	x	x	x	x	1918	Afr						
<i>Solanum rostratum</i>	Solan	c c c												c				x	x	x	x	x	x	x	1960	NAm						
<i>Solanum sisymbriifolium</i>	Solan	c c c c c							c					c				x	x	x	x	x	x	x	1968	SAm						
<i>Solanum triflorum</i>	Solan	c c c													x			x	x	x	x	x	x	x	1971	NAm, SAm						
<i>Solanum tuberosum</i>	Solan	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	x	x	x	x	x	x	x	x	x	SAm					
<i>Soleirolia soleirolii</i>	Urtic	c c c c														x	x	x	x	x	x	x	x	x	1963	Eur						
<i>Solidago canadensis</i>	Aster	e e e e e e e e e e														x x	x x	x x	x x	x x	x x	x x	x x	x x	1838	NAm						
<i>Solidago canadensis</i> × <i>S. virgaurea</i>	Aster	e		c c e				e e							x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	1905							
<i>Solidago gigantea</i>	Aster	e e e e e e e e e e													x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	1857	NAm					
<i>Solidago gigantea</i> × <i>S. virgaurea</i>	Aster	x c							c						x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	1985						
<i>Solidago rugosa</i>	Aster	x c												c				x	x	x	x	x	x	x	x	2016	NAm					
<i>Sonchus tenerrimus</i>	Aster	x c		c											x	x	x	x	x	x	x	x	x	x	2006	Eur, Afr, Asi-Tem						
<i>Sorbaria kirilowii</i>	Rosac	x c							c x						x	x	x	x	x	x	x	x	x	x	2002	Asi-Tem						
<i>Sorbaria sorbifolia</i>	Rosac	c c		c c c c c c c c				c c c c c c c c							x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	1960	Asi-Tem					
<i>Sorbaria tomentosa</i>	Rosac	c c		c c c c c c c c				c c c c c c c c							x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	1966	Asi-Tem, Asi-Tro					
<i>Sorbus intermedia</i>	Rosac	c c c c		c c c c				c c c c							x	x	x	x	x	x	x	x	x	x	x	1971	Eur					
<i>Sorghastrum nutans</i>	Poace	x c		c					x						x	x	x	x	x	x	x	x	x	x	2020	NAm						
<i>Sorghum bicolor</i>	Poace	c ? c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	c c c c c c c c c c	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	1923	Afr			

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Gilli et al. 2021
esc			Fischer et al. 2008, Eichberger et al. 2021b, Gilli et al. 2021
			Neilreich 1859, Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Fischer et al. 2008, Zernig et al. 2018
esc, sto			Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Kögeler 1951, Fischer et al. 2008
			Polatschek 2015
			Fischer et al. 2008
			Beck 1894, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Smettan 2012, Pflugbeil & Pils 2013, Amann 2016
			Forum Flora Austria 2022, JACQ 2022, Heimel unpubl., Leonhartsberger & Wendelin unpubl.
			Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Niklfeld 2016, JACQ 2022
esc			Hohla 2018b
			Amann 2016
(x)			(x) Follak 2020, Amann unpubl., Barta unpubl.
			Pflugbeil unpubl.
esc			Forstner & Hübl 1971, Walter et al. 2002
esc			Neilreich 1859, Adler & Mrkvicka 2003b, Pagitz & Lechner Pagitz 2005, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
			Amann 2016
esc			Fischer et al. 2008, Gilli unpubl.
			Adler & Mrkvicka 2006, Fischer et al. 2008
			Knapp 2018, Hohla et al. 2019, Sauberer et al. 2020
esc			Pflugbeil & Pils 2013, Vitek et al. 2021
esc			Essl 2005, Amann 2016
			Fischer et al. 2008
			Forstner & Hübl 1971, Hohla 2012b, Gilli et al. 2019b, Thalinger unpubl.
			Forstner & Hübl 1971, Bernhardt et al. 2013, Knapp 2018
esc			Walter et al. 2002, Hohla et al. 2009, Stöhr 2009, Pflugbeil & Pils 2013, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022
			Walter et al. 2002, Kleesadl 2017, Observation International 2022, Pachschwöll et al. 2025
esc, cor	xx	x?	Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc, cor	x?		Khek 1905, Walter et al. 2002, Pagitz & Lechner-Pagitz 2015, Forum Flora Austria 2022, Pagitz et al. 2023, Stöhr unpubl.
esc, cor	xx	x	Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
esc, cor			Melzer 1985
esc, cor			Amann 2016, Grabher 2017
			Adler et al. 2008
esc			Pflugbeil & Pils 2013
esc			Walter et al. 2002, Fischer et al. 2008, Pflugbeil & Pils 2013, Leonhartsberger 2015, Hohla 2018b, Hohla et al. 2019, Pagitz et al. 2023
esc			Fischer et al. 2008
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
			Hohla 2021
esc, con,			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Pagitz et al. 2023, Gilli unpubl.
sto			

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range	
<i>Sorghum bicolor</i> × <i>S. drummondii</i>	Poace	x c		c																x x	2014					
<i>Sorghum halepense</i>	Poace	e e e e e e e c e?	c e c	x											x	x	x	x	x x	1859	Afr, Asi-Tem, Asi-Tro					
<i>Spartium junceum</i>	Fabac	c c c c c		x															x x	1960	Eur, Afr, Asi-Tem					
<i>Spinacia oleracea</i>	Amara	a c c c c c c		c c											c c				x x	1859	Asi-Tem					
<i>Spiraea ×billardii</i>	Rosac	c c c c c		c c e c				x							x	x	x	x		1975						
<i>Spiraea ×brachybotrys</i>	Rosac	le		le															x	2004						
<i>Spiraea ×cinerea</i>	Rosac	x c c		c	?	c						x									2010					
<i>Spiraea ×inflexa</i>	Rosac	x c							c										x	1987						
<i>Spiraea ×multiflora</i>	Rosac	x c				c													x	2002						
<i>Spiraea ×vanhouttei</i>	Rosac	c c c		c c c c c c				x										x		1974						
<i>Spiraea alba</i>	Rosac	c		c c c c												x			x		1992	NAm				
<i>Spiraea betulifolia</i>	Rosac	x c				c										x			x		2018	Asi-Tem				
<i>Spiraea douglasii</i>	Rosac	c c		c c		c c	x								x			x		1960	NAm					
<i>Spiraea japonica</i>	Rosac	e c c c c	le	le le le c e le x	x										x			x		1910	Asi-Tem					
<i>Spiraea latifolia</i>	Rosac	x c		c												x			x		2012	NAm				
<i>Spiraea nipponica</i>	Rosac	x c		c c c											x			x		2004	Asi-Tem					
<i>Spiraea prunifolia</i>	Rosac	c c														x			x		1974	Asi-Tem				
<i>Spiraea thunbergii</i>	Rosac	x c				c									x			x		2002	Asi-Tem					
<i>Spiraea trilobata</i>	Rosac	x c				c									x			x		1879	Asi-Tem					
<i>Sporobolus cryptandrus</i>	Poace	c						c							x			x		1998	NAm, SAm					
<i>Sporobolus indicus</i>	Poace	x c	c		c										x			x		2013	NAm, SAm					
<i>Sporobolus michauxianus</i>	Poace	x c		c											x			x		2020	NAm					
<i>Sporobolus neglectus</i>	Poace	e c c c e e?	c e e?	c e c											x			x		1994	NAm					
<i>Sporobolus vaginiflorus</i>	Poace	e e?	c c e e?	c e c											x			x		2002	NAm					
<i>Stachys arvensis</i>	Lamia	a c c	x												x			x		1756	Eur, Afr, Asi-Tem					
<i>Stachys byzantina</i>	Lamia	c c c c c	c c c		c c c										x			x		1960	Eur, Asi-Tem					
<i>Staphylea colchica</i>	Staph	x le		le										x						2020	Asi-Tem					
<i>Stenotaphrum secundatum</i>	Poace	x c		c											x			x		2015	Afr, NAm, SAm					
<i>Strigosella africana</i>	Brass	le c le c c	c		c										x			x		1890	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Styphnolobium japonicum</i>	Fabac	c c		c c											x			x		1960	Asi-Tem					
<i>Symporicarpos ×chenaultii</i>	Capri	c c	c	c c c c										x x x					x	2003						
<i>Symporicarpos albus</i> subsp. <i>laevigatus</i>	Capri	e c c c c	e c c c	e c c c											x x x			x		1960	NAm					
<i>Symporicarpos orbiculatus</i>	Capri	c c c	c					c							x			x		1971	NAm					
<i>Symphyotrichum ×salignum</i>	Aster	e ? le c c le c le	e le c le	e le x	x										x			x		1859						
<i>Symphyotrichum ×versicolor</i>	Aster	c c c c c	c c c c c	c c c c c											x			x		1915						

