

Systematic Outline of *Thesium ebracteatum*

Systematický nástin *Thesium ebracteatum*

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Abstract — The paper deals with the main problems of the species *T. ebracteatum* HAYNE, in particular its variability, relations to the most closely related species (series *Repentia*), the assumed phylogenesis, area and its genesis, as well as its distribution on the territory of Czechoslovakia. The second part of the paper submits synonyms, diagnosis, description, affinities to related and differences from sympatric species.

The name *T. ebracteatum*, coined by HAYNE (1800 : 33) was not the first under which this species is mentioned in literature. The first name which *T. ebracteatum* included was the name *T. alpinum* used by GILBERT (1785). This is evident from the fact that on the territory of Lithuania to which the flora-work in which it was published referred, no other species than *T. ebracteatum* occurs. Later on GILBERT (1792 : 428) used the name *T. monophyllum* for *T. ebracteatum*. In my opinion this name should be regarded as unjustified, because of the dubiousness and evident confusion of the diagnosis attached to it. As far as plants from the vicinity of Grodno are concerned GILBERT actually also includes *T. ebracteatum* under *T. monophyllum*, but joins it into one species with plants growing in the vicinity of Lyon. But the plants from the neighbourhood of Lyon evidently belonged to the species *T. linophyllum*. Similar reasons must lead us to refute also the second name, *T. linariae-folio*, which GILBERT (1792 : 429) published simultaneously with the previous name. Due to the erroneous identification of the real *T. ebracteatum* with the species *T. pyrenaicum*, the name *T. pratense* (VAHL 1799 : 21) was used for this species. The name *T. ebracteatum*, on the other hand, was used erroneously for the plants *T. rostratum* DUVAL (1803 : 360) before *T. rostratum* was described.

The question of the validity of the name *T. comosum* ROTH (1800 : 29), published almost simultaneously with the name used by HAYNE is of a different nature. Despite all efforts, however, I have been unable to ascertain which of the two studies, that of HAYNE or of ROTH, appeared earlier in the year 1800. It seems to be impossible to ascertain this and therefore there is no reason for changing the name *T. ebracteatum*, which has been deep-rooted practically from the moment of its first publication.

As far as I have been able to observe on plentiful material from practically all parts of the area, *T. ebracteatum* seems to me the least variable species. A certain variability met with in our country refers rather to proportional variability (habit, length of leaves, bracts and small flower-bearing branches)

and is quite individual. This is certainly no variability of taxonomic significance.

At one time a variety (?) was described called *T. ebracteatum subbracteatum* VAHL ap. LANGE (1851 : 161), published previously as nomen nudum (VAHL ap. FRIES 1846 : 52). It is characterized by the presence of one or both bracteoles developed in some of the flowers. ČELAKOVSKÝ (1871 : 169) and MÜHLICH (1879 : 15) mention such plants. This evidently refers to very rare cases, for although I have seen a great number of plants in nature, but especially in herbaria, I have not been able to ascertain a similar case. I am of the opinion that we are concerned here with an abnormality of atavistic character, of interest and value in accounting for and explaining the secondary nature of the absence of bracteoles in *T. ebracteatum*. From the taxonomic viewpoint, however, no value at all can be ascribed to such plants, which naturally also holds good for their synonyms: *T. ebracteatum* (subsp.) b. *subbracteatum* RICHTER (1897 : 84), *T. ebracteatum* (var.) c. *tribracteatum* MADAUS ap. ASCHERSON (1864 : 597) and *T. ebracteatum* (subsp.) c. *tribracteatum* RICHTER (1897 : 84).

Later the form *T. ebracteatum* f. *flavipes* LETTAU ap. ABROMEIT (1910 : 44) was described, which is supposed to be marked by yellow colouring and greater fleshiness of the flower stalk. But these characters are on the whole usual in *T. ebracteatum* and can therefore not be considered to represent a special anomaly, as was found also by ASCHERSON and GRAEBNER (1911 : 663). Yellow or yellowish colouring of the flower stalks is, as I have been able to observe in many plants from Czech localities, irregular and changes even in one and the same specimen. I believe that we are not dealing even in this case with a variability of taxonomic character.

I therefore regard *T. ebracteatum* as a monotypic species, which is almost unexpected considering its extensive area.

