

## Subspecies Names in Jávorka, Magyar Flóra (1924—1925)

### Jména subspecií zveřejněná v díle Jávorka, Magyar flóra (1924—1925)

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*Dedicated to the memory of Academician Jávorka Sándor at the occasion of the centenary of his birthday.*

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The plant determinator JÁVORKA, Magyar flóra (1924—1925) was nomenclaturally analyzed to establish the subspecies names validly published therein. The list includes 55 names. Validly published subspecies names with authorship ascribed to JÁVORKA (Magyar flóra) were also selected from Soó, Nomenclator Borbasianus (1931) — 14 cases. Nomenclatural and taxonomic observations on 18 taxa are given; more important notes refer to *Carex sempervirens*, *Delphinium elatum*, *Genista tinctoria*, *Hieracium borbasii* and *Pulsatilla flavescens*. Six subspecies names can be used in contemporaneous taxonomic classifications. Six new nomenclatural combinations have been proposed for one species and five subspecies.

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#### INTRODUCTION

In the years 1924—1925 the famous Hungarian botanist of Slovak origin, Sándor JÁVORKA (1883—1961), published a plant determinator (in three parts), at which he had previously worked for a long time. Therefore, his book included the description of the flora from the territory of Hungary in its delimitation before World War I. In addition to the territory of presently demarcated Hungary, the book also covers extensive areas of neighbouring countries — Czechoslovakia, the Ukrainian SSR, Roumania, Jugoslavia, Austria, and small areas of Poland. Perfectness, with which this work was compiled and author's taxonomic clear-sightedness render it possible to use the book still as a one of basic works on the flora of the eastern part of Central Europe, both from the taxonomic and chorological viewpoints. The book by JÁVORKA is also nomenclaturally important and one aspect of these problems is the topic of this paper.

In his determinator, JÁVORKA described in detail the taxonomic variation of individual species. The taxa in the rank of "forma" were mentioned by him usually directly in the text serving for determination of species (placed before the name of the species) and were clearly designated as such by the use of the abbreviation "f.". Information on other taxa — belonging to the ranks between that of the variety to that of the minor species — were given to individual species separately and placed after the species name in paragraphs subjoined to the text serving for determination of the species; they usually were mentioned without any marking, rarely marked by figures (e.g. in some *Rubus* species) or by letters (e.g. in some *Potentilla* species). These taxa which

may be called "paragraph" taxa usually remained taxonomically unclassified by JÁVORKA and the determination of their definite taxonomic rank is left by him on decision to further students (cf. p. IX. of the introduction to his book). Regarding the status of the greater part of them, they were considered by further authors (especially by Soó) as subspecies. A certain reason for such an interpretation might also be found in the fact that in his following scientific work, *Iconography of Hungarian plants* (JÁVORKA et CSAPODY, 1929—1934), JÁVORKA classified some of these "paragraph" taxa clearly as subspecies (using the abbreviation "ssp."). Even though many "paragraph" taxa of "Magyar flóra" correspond to this taxonomic rank, still many taxa are included in that category, for which the designation of a subspecies scarcely would be used by JÁVORKA himself. Also the use of the Hungarian term "alak, alakjai" for some "paragraph" taxa designates cases not belonging to subspecies. Furthermore the fact that the authorship of the name of "paragraph" taxa is once given to that author who classified the taxon as a variety and in a neighbouring taxon to such an author who designated it as a (minor) species shows clearly a composite character of "paragraph" taxa regarding their taxonomic rank. JÁVORKA's book is written in the Hungarian language only, and authors unfamiliar with that language could do nothing else in the cases of "paragraph" taxa than to take over the classificatory interpretations of further authors, mostly from the taxonomic and nomenclatural papers by Soó. During the period 1950—1980 when Soó prepared his important work "Synopsis" he adopted, in his extensive nomenclatural revision of Hungarian and Central European flora, many of JÁVORKA's "paragraph" taxa as subspecies. These combinations were often published by him invalidly, as quotations of basionyms were often lacking after 1952 or not correctly given.