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
			Hohla 2014
con,	sto, x? (x)		Neilreich 1859, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
cor			Fischer et al. 2008, Pflugbeil & Pils 2013, Gilli et al. 2021
esc			Neilreich 1859, Walter et al. 2002, Adler & Mrkvicka 2003b, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Forum Flora Austria 2022, Pagitz et al. 2023, Lefnaer unpubl.
esc			Kniely et al. 2006
esc			Hohla 2011a, Forum Flora Austria 2022, Pachschwöll et al. 2025, Stöhr unpubl.
esc			Dörr & Lippert 2004
esc			Pflugbeil & Pils 2013
esc			Stöhr et al. 2006, Fischer et al. 2008, Hohla 2011b, Pflugbeil & Pils 2013, Forum Flora Austria 2022, Pagitz et al. 2023
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc			Stöhr unpubl.
esc	x?		Fischer et al. 2008, Hohla et al. 2009
esc	x?		Essl & Stöhr 2006, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Amann 2016, Pagitz et al. 2023, Pachschwöll et al. 2025
esc			Hohla 2022
esc			Forum Flora Austria 2022, Hohla 2022, Pils unpubl., Stöhr unpubl.
esc			Walter et al. 2002
esc			Pflugbeil & Pils 2013
esc			Pflugbeil & Pils 2013
			Walter et al. 2002
			Eichberger et al. 2015, Niklfeld 2016
			Kleesadl & Schröck 2021
			Essl 2008, Pflugbeil & Pils 2013, Hohla 2014, 2018b, Pagitz & Lechner-Pagitz 2015, Zernig et al. 2018, Hohla et al. 2019, Pagitz et al. 2023
			Melzer 2003, Hohla et al. 2015, 2019, Pagitz & Lechner-Pagitz 2015, Hohla 2016, Gilli & Niklfeld 2018, Reich et al. 2018, Zernig et al. 2019, Pagitz et al. 2023
			Janchen 1977, Fischer et al. 2008, Hohla et al. 2009, Amann 2016
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Brandes 2015, Pagitz & Lechner-Pagitz 2015, Essl unpubl.
esc			Gilli et al. 2021
esc			Hohla et al. 2015
			Forstner & Hübl 1971, Fischer et al. 2008
esc			Fischer et al. 2008
esc			Hohla 2006c, Hohla et al. 2009, Pflugbeil & Pils 2013, Lefnaer 2021, Pagitz et al. 2023
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Amann 2016
esc			Walter et al. 2002, Pflugbeil & Pils 2013
esc			Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023, Gilli unpubl.
			Hamburger 1948, Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carnithia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & screes	Ruderal habitats	Scenical habitats	First record	Native Range
<i>Symphyotrichum ericoides</i>	Aster	x c			c													x x		x	1940	NAm			
<i>Symphyotrichum laeve</i> (incl. var. <i>concinnum</i> )	Aster	le c le c c c c c c c c c c																		x	1895	NAm			
<i>Symphyotrichum lanceolatum</i>	Aster	e e e e e e e e e c e e																		x	1859	NAm			
<i>Symphyotrichum novae-angliae</i>	Aster	e c c c c c c c c c e																		x x	1967	NAm			
<i>Symphyotrichum novi-belgii</i> s.str.	Aster	e e e e e c e e c e e																		x	1859	NAm			
<i>Symphyotrichum pilosum</i>	Aster	c	c																	x	1968	NAm			
<i>Symphtym ×hidcoteense</i>	Borag	x c										c								x	2013				
<i>Symphtym ×uplandicum</i>	Borag	c c c c c c c c c c c c										c c c		x						x	1960				
<i>Symphtym asperum</i> s.str.	Borag	c	c	c	c	c	x												x	1973	Asi-Tem				
<i>Symphtym bulbosum</i>	Borag	x le?le?											x								2011	Eur, Asi-Tem			
<i>Symphtym caucasicum</i>	Borag	x c c c	c c	c c																x	2007	Asi-Tem			
<i>Symphtym ibericum</i>	Borag	x c						c					x						x	2011	Asi-Tem				
<i>Syringa ×chinensis</i>	Oleac	c c																	x	1960					
<i>Syringa ×persica</i>	Oleac	c c c																	x	1859					
<i>Syringa vulgaris</i>	Oleac	e e e e le c le e le e c										x							x x	1859	Eur				
<i>Tagetes erecta</i>	Aster	c	c c c c c										?							x x	1912	NAm, SAm			
<i>Tagetes minuta</i>	Aster	x c	c																x	2020	SAm				
<i>Tagetes patula</i>	Aster	c c c c c c c c c c c c																	x	1891	NAm, SAm				
<i>Tagetes tenuifolia</i>	Aster	c c c c c c										c							x	1996	NAm, SAm				
<i>Talinum paniculatum</i>	Talin	x c c	c																x	2018	NAm, SAm				
<i>Tamarix parviflora</i>	Tamar	c c c c c	c																x	1971	Eur, Asi-Tem				
<i>Tamarix ramosissima</i>	Tamar	c	c																x	1971	Eur, Asi-Tem, Asi-Tro				
<i>Tanacetum balSAmita</i>	Aster	c c c c c c c c?						c											x	1960	Asi-Tem				
<i>Tanacetum macrophyllum</i>	Aster	c	c c	c								c							x	1947	Eur, Asi-Tem				
<i>Tanacetum parthenium</i>	Aster	e e e e e e e e c c e										x							x	1821	Eur, Asi-Tem				
<i>Taxodium distichum</i>	Cupre	x c						c											x	2002	NAm, SAm				
<i>Taxus ×media</i>	Taxac	x c	c c	c c c c c c	x x														x	1950					
<i>Telekia speciosa</i>	Aster	e le le c e e e e c						le					x x x	x				x	1913	Eur, Asi-Tem					
<i>Teloxys aristata</i>	Amara	c	c																x	1987	Asi-Tem				
<i>Tetragonia tetragonoides</i>	Aizoa	c c c c c c	c									c							x	1923	Asi-Tem, Aus				
<i>Teucrium hircanicum</i>	Lamia	x c c	c	c	c														x	2008	Asi-Tem				
<i>Thladiantha calcarata</i>	Cucur	c	c	c	c														x	1928	Asi-Tem, Asi-Tro				
<i>Thladiantha dubia</i>	Cucur	le le c c le	le	c	le								x x						x	1946	Asi-Tem				
<i>Thuja occidentalis</i>	Cupre	le	c	le	c	c	c	le	c	le								x x	1947	NAm					
<i>Thuja plicata</i>	Cupre	c c c c c	x	x																1995	NAm				
<i>Thymus ×citriodorus</i>	Lamia	c	c	c															x	1998					
<i>Thymus drucei</i>	Lamia	x c	c																x	2012	Eur, NAm				
<i>Thymus vulgaris</i>	Lamia	c c c c	c	c	c													x x	1859	Eur, Afr					
<i>Tilia ×euchlora</i>	Malva	x c						c											x	2009					
<i>Tilia tomentosa</i>	Malva	c	c	c	c														x	1971	Eur, Asi-Tem				
<i>Tolmiea menziesii</i>	Saxif	x c					c											x	2011	NAm					

## Introduction

			Environmental Agriculture Silviculture Water management Human health Animal health	Source
				Pflugbeil & Pils 2013 Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc	xx			Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023, Pagitz et al. unpubl.
esc				Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023, Stöhr unpubl.
esc	x			Neilreich 1859, Adler & Mrkvicka 2003b, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016 Melzer 1975, Walter et al. 2002 Amann 2016
esc				Fischer et al. 2008, Hohla et al. 2009, Amann 2016 Hartl et al. 1992, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Zernig et al. 2018 Niklfeld 2015
				Hohla 2013, Pflugbeil & Pils 2013, Leonhartsberger 2018, Gilli et al. 2019b, Pachschwöll et al. 2025, Stöhr unpubl.
esc				Pflugbeil & Pils 2013
esc				Walter et al. 2002
esc				Neilreich 1859, Walter et al. 2002, Adler & Mrkvicka 2003a
esc	x?			Neilreich 1859, Erdinger 1872, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015, Pagitz et al. 2023
esc				Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc				Gilli et al. 2021
esc				Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Brandes 2015
esc				Melzer & Barta 2005, Fischer et al. 2008, Hohla 2011a, Pagitz et al. 2023
esc				Gilli et al. 2019b
esc				Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2015, ZoBoDat 2022, Metlesics unpubl.
esc				Forstner & Hübl 1971, Walter et al. 2002
				Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
				Hamburger 1948, Walter et al. 2002, Fischer et al. 2008, Kniely unpubl.
				Hamburger 1948, Hartl et al. 1992, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Pagitz et al. 2023
esc				Pflugbeil & Pils 2013
rel, esc				Stöhr 2019, Schramayr unpubl.
rel, esc				Hamburger 1948, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli unpubl.
				Melzer 1988b
				Hamburger 1948, Fischer et al. 2008
				Hohla 2011a, Pflugbeil & Pils 2013, Gilli unpubl.
				Hamburger 1948, Walter et al. 2002
rel, esc				Hamburger 1948, Fischer et al. 2008, Pflugbeil & Pils 2013, Pagitz & Lechner-Pagitz 2015
rel, esc				Hamburger 1948, Walter et al. 2002, Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Essl & Follak 2010, Pflugbeil & Pils 2013, Pagitz et al. unpubl., Stöhr unpubl.
rel, esc				Fischer et al. 2008, Hohla et al. 2009, Essl & Follak 2010, Pflugbeil & Pils 2013
				Walter et al. 2002
				Hohla 2014
esc				Neilreich 1859, Walter et al. 2002, Adler & Mrkvicka 2003b, Hohla et al. 2009, Pagitz et al. 2023
esc				Stöhr et al. 2012, Pflugbeil & Pils 2013
esc				Walter et al. 2002, Pflugbeil & Pils 2013
				Hohla 2011b