T. ebracteatum belongs to the series *Repentia* (BOBROV 1936 : 419) where it holds a marginal position both in respect of morphology as well as geography. All these characters indicate that we are dealing with a species within the framework of derivative series, perhaps further derived and therefore probably the youngest phylogenetically. In the morphological characters this was expressed in the absence of bracteoles, which is a rather isolated character within the framework of the entire genus *Thesium*. Among the geographical indices it is the extent of the area on the whole not marked by disjunction that would indicate a greater phylogenetic age which points to the grade of deviation. At the same time it is interesting to note that the area itself is not in agreement with the hypothetical territory of genesis of the entire series. Perhaps throughout the area it avoids rather mountain regions and is found most frequently, almost exclusively, in the lowlands and hilly countryside. On the other hand the monotypic character of the entire species should indicate great stability and therefore also high age, which is not true in the case of *T. ebracteatum*, as compared with the usually valid features. Ecologically *T. ebracteatum* seems to possess an inclination to mesophytic conditions even though, especially in the eastern part of the area, it is often found in regions of steppe character. This inclination also point to the more or less greater deviation of this species.

The series *Repentia* (HENDRYCH 1968a : 39) appears as a group of undoubtedly tertiary age, bound by its genesis to the Altai-Himalaya mountain

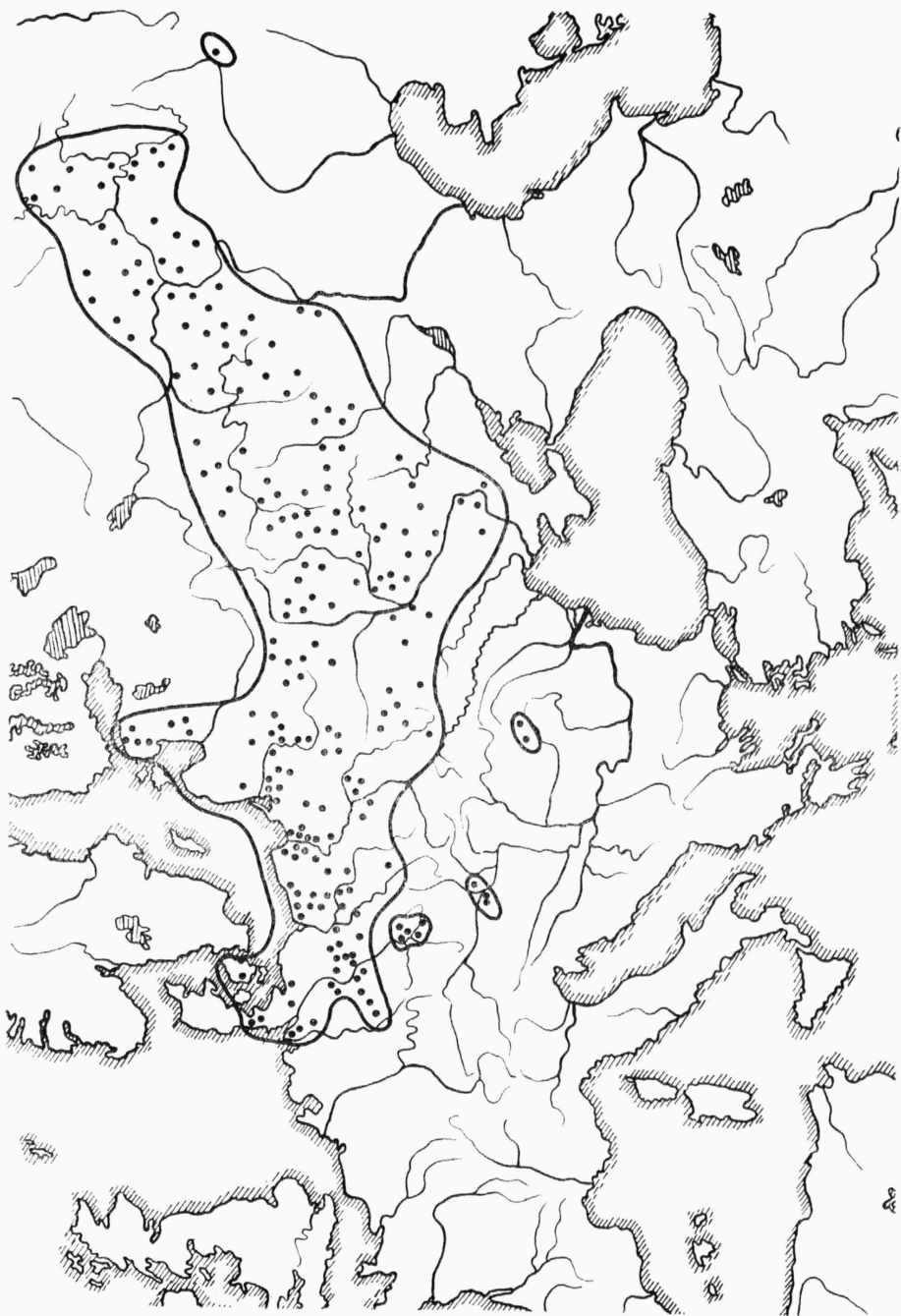


Fig. 1. Dot map of the area of *Thesium ebracteatum*. (Orig.)

range system where some of its representants are still to be found. *T. repens* LEDEB., of the species of this series occurs in an extensive area including Siberia and reaching to the Far East and to the island of Sakhalin. *T. hookeri* HENDRYCH is known from the Himalayas, whereas in eastern Afghanistan *T. afghanicum* HENDRYCH replaces it. Disjunctively from the above mentioned species *T. oreogetum* HENDRYCH occurs very much shifted forward in position and known so far only from Turkish Armenia.

As far as its place occurrence is concerned, this species in an East European element, in Central Europe probably representing a species from the early postglacial period of the migration of types, marginally accompanying the expansion to the Eurosiberian taiga-forest, and occurring at its edges in the humid and swampy primary meadows and non-forest formations and taiga light-forest, and also in the cooler steppe zone. Climatic changes occurring later and the development of vegetation connected with this, led to its retreat so that in the western, and especially the south-western part of the area some small refugial arells were formed.