It seems clear, that JÁVORKA (1924—1925) in his "Magyar flóra" did not want to classify many infraspecific taxa to a certain taxonomic rank (l. c., p. IX.) and this is why he created the institution of the above mentioned "paragraph" taxa as a substitution. Evidence for this is given in the text of the introduction to his book (p. IX.—X.), where the author gives a series of taxonomic ranks, which, however, are usually not used by him to the taxonomic specification of the "paragraph" taxa. A part of the text referring to classification of the "paragraph" taxa and giving evidence of the author's retreat from their more precise classification (in a greater part of the cases) was translated (from the page XCV. of the introduction to JÁVORKA's book) in German and published by WIDDER (1966 : 242) and Soó (1972 : 131). On the basis of the advice of the present author (cf. Soó 1972, l.c.), Soó later abandoned the interpretation of JÁVORKA's "paragraph" taxa as subspecies in his nomenclatural papers and began to designate them as "subspecies, combinatio incerta"; some names of which he himself transferred validly to the subspecies rank. "Paragraph" taxa in JÁVORKA's book are mostly taxa without taxonomic rank and nomenclaturally they represent trinomials. However, it would be an error to consider all "paragraph" taxa as taxonomically unclassified, i.e. published without a taxonomic rank as could be followed from the papers by WIDDER (1966) and Soó (1972). Even in the years 1958—1963 in connection with the revision of subspecies names of the Central European flora, the present author could establish that in some cases JÁVORKA in fact had designated certain "paragraph" taxa clearly as subspe-

cies having used the Hungarian term "alfaj" for them, which corresponds directly to this rank (see also the introduction to JÁVORKA's book, p. IX.). At the beginning of 1964, this fact was published by the present author in the case of the name *Botrychium virginianum* subsp. *europaeum* (HOLUB 1964: 47). At that time further material was also gathered, which, with regard to some troubles in the work on the full survey of subspecies names of Central European plants (cf. HOLUB 1983), is published here separately only now.

In List I given below, only those subspecies names are included which were designated in JÁVORKA's book by the term "alfaj". It is interesting that the abbreviation "ssp." is used in his book perhaps only once when added to the name of the foreign plant *Cynoglossum lanceolatum* subsp. *geometricum* (p. 842) that was published in a final note, where, for graphical reasons, the method of giving "paragraph" taxa could not be used. Altogether 55 subspecies names have been found in JÁVORKA, Magyar flóra; among them about five names are included, which probably were already published before their publication in this book, but their earlier publication places are unknown or inaccessible for revision to the present author. The authorship of these names is given in List I by the mode „BORB.—JÁV.", not by the usual "(BORB.) JÁV."; for examples see subspecies of *Hieracium alpicola*.

With regard to the problem solved here, an important part of JÁVORKA's book is the Appendix with supplements and corrections (p. 1277—1289) published before the final index to the book. Here in several cases further subspecies names are given and also some references exist, specifying the taxonomic rank of names of some "paragraph" taxa from the preceding text as the names of subspecies, e.g. by the use of the reference to the type "as a third subspecies add . . ." (in Hungarian). Such references are in *Carex gracilis*, *Delphinium intermedium* and *Genista tinctoria*. In these cases the entry in List I contains both the data on pages from the text of the book and from the Appendix. The date of publication of these subspecies names is determined by the date of edition of the Appendix (i.e. IV. 1925).