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & scree	Ruderal habitats	Segetal habitats	First record	Native Range
<i>Torenia fournieri</i>	Linde	x	c									c							x	2021	Asi-Tem, Asi-Tro				
<i>Torilis nodosa</i>	Apiac			c	c	c	c	c											x	1954	Eur, Afr, Asi-Tem, Asi-Tro				
<i>Trachomitum venetum</i>	Apocy	x	c		c														x	1992	Eur, Asi-Tem, Asi-Tro				
<i>Trachycarpus fortunei</i>	Areca	x	c		c	c		c											x	1995	Asi-Tem, Asi-Tro				
<i>Trachyspermum ammi</i>	Apiac	x	c								c								x	2022	Asi-Tem, Asi-Tro				
<i>Trachystemon orientalis</i>	Borag	x	le		le	c				c				x						2004	Eur, Asi-Tem				
<i>Tradescantia</i> × <i>andersoniana</i>	Comme		c	c	c	c	c	c	c	c	c	c	c	c				x	1960						
<i>Tradescantia virginiana</i>	Comme	t	c							c									x	2002	Eur				
<i>Tragopogon minor</i>	Aster	x	c		c	c		c	c	x									x	1940					
<i>Tragopogon orientalis</i> × <i>T. porrifolius</i>	Aster		c	c					c										x	1859	Eur, Afr, Asi-Tem				
<i>Tragopogon porrifolius</i> subsp. <i>porrifolius</i>	Aster	x	c	?	c	c	c	c										x	1912	Eur, Asi-Tem					
<i>Tragopogon pratensis</i> s.str.	Aster	x	c	c				c	c	c	c	c	c	c		x			x	1842	Eur, Afr, Asi-Tem, Asi-Tro				
<i>Tragus racemosus</i>	Poace		e	e	e	e	c	c	c									x	1866	Eur, Afr, Asi-Tem, Asi-Tro, Aus					
<i>Tribulus terrestris</i>	Zygop	x	c	c	c	c		c	c									x	1958	Afr, Asi-Tem, Asi-Tro					
<i>Trifolium alexandrinum</i>	Fabac		c	c	c	c	c	c	c	c	c	c	c	c				x	x	Eur, Afr, Asi-Tem					
<i>Trifolium echinatum</i>	Fabac		c			c												x	x	1954	Eur, Afr, Asi-Tem				
<i>Trifolium hybridum</i> subsp. <i>elegans</i>	Fabac		c	c	c	c	c	c	c	c	c	c	c	c				x	x	1909	Eur, Afr, Asi-Tem				
<i>Trifolium incarnatum</i> subsp. <i>incarnatum</i>	Fabac		c	c	c	c	c	c	c	c	c	c	c	c				x	x	1859	Eur, Asi-Tem				
<i>Trifolium incarnatum</i> subsp. <i>molinerii</i>	Fabac		c	c														x	x	1899	Eur, Asi-Tem				
<i>Trifolium lappaceum</i>	Fabac		c			c												x	1954	Eur, Afr, Asi-Tem					
<i>Trifolium mutabile</i>	Fabac		c			c												x	1954	Eur, Asi-Tem					
<i>Trifolium nigrescens</i>	Fabac		c			c												x	1971	Eur, Afr, Asi-Tem					
<i>Trifolium repens</i> subsp. <i>prostratum</i>	Fabac		c			c												x	1990	Eur, Asi-Tem					
<i>Trifolium resupinatum</i> s.str.	Fabac	t	c	c	c	c	c	c	c?	c	c	c	c	c				x	1879	Eur, Afr, Asi-Tem, Asi-Tro					
<i>Trifolium squarrosum</i>	Fabac		c			c												x	1954	Eur, Afr					
<i>Trifolium stellatum</i>	Fabac	x	c		c													x	2007	Eur, Afr, Asi-Tem					
<i>Trifolium suaveolens</i>	Fabac		e	c	c	c	c	c	c	c	c	c	c	e	c		x	1973	Eur, Afr, Asi-Tem, Asi-Tro						
<i>Trifolium subterraneum</i>	Fabac	x	c	c	c			c										x	2014	Eur, Afr, Asi-Tem					
<i>Trigonella caerulea</i>	Fabac		c	f	c	c		c	c	c	c	c	c	c			x	1842	Asi-Tem						
<i>Trigonella foenum-graecum</i>	Fabac		c			c												x	1842	Eur, Asi-Tem					
<i>Trigonella grandiflora</i>	Fabac		c			c												x	1971	Asi-Tem					
<i>Trigonella kotschy</i>	Fabac		c					c										x	1992	Asi-Tem					

	Environmental Agriculture Silviculture Water management Human health Animal health Source
	Pflugbeil unpubl. Walter et al. 2002, Gilli & Niklfeld 2018
	Forstner unpubl.
esc	Essl 2019b Observation International 2022, Pachschwöll et al. 2025
sto	Stöhr et al. 2004, Pflugbeil & Pils 2013, Wallnöfer et al. 2015
esc	Walter et al. 2002, Hohla 2011a, Pflugbeil & Pils 2013, Amann 2016, Gilli et al. 2020, Pachschwöll et al. 2025
esc	Hohla et al. 2002, Pflugbeil & Pils 2013, Gilli et al. 2019b, Kleesadl & Schröck 2021
cor	Glantschnig 1940, Janchen 1956–1960, Traxler 1973, Hartl et al. 1992, Walter et al. 2002
	Neilreich 1859, Walter et al. 2002, Hohla et al. 2009, Forum Flora Austria 2022, JACQ 2022, Lefnaer unpubl., Leonhartsberger unpubl.
	Dalla Torre von Thunberg-Sternhof & Sarnthein 1912, Traxler 1984, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Kniely 2016
	Dolliner 1842, Kleesadl 2009, Pflugbeil & Pils 2013, Niklfeld 2016, Zernig et al. 2019
cor	Neilreich 1866, Adler & Mrkvicka 2006, Fischer et al. 2008, Niklfeld 2016, Hohla 2018b
	Schratt-Ehrendorfer 1986 unpubl., Fischer et al. 2008, Melzer & Barta 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Amann 2016
	Walter et al. 2002
	Fischer et al. 2008, Hohla et al. 2009
esc	Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
	Melzer & Barta 1992, Walter et al. 2002
	Walter et al. 2002
	Walter et al. 2002
con, sto	Kniely et al. 2006, Melzer & Ocepek 2009
	Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld & Schratt-Ehrendorfer 2022
	Walter et al. 2002
	Stöhr et al. 2009
	Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli et al. 2021, Vitek et al. 2021, Niklfeld & Schratt-Ehrendorfer 2022, Forum Flora Austria 2022, Pagitz et al. 2023, Stöhr unpubl.
	Kleesadl & Schröck 2021, Forum Flora Austria 2022, Pachschwöll et al. 2025, Fischer unpubl.
	Dolliner 1842, Janchen 1977, Polatschek 2000, Adler & Mrkvicka 2003a, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016
esc	Dolliner 1842, Fischer et al. 2008
	Walter et al. 2002
	Walter et al. 2002