As far as I have been able to verify, in Bohemia, *T. ebracteatum* has been preserved up to the present only in very few localities which together with other known and today already extinct localities, represent only a small remnant of the primary distribution. It may be assumed that before agrotechnical interference, especially before its intense development in the nineteenth century, *T. ebracteatum* was far more widely distributed. This was probably the case mainly in the inundational zones of the large Bohemian rivers (in particular in the Polabí Lowlands), perhaps also in Moravia (Morava-River region), as well as in western Slovakia, as indicated by the present distribution of residual localities.

Distribution in Bohemia might naturally also have been more or less continuous with the western margin of its area in Germany. In Moravia, where it is not known at all, either now or from the past, continuity of distribution might have consisted with the territory of the Viennese Basin in which its occurrence originally probably was more frequent than it is today and it also probably reached further upstream along the Danube. This extensive part of the total area indicated still more characteristically the original migrational continuity in the direction of Transylvania and along the arc of the Eastern and Southern Carpathians across Moldavia further to the East.

From the localities that I have visited in Bohemia I can confirm the existence of *T. ebracteatum* today only for the village of Velenka and the village of Mělnická Vrutice. There are only very few specimens at the latter locality. DOMIN discovered this species there in 1910 and as he stated later (DOMIN 1942 : 219) he found it there in 1941 only in isolated groups. Nearly twenty years later I succeeded in finding only some few remaining isolated specimens in the course of two years.

I found a considerable number of specimens in 1944 near the village of Velenka in a forest meadow in the "Doubice" forest, but not one in the year 1960. On the western border of a forest, a locality where ČELAKOVSKÝ (1889 : 520) reported *T. ebracteatum* as strongly represented in 1888 (though endangered by agriculture) ŽERTOVÁ and ČRTEK (1958 : 263) still found a few specimens and I also in the same year, in accordance with their information. I has seemed in recent years that there are again slightly more specimens. At the second locality nearby I also found some specimens in 1961

near the village of Velenka in a meadow planted with a few trees. These are evidently remnants of a previously more plentiful occurrence. I am afraid that as is the case with *T. rostratum* (HENDRYCH 1966b : 99), this is a species that within a few decades, nay even years, will be a feature of the past in the flora of Czechoslovakia.

In one of the two above mentioned localities near the village of Velenka which are fairly similar (at least as far as the composition of the vegetation cover is concerned) *T. ebracteatum* grows in a formation also containing species, such as *Astragalus danicus* RETZ., *Colchium autumnale* L., *Crepis praemorsa* (L.) TAUSCH, *C. succisifolia* AL., *Dianthus carthusianorum* L., *D. superbus* L., *Epipactis palustris* (MILL.) CR., *Euphorbia palustris* L., *Filipendula vulgaris* MOENCH, *Galium boreale* L., *Genista tinctoria* L., *Gladiolus imbricatus* L., *Helictotrichon pratense* (L.) PILGER, *Inula salicina* L., *Iris sibirica* L., *Orchis incarnata* L., *Peucedanum cervaria* (L.) LAPEYR., *P. oreoselinum* (L.) MOENCH, *Polygonum bistorta* L., *Potentilla alba* L., *P. erecta* (L.) REAUV. *Salix repens* L., *Saxifraga granulata* L., *Sesleria uliginosa* OPIZ, *Succisa pratensis* MOENCH, *Tetragonolobus siliquosus* (L.) ROTH. etc.

It is evident from this survey alone that we are dealing here with a very heterogeneous formation. It may be said that already with regard to the character of the whole terrain it has arisen from the original formations dominated by *Sesleria uliginosa* OPIZ. The drop in the level of ground water caused by drainage led to the appearance of most xerophilous species from their nearby original habitats.

At the extinct locality near the forest of Vydrholec close to the village of Běchovice discovered by K. POLÁK (according to ČELAKOVSKÝ 1889 : 520) *T. ebracteatum* grew on a humid meadow together with the species *Carex lasiocarpa* EHRH., *Orchis maculata* L., *Salix repens* L., etc.

Near the railway station of Mělnická Vrutice where *T. ebracteatum* grows on meadow fens, I have found it together with the following species: *Carex davalliana* SM., *C. distans* L., *C. diversicolor* CR., *C. fusca* ALL., *C. panicea* L., *Crepis succisifolia* ALL., *Epipactis palustris* (MILL.) CR., *Eriophorum latifolium* HOPPE, *Galium boreale* L., *Gymnadenia conopsea* (L.) R. BR., *Helictotrichon pratense* (L.) PILGER, *Inula salicina* L., *Menyanthes trifoliata* L., *Molinia coerulea* (L.) MOENCH, *Orchis palustris* JACQ., *Parnassia palustris* L., *Phragmites communis* L., *Potentilla erecta* (L.) REAUV., *Salix repens* L., *Schoenus ferrugineus* L., *S. nigricans* L., *Sesleria uliginosa* OPIZ, *Succisa pratensis* MOENCH, *Tetragonolobus siliquosus* (L.) ROTH, *Trifolium montanum* L. etc.

Apart from the confirmed localities, *T. ebracteatum* has been reported from the vicinity of Prague (from Podbaba and Troja to Zbraslav) by PRESL (in SCHOTTKY 1830 : 41). This was the very first literary datum of this species from Bohemia and it is likely that it entirely or to a great extent referred to other species, in particular to *T. alpinum* and *T. linophyllum*. Later *T. ebracteatum*, as well as PRESL's finding near Prague, is recalled by OPIZ (1835 : 108). It is impossible to say whether the latter data are identical with the herbarium specimen of the real *T. ebracteatum* marked by PRESL as "In pratis Čechiae", but the possibility cannot be excluded. Further localities are supposed to have existed near the village of Poběžovice in South Bohemia (HOCKE according to OPIZ 1839 : 37), but actually this seems to have referred to *T. pyrenaicum*.

The first reliably confirmed locality where *T. ebracteatum* was found in Bohemia is a locality discovered in 1842 near the small town of Český Dub by HOFFMANN (see ČELAKOVSKÝ 1871 : 169) and confirmed in 1910 by SAGORSKY, both herbarium specimens of which I have had the possibility of seeing.

Later *T. ebracteatum* was reported from the town of Litoměřice (NEUMANN according to REICHARDT 1854 : 266), but herbarium specimens do not exist. It seems to me, considering that this is a locality continuing the area of existence of this species from the Polabí Lowlands, that from all the localities unconfirmed by herbarium material it is the most likely. There is no doubt, however, that the data of TESAŘ (1926 : 187) concerning the environment of the town of Litoměřice is incorrect (Soví Hůrka, Pokratice, the region between Malíč and Strážistě and in the hill of Hradisko). It evidently refers to *T. linophyllum*, known from this region.