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rocks & scree	Ruderal habitats	Segetal habitats	First record	Native Range		
<i>Trisetaria panicea</i>	Poace	x c										c						x						1978			
<i>Triticosecale ×rimpaui</i>	Poace	c c							c										x								
<i>Triticum aestivum</i>	Poace	c c c c c c c c c								c c										x							
<i>Triticum compactum</i>	Poace	c c										c							x								
<i>Triticum dicoccum</i>	Poace	c x c										c						x									
<i>Triticum durum</i>	Poace	c x c						c		c		c c						x									
<i>Triticum monococcum</i>	Poace	c c c						c		c		c						x									
<i>Triticum polonicum</i>	Poace	c x c								c								x									
<i>Triticum spelta</i>	Poace	c c						c				c						x									
<i>Triticum turgidum</i>	Poace	c c						c c c										x									
<i>Tropaeolum majus</i>	Tropae	c c c c c c c c c										x				x	x	x	1931	SAm							
<i>Tsuga canadensis</i>	Pinac	x c						c	c									x	2003	NAm							
<i>Tsuga chinensis</i>	Pinac	x c	c									x								2006	Afr, Asi-Tem						
<i>Tsuga heterophylla</i>	Pinac	x c						c										x	2009	NAm							
<i>Tulipa gesneriana</i>	Lilia	x c c c c c c						c c c				x				x			x	1844	Eur, Asi-Tem						
<i>Tulipa greigii</i>	Lilia	x c	c															x	2014	Asi-Tem							
<i>Tulipa praestans</i>	Lilia	x c	c														x	2013	Asi-Tem								
<i>Tulipa sylvestris</i> subsp. <i>sylvestris</i>	Lilia	x e le e e ? le								c		x x x								1814	Eur, Afr, Asi-Tem						
<i>Tulipa tarda</i>	Lilia	x c						c										x	2015	Asi-Tem							
<i>Tulipa turkestanica</i>	Lilia	x le	le							c								x	2001	Asi-Tem							
<i>Typha angustifolia</i> × <i>T. laxmannii</i>	Typha	x c	c									x x								2015							
<i>Typha laxmannii</i>	Typha	e e e e e?	c					c		c		x x								1975	Eur, Asi-Tem, Asi-Tro						
<i>Ulex europaeus</i>	Fabac	le? c c	c							le?							x	x	1954	Eur							
<i>Ulmus pumila</i>	Ulmac	c c c c f										x							x	1998	Asi-Tem						
<i>Urospermum picroides</i>	Aster	x c	c															x	2003	Eur, Afr, Asi-Tem, Asi-Tro							
<i>Urtica membranacea</i>	Urtic	x c						c										x	2020	Eur, Afr, Asi-Tem							
<i>Urtica pilulifera</i>	Urtic	c	c					c c		c	c	x						x	1840	Eur, Afr, Asi-Tem							
<i>Vaccinium ×atlanticum</i>	Erica	c le?						c c	le?							x	x	x	2004								
<i>Vaccinium macrocarpon</i>	Erica	x le							le							x	x	x	2009	NAm							
<i>Valeriana pyrenaica</i>	Capri	x le								le		x				x	x	x	1977	Eur							
<i>Vallisneria spiralis</i>	Hydro	le	le					le	le									x	1968	Eur, Afr, Asi-Tem, Asi-Tro							
<i>Verbascum bombyciferum</i>	Scrop	c c c						c									x	x	1994	Asi-Tem							
<i>Verbascum chaixii</i> subsp. <i>chaixii</i>	Scrop	c								c		x						x	2006	Eur							
<i>Verbascum pulverulentum</i>	Scrop	c c								c							x	x	1977	Eur							
<i>Verbascum sinuatum</i>	Scrop	c c						c								x	x	x	1954	Eur, Afr, Asi-Tem							
<i>Verbascum virgatum</i>	Scrop	c c						c								x	x	x	1975	Eur							
<i>Verbena ×hybrida</i>	Verbe	c c c						c	c								x	x	2002								
<i>Verbena bonariensis</i>	Verbe	c c c c c						c c c								x	x	x	2005	SAm							
<i>Verbena bracteata</i>	Verbe	c c c						c				c				x	x	x	1960	NAm							
<i>Verbena hastata</i>	Verbe	x c						c	c			c				x	x	x	2009	NAm							

## Introduction

		Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc			Amann 2016
esc, sto			Hohla 2006b, Hohla et al. 2009
			Neilreich 1859, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Sauberer et al. 2020
esc			Amann 2016
esc			Jacquin 1762, Neilreich 1859, Amann 2016
esc			Pflugbeil & Pils 2013, JACQ 2022, Bregant unpubl., Pagitz unpubl.
esc			Dolliner 1842, Hohla et al. 2009, Amann 2016, Sauberer et al. 2020
esc			Pils 2008, Pflugbeil & Pils 2013
esc			Dolliner 1842, Hohla et al. 2009, Amann 2016
esc			Melzer 1979, Walter et al. 2002, Hohla et al. 2009, Melzer unpubl.
esc			Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Polatschek & Neuner 2013, Niklfeld & Schrott-Ehrendorfer 2022
esc			Hohla 2005, Hohla et al. 2009, Vitek et al. 2021
esc			Stöhr et al. 2007
esc			Hohla et al. 2009, Hohla unpubl.
esc			Sailer 1844, Fischer et al. 2008, Stöhr 2011, Pflugbeil & Pils 2013, Niklfeld & Schrott-Ehrendorfer 2022, Pagitz et al. 2023
esc			Gilli et al. 2021
esc			Gilli et al. 2021
esc			Schultes 1814, Hamburger 1948, Fischer et al. 2008, Hohla et al. 2009, Gilli & Niklfeld 2018
esc			Hohla et al. 2015
esc			Adler & Mrkvicka 2003a, Adler & Mrkvicka 2006, JACQ 2022
			Bernhardt & Gregor 2019
esc			Adler & Mrkvicka 2003b, Fischer et al. 2008, Amann 2016, Kleesadl 2017, Wittmann & Pflugbeil 2017
esc			Fischer et al. 2008, Amann 2016
esc			Walter et al. 2002, Sauberer & Till 2015, Nadler & Haug 2021, JACQ 2022, Starlinger unpubl.
sto			Adler & Mrkvicka 2006
hyb			JACQ 2022, Pils unpubl.
			Walter et al. 2002, Hohla et al. 2009, Hohla 2022, JACQ 2022, Pagitz et al. 2023
			Essl 2004a, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013
			Pflugbeil & Pils 2013
			Maier et al. 2001, Amann 2016
			Hartl et al. 1992, Fischer et al. 2008, Schrott-Ehrendorfer unpubl.
			Fischer et al. 2008, Pflugbeil & Pils 2013, Gilli & Niklfeld 2018
			Pagitz 2007, Fischer et al. 2008
			Fischer et al. 2008
			Walter et al. 2002
			Walter et al. 2002
esc			Stöhr et al. 2006, Hohla et al. 2009, Pflugbeil & Pils 2013
esc			Hohla 2006b, Stöhr et al. 2012, Pflugbeil & Pils 2013, Sauberer & Till 2015, Gilli & Niklfeld 2018, Zernig et al. 2019, Pagitz et al. 2023
esc			Walter et al. 2002, Hohla et al. 2009, Amann 2016
esc			Hohla 2011b, Pflugbeil & Pils 2013