Fig. 2. Habitats of *Thesium ebracteatum* in Czechoslovakia. (Orig.)

Apart from the known area I have seen *T. ebracteatum* in two herbarium specimens (herb. Florence) from Italy (see HENDRYCH 1962 : 16). For the first the locality "Pontebba, Maggio (leg. TACCONI, 7. 5. 1886)" in the Venice region was given. The herbarium specimen was not identified. The second specimen was collected in the Abruzzi Mountains in the mountain of Cornu (leg. ORSINI s. a.) and identified as *T. alpinum* by the collector. In the year 1907 FIORI identified it as *T. linophyllum* and in the year 1911 it was correctly identified (det. GRANDE) as *T. ebracteatum*. For the time being it is impossible to say how far the origin of these herbarium specimens is trustworthy. They came from localities rather distant from the well-known margins of the area and the peripheral arells and furthermore from a mountain region, i.e. from regions avoided throughout their area by this species. Uncertain data concerning the existence of *T. ebracteatum* in Italy are given by FIORI (1896—98 : 286), but as he writes, this seems to have been another species altogether (*T. divaricatum*), so the entire data must be regarded as erroneous. Perhaps further study of the material will bring clarification also in the case of the former herbarium specimen.

The herbarium specimen *T. ebracteatum* identified as *T. linophyllum*, from the herbarium of BUNGE (in herb. Paris) marked "Tauria" is also interesting. The collector was STEVEN. Since this is the only datum of the species known to me from the Crimea, I do not feel justified in having full confidence in this specimen and its identification.

On the one hand we might be faced by an interchange of labels, for STEVEN also marked the territory near, but already situated outside the Crimea as "Tauria". I also consider as a mistake the herbarium specimens *T. ebracteatum* from Munich (leg. SOMMER, herb. Göttingen), and from Regensburg (leg. LORITZ, herb. Munich) and from Switzerland from Radders (leg. WENZEL, herb. Budapest), etc.

From the close vicinity of Czechoslovakia *T. ebracteatum* was mentioned once by NEILREICH (1866 : 92) who took over WIERZBICKÝ's data on the existence of this species on the Danubian Island near the villages of Kis-Bodak and Puszta Sziget from the year 1820. They have not been confirmed and also JÁVORKA (1925 : 264) refers to them as doubtful. I do not consider it impossible that they may indeed have been *T. ebracteatum*, even though I have not seen any herbarium specimen and probably none exists. This conclusion might be drawn from the general situation of the respective localities with regard to the distribution of this species in Lower Austria and in Slovakia.¹⁾

Summatim conscriptum:

Thesium ebracteatum

Planta rhizomate stolonifero, foliis radicalibus longis non squamiformibus, bracteolis absentibus, floribus late campanulatis, fructu breviter sed conspicue stipitato, perigonio sicco deflorato fructus aequilongi.

Nomen: *Thesium ebracteatum* HAYNE (1800) in Journ. Bot. (Schraders) 1 : 33 et tab. VII., non DUVAL.

Synonyma:

T. alpinum GILBERT (1785) Fl. Lith. inch., sec. ed. USTERII, Delec. opusc. botan. 2 : 428 (1793) non LINNÉ, nec auct. al.

T. monophyllum GILBERT (1792) Exercit. phytol. 2 : 428, quoad pl. Grodnens., non Lugdunens., diagn. confusa et ambig.

T. linariae-folio GILBERT (1792) l. c. 429, quoad pl., sed non diagn. conf. et ambig.

¹⁾ The above — mentioned material originated from the following herbarium collections: BG, BP, BPU, BR, BRA, BRNU, BRSL, C, CL, DE, E, FI, G, GB, GOET, GZU, HAL, JE, KRA, L, LD, LE, M, MA, MW, P, POZ, PR, PRC, S, SARA, SLO, TUB, W, WA, WU, ZA (according to Index herbariorum). In the basis of the above-mentioned material I have constructed a dot map as well as verbal delimitation and a description of the whole area of the species (pag. 238—239); the necessity of limiting the text did not allow me to quote individual herbarium specimens of the examined material, for this I should like to refer to the revisid herbaria.