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Carinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Scenical habitats	First record	Native Range
<i>Verbena rigida</i>	Verbe	x	c	c	c															x	2019	SAm			
<i>Verbesina encelioides</i> subsp. <i>exauriculata</i>	Aster		c		c																x	1971	NAm, SAm		
<i>Verbesina occidentalis</i>	Aster		c			c														x	1931	NAm			
<i>Veronica arguteserrata</i>	Plant	x	c									c								x	2006	Asi-Tem, Asi-Tro			
<i>Veronica ceratocarpa</i>	Plant		c						c										x	1893	Asi-Tem				
<i>Veronica cymbalaria</i>	Plant	x	c						c	c									x	2013	Eur, Afr, Asi-Tem				
<i>Veronica filiformis</i>	Plant	e	e	e	e	e	e	e	e	e	e	e	e	e	x				x	1934	Asi-Tem				
<i>Veronica gentianoides</i>	Plant	c			c														x	2002	Eur, Asi-Tem				
<i>Veronica peregrina</i> var. <i>peregrina</i>	Plant	e	c	e	e	e	e	e	e	e	e	e	e	e					x	1854	NAm, SAm				
<i>Veronica peregrina</i> var. <i>xalapensis</i>	Plant		c	c	c	c	c	c	c	c	c	c	c	c				x	1973	NAm, SAm					
<i>Veronica persica</i>	Plant		e	e	e	e	e	e	e	e	e	e	e	e				x	x	1814	Asi-Tem				
<i>Veronica scheereri</i>	Plant	x	c				c											x	x	2008	Eur				
<i>Viburnum ×bodnantense</i>	Adoxa	c	c						c	c			x		x				x	2004					
<i>Viburnum ×burkwoodii</i>	Adoxa	c	c	c									x							x	2005				
<i>Viburnum</i> × <i>rhytidophylloides</i>	Adoxa	c	c	c	c	c	c	c	c	c	c	c	c	c					x	1999					
<i>Viburnum buddlejifolium</i>	Adoxa		c					c										x	2003	Asi-Tem					
<i>Viburnum farreri</i>	Adoxa	x	c						c									x	2011	Asi-Tem					
<i>Viburnum rhytidophyllum</i>	Adoxa		c	c	c	c	c	c	c	c	c	c	c	x	x			x	1995	Asi-Tem					
<i>Vicia benghalensis</i>	Fabac		c				c			c								x	x	1853	Eur, Afr				
<i>Vicia bithynica</i>	Fabac		c				c											x	x	1948	Eur, Afr, Asi-Tem				
<i>Vicia cordata</i>	Fabac		c	c	c	c	c	c	c	c	c	c	c	c				x	x	1932	Eur, Afr, Asi-Tem				
<i>Vicia dalmatica</i>	Fabac		c	c			c			c			c	x				x	x	2004	Eur, Asi-Tem				
<i>Vicia ervilia</i>	Fabac		c		c	c	c	c	c	c	c	c	c	c				x	x	1866	Eur, Afr, Asi-Tem				
<i>Vicia ervoides</i>	Fabac		c			c												x	x	1960	Eur, Afr, Asi-Tem				
<i>Vicia faba</i>	Fabac	a	c	c	c	c	c	c	c	c	c	c	c	c				x	x		Asi-Tem				
<i>Vicia johannis</i>	Fabac		x	le	le													x	2019	Eur					
<i>Vicia lens</i>	Fabac	c	c		c	c	c	c	c	c	c	c	c	c				x	x						
<i>Vicia lutea</i>	Fabac		e	e?	e	e	c	c	c	c	c	c	c	c	x			x	x	1917	Eur, Afr, Asi-Tem				
<i>Vicia peregrina</i>	Fabac			c	c													x	x	1948	Eur, Afr, Asi-Tem, Asi-Tro				
<i>Vicia sativa</i> s.str.	Fabac	a	e?	e?	e?	e?	e?	e?	c	c	c	c	c	c				x	x		Eur, Afr, Asi-Tem, Asi-Tro				
<i>Vinca major</i>	Apocy		le	c	c	c	e	le	c	c	c	le		x	x	x		x	1948	Eur, Asi-Tem					
<i>Viola ×wittrockiana</i>	Viola		c	c	c	c	c	c	c	c	c	c	c	c				x	x	1922					
<i>Viola palmata</i>	Viola	x	c			c												x	2010	NAm					
<i>Viola sororia</i>	Viola		le		c	c	c	le	c	c	c	c	c	c	x			x	1986	NAm					
<i>Visnaga daucoides</i>	Apiac		c	c	c							c						x	1920	Eur, Afr, Asi-Tem					
<i>Vitis amurensis</i>	Vitac		c						c				x					x	1993	Asi-Tem					
<i>Vitis labrusca</i>	Vitac		c	c	c	c	c	c	c	c	c	c	x					x	1973	NAm					
<i>Vitis riparia</i>	Vitac		le	le	le?	c		c	c	c	c	c	x				x	x	1973	NAm					

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Lefnaer 2020, 2021
esc		Walter et al. 2002
esc		Walter et al. 2002 Zidorn 2008 Pilsl et al. 2008 Pflugbeil & Pilsl 2013, Pagitz unpubl. Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016
esc	Hohla	Hohla et al. 2009
sto		Haussmann 1854, Melzer & Barta 2001, Fischer et al. 2008, Pflugbeil & Pilsl 2013, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022, Pagitz et al. 2023
sto		Gutermann & Niklfeld 1973, Walter et al. 2002, Melzer & Barta 2008, Pflugbeil & Pilsl 2013, Hohla et al. 2015 Schultes 1814, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016
esc		Hohla et al. 2009
esc		Pflugbeil & Pilsl 2013, Pagitz et al. 2023
esc		Melzer & Barta 2008
esc		Melzer & Barta 2000, Hohla 2021, Pagitz et al. 2023
esc		Hohla et al. 2005a, 2009
esc		Pflugbeil & Pilsl 2013
esc		Melzer & Barta 1996, Fischer et al. 2008, Hohla et al. 2009, Stöhr 2011, Stöhr et al. 2012, Pflugbeil & Pilsl 2013, Amann 2016, Leonhartsberger 2018
esc		Niklfeld 2016, Pagitz et al. 2023
esc		Melzer 1954, Walter et al. 2002
esc		Walter et al. 2002, Fischer et al. 2008
esc		Melzer & Barta 2005, Karrer unpubl.
esc		Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009
esc		Walter et al. 2002
esc		Walter et al. 2002, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022
esc		Pachschwöll et al. 2025
esc		Kramer 1756, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013
esc		Melzer 1954, Polatschek 2000, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Amann 2016, Niklfeld & Schrott-Ehrendorfer 2022, Höbel unpubl.
esc		Janchen 1956–1960, Walter et al. 2002
esc		Neilreich 1846, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013
esc		Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, ZoBoDat 2022, Pagitz et al. 2023, Pagitz et al. unpubl.
esc		Essl 2008, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Polatschek & Neuner 2013
esc		Vitek et al. 2012
esc		Melzer 1988a, Fischer et al. 2008, Pflugbeil & Pilsl 2013, Hohla et al. 2015, Zernig et al. 2017, Vitek et al. 2021, Forum Flora Austria 2022, JACQ 2022, Stöhr unpubl.
esc		Murr 1923, Fischer et al. 2008, Gilli & Niklfeld 2018, Sauberer et al. 2020
esc		Wittmann & Pilsl 1997, Pflugbeil & Pilsl 2013
esc, sto		Fischer et al. 2008, Pflugbeil & Pilsl 2013, Niklfeld & Schrott-Ehrendorfer 2022
esc		Adler & Mrkvicka 2003a, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pilsl 2013, Pagitz et al. 2023

Taxon	Family	Questions	New taxon	Status in Austria	Burgenland	Lower Austria	Vienna	Styria	Upper Austria	Cärinthia	Salzburg	East Tyrol	North Tyrol	Vorarlberg	Forests	Shrublands	Tall forb stands	Grasslands	Aquatic habitats	Wetlands	Rock & scree	Ruderal habitats	Segetal habitats	First record	Native Range	
<i>Vitis vinifera</i> subsp. <i>vinifera</i>	Vitac	a, c	e c	c e	c c	c c	c c	c c	c c	c c	x	x	x	x												
<i>Weigela florida</i>	Capri		c	?	?	c	c	c	c	c	x				x							x	1960	Asi-Tem		
<i>Wisteria sinensis</i>	Fabac	x	c			c		c		c									x	x	2003	Asi-Tem				
<i>Wolfia columbian</i>	Arace	x	le			le									x									2017	NAm, SAm	
<i>Xanthium chinense</i>	Aster		c				c												x	x	1963	NAm				
<i>Xanthium orientale</i> × <i>X. strumarium</i>	Aster		c	c															x	x	1973					
<i>Xanthium orientale</i> s. lat.	Aster	x	e	e?	e	c	c	c	c									x	x	1896	NAm, SAm					
<i>Xanthium spinosum</i>	Aster		e?	e?	c	c	c	c	c	c					x	x	x	x	1825	SAm						
<i>Xerochrysum bracteatum</i>	Aster		c	c	c										x	x	x	x	1966	Aus						
<i>Yucca filamentosa</i>	Aspar	t	c	c	c	c	c	c	c	c	x				x	x	x	x	1969	NAm						
<i>Yucca flaccida</i>	Aspar	x	c	c		c					x				x	x	x	x	1971	NAm						
<i>Yucca gloriosa</i>	Aspar	x	c				c				x				x	x	x	x	2022	NAm						
<i>Zea mays</i>	Poace		c	c	c	c	c	c	c	c					x	x	x	x	1868	NAm, SAm						
<i>Zelkova serrata</i>	Ulmac	c		c											x	x	x	x	1971	Asi-Tem						
<i>Zinnia elegans</i>	Aster	c		c		c		c							x	x	x	x	2002	NAm						

## Introduction

	Environmental Agriculture Silviculture Water management Human health Animal health	Source
esc		Hartl et al. 1992, Fischer et al. 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Amann 2016, Pagitz et al. 2023
esc		Janchen 1956–1960, Traxler 1989a, b, Walter et al. 2002, Fischer et al. 2008, Pflugbeil & Pils 2013, Schrammel et al. 2019, Forum Flora Austria 2022, Stöhr unpubl.
esc		Essl 2008, Pflugbeil & Pils 2013, Hohla 2021 Gilli et al. 2021
sto		Melzer 1964
sto		Melzer 1979, Walter et al. 2002
		Fritsch 1896, Melzer 1954, Baschant 1955, Walter et al. 2002, Adler & Mrkvicka 2003b, Melzer & Barta 2008, Hohla et al. 2009, Sauberer & Till 2015, Vitek et al. 2021
sto		Forstner & Hübl 1971, Fischer et al. 2008, Hohla et al. 2009 Fischer et al. 2008
esc		Walter et al. 2002, Adler & Mrkvicka 2006, Hohla et al. 2009, Pflugbeil & Pils 2013, Leonhartsberger 2018, Niklfeld & Schrott-Ehrendorfer 2022, Pagitz et al. 2023
esc		Forstner & Hübl 1971, Gilli et al. 2021 Pachschwöll et al. 2025
esc		Hamburger 1948, Walter et al. 2002, Stöhr 2008, Hohla et al. 2009, Pflugbeil & Pils 2013, Niklfeld & Schrott-Ehrendorfer 2022
esc		Forstner & Hübl 1971, Walter et al. 2002
esc		Hohla et al. 2009, Pflugbeil & Pils 2013, Gilli et al. 2021

**Appendix 2.** Overview of the taxa excluded from the second edition of the checklist of neophytes in Austria (n = 152). Given are taxa that were included in the first edition but excluded in the second edition (n = 46), and taxa that were discussed, but finally not included in the second edition (n = 71). Taxa are arranged alphabetically. Families are based on the APG IV system (The Angiosperm Phylogeny Group 2016), taxon NAmes follow Fischer et al. (2008), with updates (see Material and Methods). The reason for exclusion is summarized in the column “Status” (a = taxon is planted in the wild, ? = questionable records, x = erroneous records, ● = taxon is native, ●\* = taxon status as native not fully resolved (treated as native here), †\* = taxon was probably native and is extinct in Austria) and expanded upon in “Details”.