- T. pratense* VAHL (1799) Fl. Danica 7/21, tab. 1205, non EHRHART, non THUILLIER, nec LEDEBOUR, nec non auct. al.
T. comosum ROTH (1800) Catalect. Bot. 2 : 29, non HAYNE.
T. linophyllum LINNÉ sensu SPRENGEL (1806) Fl. Halen. 82, ex min. p. (pro var. sine nom.), non auct. al.
T. bracteatum GROMOV (1817) in Trudy Obščest. Nauk. Chark. Univ. 1/1 : 143, per laps. cal.
Linosyris ebracteata KUNTZE (1891) Rev. Gen. Plant. 2 : 588.

Descriptio

Planta perennis. Rhizoma breve, 4–7 cm longum, horizontale usque obliquum, tenue, stoloniferum, non lignescens, caulem unicum vel caules paucos emittens.

Caulis ascendens vel erectus (7)10–20(30) cm altus, simplex, rarissime cum ramis sterilibus sub inflorescentia, tenuis, ca 1–1,5(2) mm in diametro, glaber, laevis, foliosus, longitudinaliter et tenue sulcatus, viridis usque flavoviridis, tantum basi flavus usque flavobrunnescens, a dimidia vel a inferiore parte tertia in inflorescentiam transiens.

Folia ima lineariter oblonga, 5 mm longa, viridia, distanter alternata. Folia caulina lineariter oblonga vel oblonga, 1,5–3,5 (4,5) cm longa, 2–3,5(4) mm lata, conspicue univervia seu inconspicue trivervia, glabra, integerrima, vel (sub lente) indistincte subtiliter denticulata, acuminata, viridia, sessilia seu brevissime stipitata, vaga.

Inflorescentia simpliciter racemosa, satis laxa, vaga, apice post florescentiam in comam foliorum sterilius excurrans.

Brectea lineariter oblonga, flore vel fructu minime duplo, frequenter usque decies longiore, (0,5)1–2,5(3) cm longa, 1,5–2 mm lata, uninervis usque item inconspicue trinervia, glabra, integerrima vel tantum satis subtiliter (sub lente) denticulata, viridis.

Bracteolae nullae.

Ramuli floriferi 3–15 mm longi, horizontaliter vel oblique patentes, angulati, glabri et laeves, uniflori.

Flores late campanulati, demum post anthesim aliquanto plus minus tubulati, 3–5 mm longi, pentameri, breviter (1–1,5 mm), sed conspicue stipitati.

Perigonium intus album, extus brunnescenter viride usque bruneum seu atrobuneum, in quinque laciniis triangulate oblongas, apice intus inflexas dissectum.

Fructus plus minusve ellipsoideus, ca 2–2,5 mm longus et 1,2–1,5 mm latus, distincte longitudinaliter nervatus, viridis usque brunnescens, conspicue stipitatus (ca 1,5 mm), stipitello rubrescente, anguste alate pentangulato.

Perigonium siccum defloratum conspicuum, fructu aequilongo vel tantum paulo brevior, breviter tubulatum, laciniis intra plus minusve involutis.

Floret: Aprili–Junio. Fructificat: Aprili–Julio.

Stationes: In pratis humidis, turfosis vel uliginosis sed etiam subsiccis, praecipue ripariis, atque in pratis silvaticis, pascuis humidis, nec non in silvis lucidis et in locis graminosis vel item in steppis seu silvo-steppis crescens.

Locus classicus: E pascuis nemorosis prope urbem Berolinum (Berlin) in Germania, secundum indicium descriptionis speciei haec planta, descripta.

Typus (seu specimen authenticum) a HAYNE in loco "Tiergarten" dicto ad urbem Berolinum lectus, in herbario Musaei botanici in Lund conservatur.

Etymologia: Propter absentiam bracteolarum, olim „bracteae“ falso dictarum, appellatum.

Differentia

A species fere omnibus differt absentia bracteolarum. A *T. rostrato* differt rhizomate stolonifero, floribus late campanulatis, perigonio sicco deflorato fructu tantum aequilongo.

Affinitas

T. ebracteato species affinissima *T. repens* est; ab hoc differt absentia bracteolarum, perigonio sicco deflorato longiore, nec non stipitato fructu brevior. Convenit cum eo forma magnitudineque florum, inflorescentia sim-



Fig. 3. Habit of *Thesium ebracteatum* (Del. B. Křísa) and flower (1) and fruit (2).

plici racemosaque, coma bractearum steriliū, statura, rhizomate repenti stolonifero, forma magnitudinequo foliorum.

A *T. hookeris* differt foliis distancte tantum uninervis, caule omnino simplici et eramoso, absentia bracteolarum, perigonio sicco deflorato longiore, statura humiliore, coma bractearum steriliū magna conspicuaque, fructu breviter sed distincte stipitato. Convenit cum eo forma magnitudineque

florum, ramificatione inflorescentiae simplici racemosaque, dispositione florum fructuumque remota et vaga.

A *T. afghanico* differt statura elatiore, ramulis floriferis longioribus, foliis lineariter oblongis, absentia bracteolarum et coma bractearum sterilium. Convenit cum eo forma magnitudineque florum, ramificatione inflorescentiae simplici, rhizomate repenti et stolonifero, floribus breviter sed conspicue stipitatis.

A *T. oreogeto* absentia bracteolarum, caule simplici et elatiore, foliis longioribus latioribus etc., coma bractearum sterilium distat. Convenit cum eo forma magnitudineque florum, inflorescentiae caractere ramificationis etc.

Icones: Reich. Ic. bot. pl. crit., vol. 5, tab. 457 (1827); Reich. Deutsch. Fl. vol. 6, tab. 545, fig. 1158 (1849) et Ic. fl. Germ. Helv. vol. 11, tab. 545, fig. 1158 (1849). Tab. mea 3.

Exsiccata: Baenitz Herb. Eur. 3. 6. 1888; Billot. exs. no 638 (cum *T. linophyllo* mixt.); Call. Fl. Sil. exs. no 245; Dörf. Herb. norm. no 5166; Eston. pl. no 53 et 53a; Fl. Gall. Germ. exs. no 513 et 513 b; Fl. Lit. exs. no 42; Gerb. fl. SSSR no 3387; Herb. fl. Ross. no 104 et 184; Kováts Fl. vind. no 580; Phan. Dan. 13. 6. 1897; Reh. Wol. Fl. pol. 254a et 254b; Reich. Fl. Germ. no 14; Schultz Herb. nor. no 1138; Bunge Fl. exs. no 667/8.

Area geographica

Species a promuntorio occidentali montium Ural, circa a linea Perm — Ufa — Sterlitamak oppidorum ad occidentem versus distributa. Per aream totam forsitant tantum in planitiebus depressis vel maxime in collibus ineditis crescit (vide fig. 1).

In Rossia limes borealis ad lineam Vitebsk — Moskva — Gorkij — Kirov — Glazov — Perm — Kungur — Krasnoufimsk oppidorum circa percurrit. *T. ebracteatum* abhinc ad meridiem, usque ad lineam Artemovsk — Bogučar — Saratov — Kujbišev oppidorum dissipate usque subfrequenter distributum est. Relative non procul ab area principali arella disjuncta in adjacentibus oppidi Orsk posita est; illic item species ea territorium Europae excedit et in Asiam pervenit.

Ad septentriones maxime in Aestonia, usque ad oppidum Talin attingit, ubi in parte occidentali sat distributa est. Rarior in Lothinia est; in Lithuania praecipue in parte australi crescit. In Bjelorossia forsitant per territorium totum distributa est. In Ucraina in dimidia parte boreali, usque ea ad lineam Lvov — Berdičev — Krivoj Rog — Zaporozije dissipata est. Arella potissime disjuncta in vicinitate oppidi Kamenec Podolskij est, abhinc secundum flumen Dnestr in Moldaviam attingit.

In Transsilvania Romaniae prope pagum Ragla (districtus Bistrita) et prope oppidum Cluj sat separate crescit.

In Peribaltia in provincia oppidi Kaliningrad satis distributa est. Per Poloniam, in parte boreali et centrali tota, ad meridiem usque ad lineam: Wroclaw — Opole — ad septentriones ab oppido Kraków — Przemyśl dissipata est.

E Germania tantum e parte Brandenburgiae boreoorientali, e Lusatia, Saxonia solitarie ad meridiem usque ad oppidum Dresden, e Thuringia solum apud oppida Weimar et Erfurt reperta est. Linea occidentalis area per lineam Bremen — Hannover — Magdeburg — Erfurt percurrit. Ad septentriones usque ad mare in Selesviciam-Holstiniam pertinet. In insula Daniae Sjealland dicta dissipate crescit.