Taxon	Family	Status Details
<i>Acanthus mollis</i>	Acanthaceae	? Records from Salzburg (Pflugbeil & Pils 2013) and Lower Austria (Essl 2008) most likely refer to escaped horticultural hybrids (Gilli et al. 2021).
<i>Acanthus spinosus</i>	Acanthaceae	? Records from Salzburg (Pflugbeil & Pils 2013, Eichberger et al. 2015) and Upper Austria (Hohla 2023) most likely refer to escaped horticultural hybrids (Gilli et al. 2021).
<i>Acer saccharum</i>	Sapindaceae	x Taxon reported in error.
<i>Acer tataricum</i> s.str.	Sapindaceae	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Achillea grandifolia</i>	Apiaceae	x The single record from Styria (Melzer 1954) based on Hamburger (1948 as <i>Chrysanthemum macrophyllum</i> ) most likely refers to <i>Tanacetum macrophyllum</i> (see Table S1).
<i>Allium atropurpureum</i>	Amaryllidaceae	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Alyssum turkestanicum</i>	Brassicaceae	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Amaranthus quitensis</i>	Amaranthaceae	? Taxon was likely reported in error (Fischer et al. 2008).
<i>Amaranthus quitensis</i> × <i>tuberculatus</i>	Amaranthaceae	? Taxon was likely reported in error (Walter et al. 2002).
<i>Anemone hupehensis</i>	Ranunculaceae	? Records from Northern Tyrol (Polatschek & Neuner 2013) may refer to <i>A. ×hybrida</i> (Pagitz et al. 2023), a horticultural hybrid involving this taxon. Given the uncertainties differentiating between the two taxa, the identification of <i>A. hupehensis</i> needs further confirmation. ●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Anthyllis vulneraria</i> subsp. <i>pseudovulneraria</i>	Fabaceae	†* Taxon was probably native (Schratt-Ehrendorfer et al. 2022).
<i>Apium graveolens</i>	Apiaceae	x Taxon was reported in error, records refer to <i>A. elata</i> (Berg et al. 2009).
<i>Aralia spinosa</i>	Araliaceae	
<i>Armeria arenaria</i>	Plumbaginaceae	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Asparagus officinalis</i>	Asparagaceae	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Asyneuma canescens</i>	Campanulaceae	x Taxon was reported in error (Walter et al. 2002).
<i>Aubrieta columnae</i>	Brassicaceae	? Records from Burgenland (Walter et al. 2002) and Northern Tyrol (Pagitz et al. 2023) most likely refer to <i>A. ×cultorum</i> .
<i>Aubrieta deltoidea</i>	Brassicaceae	? Records from various federal states (Walter et al. 2002, Fischer et al. 2008, Pagitz et al. 2023) most likely refer to <i>A. ×cultorum</i> (see Table S1).
<i>Avena brevis</i>	Poaceae	? Taxon was likely reported in error (Walter et al. 2002, Hohla et al. 2009).
<i>Avena nuda</i> s.str.	Poaceae	? Taxon was likely reported in error (Walter et al. 2002, Englmaier & Wilhalm 2018).
<i>Berberis angulosa</i>	Berberidaceae	? The single record from Salzburg was based on tentative identification (Pils 2008, Pflugbeil & Pils 2013).
<i>Brimeura amethystina</i>	Asparagaceae	x Taxon was reported in error (Walter et al. 2002).
<i>Bromus grossus</i>	Poaceae	? Records most likely refer to <i>B. secalinus</i>
<i>Bromus rigidus</i>	Poaceae	x Taxon was reported in error (Wilhalm & Pagitz 2001).
<i>Calceolaria pinnata</i>	Calceolariaceae	x Taxon was reported in error. Records from Styria and Northern Tyrol (Walter et al. 2002) refer to <i>C. tripartita</i> (syn. <i>C. chelidoniooides</i> ) as stated already by Forstner (1973).

Taxon	Family	Status Details
<i>Callitrichia hermaphroditica</i> s.str.	<i>Plantaginaceae</i>	x Taxon was reported in error (Walter et al. 2002, Hohla et al. 2009, Amann 2016).
<i>Camelina alyssum</i>	<i>Brassicaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Carduus nutans</i> subsp. <i>leiophyllus</i>	<i>Asteraceae</i>	? Taxon was likely reported in error (Walter et al. 2002).
<i>Carduus pycnocephalus</i>	<i>Asteraceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Carpesium cernuum</i>	<i>Asteraceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Centaurea australis</i> × <i>C. diffusa</i>	<i>Asteraceae</i>	?
		The record of “ <i>C. diffusa</i> × <i>C. micrantha</i> ” from Vienna (Rechinger 1950) needs verification. The different ploidy level of the putative parents ( <i>C. australis</i> : 2n = 36, <i>C. diffusa</i> : 2n = 18) should largely prevent successful hybridization.
<i>Cephalaria transsylvanica</i>	<i>Caprifoliaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Cerastium biebersteinii</i>	<i>Caryophyllaceae</i>	x Taxon likely reported in error (e.g. Pilsl et al. 2008, Pflugbeil & Pilsl 2013, Hohla 2021, 2022) for <i>C. tomentosum</i> .
<i>Chenopodium borbasii</i>	<i>Chenopodiaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Clarkia pulchella</i>	<i>Onagraceae</i>	x The source given in Walter et al. (2002) for Carinthia was “BIODAT 2002”; as there is no record within this database, the taxon was likely reported in error.
<i>Collinsia heterophylla</i>	<i>Plantaginaceae</i>	?
		According to Janchen (1956–1960, 1977) occasionally used as an ornamental, but evidence on escaped occurrences is missing.
<i>Commelina tuberosa</i>	<i>Commelinaceae</i>	x Records from Upper Austria (Baschant 1955) and Salzburg (Fischer et al. 2008 but see Pflugbeil & Pilsl 2013) most likely refer to <i>C. communis</i> .
<i>Conringia orientalis</i>	<i>Brassicaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Cornus sanguinea</i> subsp. <i>australis</i> × subsp. <i>sanguinea</i>	<i>Cornaceae</i>	●* This hybrid with a more south(east)ern distribution is intrograding into the native and common subsp. <i>sanguinea</i> (= <i>Cornus sanguinea</i> nothosubsp. <i>hungarica</i> ). Further investigation is needed.
<i>Cotoneaster hjelmqvistii</i>	<i>Rosaceae</i>	?
		<i>C. hjelmqvistii</i> has been described by Flinck & Hylmö (1991) as a distinct species closely related to <i>C. horizontalis</i> . Some occurrences on citizen science platforms (e.g., <a href="https://observation.org/species/128326">https://observation.org/species/128326</a> ) have recently been identified as this species. Further work is needed to identify possible earlier records of <i>C. hjelmqvistii</i> .
<i>Crocus ligusticus</i>	<i>Iridaceae</i>	x Taxon was reported in error (Walter et al. 2002, Fischer et al. 2008).
<i>Crocus neapolitanus</i>	<i>Iridaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Cuscuta scandens</i> subsp. <i>cesatiana</i>	<i>Convolvulaceae</i>	?
		Records from eastern Austria (Neumayer 1930, Janchen 1956–1960, 1977) most likely refer to <i>C. campestris</i> (Forstner & Hübl 1971) or <i>C. gronovii</i> (Melzer 1991, Lippert & Meierott 2018).
<i>Cuscuta suaveolens</i>	<i>Convolvulaceae</i>	?
		Records from Lower Austria (Janchen 1977), Upper Austria (Hohla et al. 2009) and Northern Tyrol (Polatschek 1999) most likely refer to <i>C. campestris</i> .
<i>Cyperus longus</i>	<i>Cyperaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Dahlia pinnata</i>	<i>Asteraceae</i>	?
		Records from Burgenland and Vienna (Walter et al. 2002) most likely refer to <i>D. ×hortensis</i> .
<i>Datura metel</i>	<i>Solanaceae</i>	x Taxon was reported in error; records refer to either <i>D. innoxia</i> or <i>D. wrightii</i> (Walter et al. 2002).
<i>Delphinium consolida</i> subsp. <i>paniculatum</i>	<i>Ranunculaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Deutzia scabra</i>	<i>Hydrangeaceae</i>	?
		Previous records (Walter et al. 2002, Fischer et al. 2008, Griebl 2020) most likely refer to <i>D. crenata</i> (syn. <i>D. scabra</i> hort.) (Hohla 2022).
<i>Dianthus caryophyllus</i>	<i>Caryophyllaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Dianthus chinensis</i>	<i>Caryophyllaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Diptaxis muralis</i>	<i>Brassicaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Draba nemorosa</i>	<i>Brassicaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).