In Čechoslovacia (vide ultra) in Bohemia et in Slovacia valde rarissime et satis insulate reperta est. Simili modo disjuncte item in Austria inferiore, in vicinitate australi urbis Wien crescit.

In re publica nostra (vide fig. 2) tantum valde solitarie in Bohemia, praecipue in planitie depressa Polabí (3) dicta dissipata est. Abhinc a pagis Sadská et Velenka in districto Český Brod dicta, a pagi Konětopy et Dřísy in districto Brandýs n. L. appellato, ad pagum Mělnická Vrutice districti Mělník adhuc reperta, nec non ab oppido Litoměřice indicata est. E Bohemia septentrionali ab oppidulo Český Dub (2), nec non e Bohemia centrali a pago Běchovice non procul a Praha (1) nota est.

Localitas separata in depressa planitie fluminis Morava prope pagum Velké Leváre (4) in Slovacia occidentali posita est.

E Čechoslovacia specimina visa¹⁾

In pascuis Čechiae (K. B. Presl).

1. Průhonická plošin a: In prato ad silvam „Vyrholec“ prope pag. Běchovice (Polák: 1888 Faustus: 1889, 1890).

2. Podještědí: Prope opp. Český Dub (Hoffmann: 1842) — In loco „Allstedter Teilholz“ pr. opp. Český Dub (Šagorski: 1910).

3. Polabí: In prato humido turfoso silvae „Doubice“ (seu Kersko dictae) prope opp. Sadská, ca 175 m s. m. (Velenovský: 1883; Čelakovský: 1884, 1888; Freyn: 1884; Košťál: 1894, 189 Toel: 1894; Hendrych: 1944). — In pratis humidis non procul a pago Velenka, ca 175 m s. m. (Vandas: 1884; Freyn: 1884; Pošťál: 1894; Binder: 1887; Bubák: 1901; Domin: 1902; Klika: 1915, 1916; Schustler: 1916; Rohlena: 1921; Chrtěk: 1958; Hendrych: 1958, 1960, 1961). — Ab oppido Lysá n. L. ad pagum Poříčany versus; locus cum praec. verosim. ident. (Sedláček: 1908). — Prata turfosa pr. pag. Dřísy, pr. opp. Všetaty (Polák: 1886); Conrath: 1886; Kabát: 1889). — Inter pag. Konětopy et Dřísy (Velenovský: 1908). — In pratis udis prope pag. Mělnická Vrutice, ca 180 m s. m. (Domin: 1910). — In prato humido usque perhumido ad stat. ferroviariae Mělnická Vrutice, 1800 m s. m.; locus cum praec. tuto ident. (Hendrych: 1960, 1961). — Lit.: In pratis p. opp. Litoměřice (Neumann sec. Reichardt: 1854, in Verh. zool.bot. Gesell. Wien 4 : 266). In prat. humid. prope pag. Chrást et item inter pag. Jelenice et Vrutice (Domin: 1910, in Beih. Bot. Centr.-Bl. 26/2 : 248).

4. Záhorie: In prato humido „V abrodje“ prope pag. Velké Leváre, 155 m s. m. (Staněk: 1921).

Souhrn

Studie přináší shrnutí hlavních poznatků, týkajících se druhu *T. ebracteatum*, získaných několikaletým studiem laboratorním i terénním, ale i kritickým zhodnocením literárních dat; podobně jsou zatím uveřejněny *T. alpinum*, *T. rostratum* a *T. arvense* (HENDRYCH 1966a, 1966b, 1968b). Na území Československa se *T. ebracteatum* vyskytuje jen sporadicky. Jako dosud existující jsou autorovi známá naleziště u Velenky a u Mělnické Vrutice, které jsou zbytkem, ale také jen dočasným, rozšíření mnohem většího. Na takové větší rozšíření ukazuje rozložení ostatních, dnes většinou asi jen archivních lokalit. Ústup tohoto zajímavého druhu byl u nás způsoben odvodňováním a vysoušením stanovišť, kterými byly většinou vlhké až bažinaté louky nebo lesní světliny. Ze Slovenska je *T. ebracteatum* známé z jediné lokality (HENDRYCH 1961 : 16), nověji však nepotvrzené, ač bezpečně doložené. Uvedená slovenská lokalita navazuje na výskyt tohoto druhu (také sporadický) v prostoru Vídeňské pánve.

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¹⁾ Vel habitationes e literatura tantum cognitae.

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