Taxon	Family	Status Details
<i>Dracocephalum parviflorum</i>	<i>Lamiaceae</i>	x Taxon was reported in error (Pagitz et al. 2023).
<i>Echinochloa oryzoides</i>	<i>Poaceae</i>	? Taxon was likely reported in error (Pflugbeil & Pils 2013, Englmaier & Wilhalm 2018).
<i>Echinodorus cordifolius</i>	<i>Alismataceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Walter et al. 2002).
<i>Echium italicum</i>	<i>Boraginaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Eragrostis amurensis</i>	<i>Poaceae</i>	x The record from Upper Austria (Hohla 2013) refers to a glandular morphotype of <i>E. albensis</i> (Wróbel et al. 2021: <i>E. albensis</i> var. <i>scholziana</i> ).
<i>Erica spiculifolia</i>	<i>Ericaceae</i>	? Taxon was likely reported in error, the source of the record from Salzburg (Fischer et al. 2008) is unknown.
<i>Erysimum perofskianum</i>	<i>Brassicaceae</i>	x According to Polatschek (2013) the records from Northern Tyrol and Vorarlberg refer to <i>E. melicentiae</i> .
<i>Euphorbia engelmannii</i>	<i>Euphorbiaceae</i>	x According to Walter et al. (2002) it is unclear if the single record from Vienna (Hügin 1999) was based on cultivated or escaped plants.
<i>Euphorbia indica</i>	<i>Euphorbiaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Euphorbia rigida</i>	<i>Euphorbiaceae</i>	x Given for Lower Austria in Adler et al. (1994), however concrete evidence is missing. There was very likely a confusion with <i>E. myrsinites</i> .
<i>Eurybia sibirica</i>	<i>Asteraceae</i>	x Taxon reported in error from Salzburg (Pflugbeil & Pils 2013). In Janchen (1956–1960 as <i>Aster sibiricus</i> ) also listed for North Tyrol as cultivated and occasionally naturalized but likely reported in error as well.
<i>Fimbristylis annua</i>	<i>Cyperaceae</i>	x For Austria there is only one documented record from St. Gilgen am Wolfgangsee (Salzburg) (Hinterhuber 1855, Pflugbeil & Pils 2013). Since, as is well known, J. Hinterhuber's specimens are often incorrectly labeled, the record must be regarded as highly questionable.
<i>Fragaria virginiana</i>	<i>Rosaceae</i>	? It is questionable whether the record of <i>F. virginiana</i> in Rauscher (1871) refers to this rarely cultivated progenitor of <i>F. ×ananassa</i> (Ruttner 1955, Walter et al. 2002, Hohla et al. 2009), no specimen could be traced (pers. comm. G. Kleesadl).
<i>Galinsoga parviflora</i> × <i>quadriradiata</i>	<i>Asteraceae</i>	x A detailed check revealed that the single record for this hybrid is doubtful and thus it was moved to Table S2.
<i>Galium rubrum</i> s.str.	<i>Rubiaceae</i>	? The old record from Berg Isel-Hohlweg near Innsbruck in Dalla Torre von Thunberg-Sternhof & Sarnthein (1912) was likely based on confusion with <i>Galium ×centroniae</i> (pers. comm. H. Niklfeld).
<i>Geranium divaricatum</i>	<i>Geraniaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Gladiolus communis</i>	<i>Iridaceae</i>	x Records of “ <i>Gladiolus communis</i> ” refer to escaped horticultural hybrids summarized under the NAmE <i>G. × hortulanus</i> .
<i>Glaucium corniculatum</i>	<i>Papaveraceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Gypsophila acutifolia</i>	<i>Caryophyllaceae</i>	? Taxon was likely reported in error for <i>G. scorzonerifolia</i> (Walter et al. 2002). This probably also applies to the record from Upper Austria in Stöhr et al. (2006).
<i>Gypsophila pilosa</i>	<i>Caryophyllaceae</i>	x Janchen (1956–60) refers Neilreich's record of “ <i>Gypsophila perfoliata</i> ” to <i>G. scorzonerifolia</i> (“Syn.: <i>G. perfoliata</i> Beck, non L. - (NÖ), Vöslau, vor 1857!, längst verschwunden.” and furthermore notes the species has already disappeared. Beck (1890) brings another record “in Sandgruben bei der St. Marxer Linie vor Wien 1889.”, later on also referred to <i>G. scorzonerifolia</i> by Forstner & Hübl (1971). Given the nomenclatural confusion in the available records, we have decided to exclude <i>G. pilosa</i> from the checklist pending critical review (e.g., of herbarium records).
<i>Halesia diptera</i>	<i>Styracaceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Pagitz et al. 2023).

Taxon	Family	Status Details
<i>Heliotropium europaeum</i>	<i>Boraginaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Helleborus orientalis</i>	<i>Ranunculaceae</i>	? This species is rarely found in cultivation. All records probably refer to the horticultural hybrid <i>H. ×hybridus</i> .
<i>Herniaria incana</i>	<i>Caryophyllaceae</i>	†* Taxon was probably archaeophytic near Breitensee in south-eastern Marchfeld (Lower Austria) but has long since become extinct there (Neilreich 1859, Janchen 1977). Recent records from Vienna (Melzer & Barta 2003) and Lower Austria (Gilli & Niklfeld 2018) are based on ephemeral reintroductions.
<i>Honorius nutans</i> s.str.	<i>Asparagaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Hosta ventricosa</i>	<i>Asparagaceae</i>	? The single record from Salzburg (Stöhr et al. 2009) was based on tentative identification (Pflugbeil & Pils 2013).
<i>Hylotelephium telephium</i> s.str.	<i>Crassulaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Hypericum pulchrum</i>	<i>Hypericaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Isatis praecox</i>	<i>Brassicaceae</i>	? Old records from Styria (Schlossberg in Graz) (Hayek 1909, Melzer 1954, Maurer 1996) need verification.
<i>Lemna aquinoctialis</i>	<i>Araceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Walter et al. 2002).
<i>Lepidium latifolium</i>	<i>Brassicaceae</i>	†* Taxon was probably archaeophytic on salt-influenced ruderal places in Pulkautal, northern Weinviertel (Lower Austria) (Janchen 1977, Schratt-Ehrendorfer et al. 2022). Recent records from various federal states (Melzer & Barta 1994, Adler & Mrkvicka 2003a, Hohla 2013, Gilli & Niklfeld 2018) are based on escapes from cultivation.
<i>Ligularia sibirica</i>	<i>Asteraceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Linaria incarnata</i>	<i>Plantaginaceae</i>	? Taxon was likely reported in error for <i>L. bipartita</i> s. lat. (see Jäger et al. 2008).
<i>Linaria maroccana</i>	<i>Plantaginaceae</i>	? Taxon was likely reported in error for <i>L. bipartita</i> s. lat. (see Jäger et al. 2008).
<i>Linaria simplex</i>	<i>Plantaginaceae</i>	x Taxon was reported in error for <i>L. caesia</i> (Hohla et al. 1998, 2009).
<i>Lupinus perennis</i>	<i>Fabaceae</i>	x Taxon was likely reported in error (Walter et al. 2002).
<i>Magnolia ×soulangeana</i>	<i>Magnoliaceae</i>	x The erroneous reporting actually refers to <i>Magnolia kobus</i> (Pils pers. comm.).
<i>Malva moschata</i>	<i>Malvaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Matthiola longipetala</i> subsp. <i>longipetala</i>	<i>Brassicaceae</i>	x The indication of the type subspecies for Vienna in Walter et al. (2002) is based on an error and refers to <i>M. longipetala</i> subsp. <i>bicornis</i> .
<i>Mazus pumilio</i>	<i>Mazaceae</i>	x Taxon was reported in error for <i>M. miquelianus</i> (Gilli et al. 2022).
<i>Micropyrum tenellum</i>	<i>Poaceae</i>	x Taxon was reported in error for native <i>Festuca myuros</i> (syn. <i>Vulpia myuros</i> ) (Hohla et al. 2009).
<i>Murbeckiella pinnatifida</i>	<i>Brassicaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Muscari botryoides</i>	<i>Asparagaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Nasturtium ×sterile</i>	<i>Tropaeolaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Nepeta cataria</i>	<i>Lamiaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Oenothera gaura</i>	<i>Onagraceae</i>	? The single record from Graz (Styria) in Hamburger (1948 sub <i>Gaura biennis</i> ) could not be unambiguously identified and the taxon has not been found since. Thus, its status remains unclear.
<i>Oenothera stricta</i>	<i>Onagraceae</i>	x Given for Styria in Walter et al. (2002), however concrete evidence is missing. Not mentioned for Austria in Hassler et al. (2020).
<i>Ononis natrix</i>	<i>Fabaceae</i>	x Given for Carinthia in Fischer et al. (2008), however concrete evidence is missing.

Taxon	Family	Status Details
<i>Orchis simia</i>	<i>Orchidaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Ornithogalum divergens</i>	<i>Asparagaceae</i>	●* Contrary to Speta (2000) and (Fischer et al. 2008) this taxon is probably native; however its status is not fully resolved and doubts remain as to its taxonomy.
<i>Orobanche crenata</i>	<i>Orobanchaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Oxalis deppei</i>	<i>Oxalidaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Oxalis valdiviensis</i>	<i>Oxalidaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Persicaria lapathifolia</i> subsp. <i>leptooclada</i>	<i>Polygonaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Persicaria virginiana</i>	<i>Polygonaceae</i>	x Taxon was reported in error (G. Pflugbeil unpubl.).
<i>Picris hieracioides</i> subsp. <i>spinulosa</i>	<i>Asteraceae</i>	● According to Slovák et al. (2012) this taxon should be included into the variable <i>Picris hieracioides</i> subsp. <i>hieracioides</i> , native in Austria.
<i>Plantago afra</i>	<i>Plantaginaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Polygonum arenarium</i>	<i>Polygonaceae</i>	? Taxon was likely reported in error (Walter et al. 2002, Fischer et al. 2008).
<i>Polygonum graminifolium</i>	<i>Polygonaceae</i>	? Taxon was likely reported in error (Fischer et al. 2008).
<i>Pontechium maculatum</i>	<i>Boraginaceae</i>	●* Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Portulaca oleracea</i>	<i>Portulacaceae</i>	● The taxonomic value of several morphotypes (distinguished based on testa structure), sometimes classified at subspecies rank (subsp. <i>granulatostellulata</i> , subsp. <i>nitida</i> , subsp. <i>oleracea</i> , subsp. <i>papillato-stellulata</i> , subsp. <i>stellata</i> ) is questionable (Walter 2006). The collective species is native (Schratt-Ehrendorfer et al. 2022).
<i>Pulmonaria saccharata</i>	<i>Boraginaceae</i>	x The single record from Upper Austria (Vollrath 2004) is somewhat obscure and likely refers to white-spotted plants of <i>Pulmonaria officinalis</i> .
<i>Pyrus ×nivalis</i>	<i>Rosaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022), doubts remain as to its taxonomy or representation of an old line of cultivated <i>Pyrus</i> sp.
<i>Pyrus salviifolia</i>	<i>Rosaceae</i>	? Taxon status and identification are unclear; it is possibly only a variant of <i>P. ×nivalis</i> . Given its questionable taxonomic status and comparatively few records, its status as an alien species remains unclear.
<i>Rhaponticoides ruthenica</i>	<i>Asteraceae</i>	? The single record from Northern Tyrol (Janchen 1956-60) is questionable.
<i>Rodgersia podophylla</i>	<i>Saxifragaceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Hohla 2011c).
<i>Rubia peregrina</i>	<i>Rubiaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Rubus sprengelii</i>	<i>Rosaceae</i>	? Taxon was likely reported in error (Amann 2016).
<i>Sagittaria subulata</i>	<i>Alismataceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Walter et al. 2002).
<i>Salix ×calodendron</i>	<i>Salicaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Salix ×stipularis</i>	<i>Salicaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Salix atrocinerea</i>	<i>Salicaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Salix eriocephala</i>	<i>Salicaceae</i>	x Taxon was reported in error (Walter et al. 2002 as <i>S. rigida</i> ).
<i>Salvia aethiopis</i>	<i>Lamiaceae</i>	● Taxon is native (Schratt-Ehrendorfer et al. 2022).
<i>Sanguisorba minor</i> subsp. <i>verrucosa</i>	<i>Rosaceae</i>	x Taxon was reported in error (Walter et al. 2002).
<i>Sanvitalia procumbens</i>	<i>Asteraceae</i>	? Taxon was likely reported in error for <i>Melampodium montanum</i> (Hohla 2012b, 2022, Pflugbeil & Pilsl 2013).
<i>Sarracenia ×readei</i>	<i>Sarraceniaceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Stöhr et al. 2007).
<i>Sarracenia alata</i>	<i>Sarraceniaceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Stöhr et al. 2007).

Taxon	Family	Status Details
<i>Sarracenia flava</i>	<i>Sarraceniaceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Adlassnig et al. 2010, Stöhr unpubl.).
<i>Sarracenia purpurea</i>	<i>Sarraceniaceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Adlassnig et al. 2010).
<i>Saururus cernuus</i>	<i>Saururaceae</i>	a No evidence of spread or reproduction in Austria is known, occurrences can be traced back to plantings in the wild (Walter et al. 2002).
<i>Saxifraga hirsuta</i>	<i>Saxifragaceae</i>	?
		Records most likely refer to escaped horticultural hybrids: <i>S. ×geum</i> or <i>S. ×urbium</i> (Walter et al. 2002, Essl 2004b, Hohla et al. 2009, Pflugbeil & Pils 2013).
<i>Saxifraga umbrosa</i> s.str.	<i>Saxifragaceae</i>	x
		Records most likely refer to escaped horticultural hybrids: <i>S. ×geum</i> or <i>S. ×urbium</i> (Walter et al. 2002, Essl 2004b, Hohla et al. 2009, Pflugbeil & Pils 2013).
<i>Scirpus pendulus</i>	<i>Cyperaceae</i>	?
		The single record from Northern Tyrol (Niklfeld 2015) needs to be verified, it is likely as result of planting in the wild (Pagitz et al. 2023).
<i>Sedum lineare</i>	<i>Crassulaceae</i>	x
<i>Sedum thartii</i>	<i>Crassulaceae</i>	●*
		Taxon was reported in error (Walter et al. 2002).
<i>Sedum urvillei</i>	<i>Crassulaceae</i>	?
<i>Setaria verticilliformis</i>	<i>Poaceae</i>	●
		Taxon was likely reported in error (Gilli et al. 2022).
<i>Silene gallica</i>	<i>Caryophyllaceae</i>	●*
		Taxon is probably native, but status not fully resolved (Schratt-Ehrendorfer et al. 2022).
<i>Silene italicica</i> s.str.	<i>Caryophyllaceae</i>	?
<i>Sixalix atropurpurea</i>	<i>Caprifoliaceae</i>	?
		Taxon was likely reported in error (Walter et al. 2002).
<i>Solanum sarachoides</i> s.str.	<i>Solanaceae</i>	x
<i>Symphyotrichum parviflorum</i>	<i>Asteraceae</i>	?
<i>Tamarix chinensis</i>	<i>Tamaricaceae</i>	?
		Taxon was recently reported for Austria ( <a href="https://forum.flora-austria.at/viewtopic.php?f=4&amp;t=4208">https://forum.flora-austria.at/viewtopic.php?f=4&amp;t=4208</a> ). However, the identity of the taxon remains questionable, and thus, this was not included here.
<i>Tamarix gallica</i> s.str.	<i>Tamaricaceae</i>	x
		Taxon was reported in error (Walter et al. 2002, Sauberer et al. 2020), in a more recent report ( <a href="https://forum.flora-austria.at/viewtopic.php?f=4&amp;t=4208">https://forum.flora-austria.at/viewtopic.php?f=4&amp;t=4208</a> ) the identity of the taxon remains questionable.
<i>Trifolium hybridum</i> subsp. <i>hybridum</i>	<i>Fabaceae</i>	●*
<i>Trifolium pannonicum</i>	<i>Fabaceae</i>	x
<i>Turgenia latifolia</i>	<i>Apiaceae</i>	†*
<i>Typha domingensis</i>	<i>Typhaceae</i>	?
		The occurrence, distribution, and floristic status of this halophilic, more southern species, are unclear in Austria (Burgenland) (Gilli et al. 2022).
<i>Valeriana phu</i>	<i>Caprifoliaceae</i>	?
		The single record from Upper Austria (Sailer 1844, Hohla et al. 2009) is questionable.
<i>Zygophyllum fabago</i>	<i>Zygophyllaceae</i>	?
		Given the age of the record (Neilreich 1859) and associated uncertainties this taxon's occurrence in Austria remains unclear.