A special case is the combination *Potentilla recta* subsp. *sulphurea* proposed in the Appendix to JÁVORKA's book. In the text of the book, JÁVORKA distinguished eight infraspecific taxa in *Potentilla recta* (marked there by alphabete letters) and designated as "alakjai". In the Appendix the first of them was selected and classified as a subspecies, no information having been given at that time on seven further infraspecific taxa of that species. It might be submitted for consideration whether the transfer of one (the first) taxon from the whole series of taxa should not be taken as the reason to classify the other "paragraph" taxa of *Potentilla recta* also as subspecies, especially with regard to their conformable classification mode in the proper text of JÁVORKA's book. This procedure would not be found justifiable according to the present author; it could also be the initiation of classification of other JÁVORKA's "paragraph" taxa as subspecies as this was earlier incorrectly made by some authors. But JÁVORKA clearly left the possibility of a taxonomic decision on these taxa to future taxonomists (see above). It can be possible to attribute to him only those subspecies names designated clearly by himself as subspecies. All other names of "paragraph" taxa without direct mentioning of their rank ("alfaj") must be considered as trinomials for designation of infraspecific taxa of unclear taxonomic rank.

As already mentioned above, JÁVORKA's "paragraph" taxa were designated often by Soó as subspecies in his many earlier papers (often in the synonymy only and thus not validly published); after 1953 he mentioned them usually without quotations of basionyms and therefore also as invalidly published names. Shortly after the publication of JÁVORKA's book, Soó clearly designated some of JÁVORKA's "paragraph" taxa as subspecies in the publication with results of the Fifth IPE through Czechoslovakia and Poland (Soó 1930) and by this fact valid subspecies names were proposed. The following names belong here: *Cardaminopsis arenosa* subsp. *dependens* (BORB.), *Erigeron neglectus* subsp. *hungaricus* (VIEBH.), *Gentiana austriaca* subsp. *fatrae* (BORB.), *G. praecox* subsp. *depauperata* (ROCHEL) and *Sempervivum montanum* subsp. *heterophyllum* (HAZSL.); the authorship of these combinations may be given here as "JÁV. ex Soó" or more correctly only as "Soó". In the following year, Soó (1931) published a nomenclatural revision "Nomenclator Borbasianus" where he used the names of JÁVORKA's "paragraph" taxa as subspecies when explaining the names published by BORBÁS. As the quoted paper could easily be overlooked in indexing subspecies names, the corresponding names (with the authorship ascribed to JÁVORKA) were selected from it for List II. Provided the plant names by BORBÁS were explained by Soó only with one name (in the rank of subspecies) such names are considered by the present author as validly published and included in List II. However, where Soó used more than one name for explanation of a BORBÁS's name (from which one was that used by JÁVORKA in the subspecies rank) and when it is not clear from the character of the quotation, which name he really accepted (e.g. by mentioning the designation "comb. nova"), then such a "subspecies" name attributed to JÁVORKA cannot be considered as validly published, but only taken as mentioned in the synonymy in an inappropriate form. Such names are not included in List II. Altogether, List II contains 14 names from Soó's „Nomenclator Borbasianus“. In these cases, Soó ascribed the authorship of subspecific combinations to JÁVORKA; this has to be corrected in all cases by using the mode "JÁV. ex Soó" or an abbreviated form to give only "Soó" as the author of the combination.

#### LIST I.

#### Subspecies names validly published in JÁVORKA, Magyar flóra (1924—1925)

- Anthriscus nemorosus* (M. BIEB.) SPRENG. subsp. *macrocarpus* JÁV., Magyar Fl., 765, 1924 [ut "macrocarpa"; auct. "BOISS."].
- Botrychium virginianum* (L.) SW. subsp. *europaeum* (ANGSTR.) JÁV., l. c., 18, 1924 [auct. "ANGSTR."].
- Carex gracilis* CURT. subsp. *personata* (FR.) JÁV., l. c., 136 et 1280, 1925 [auct. "FR."].  
subsp. *sphaerocarpa* (UECHTR.) JÁV., l. c., 136 et 1280, 1925 [auct. "UECHTR."].
- C. sempervirens* VILL. subsp. *laxiflora* (SCHUR) JÁV., l. c., 1280, 1925 [auct. "SCHUR"].
- Cochleria pyrenaica* DC. subsp. *tatrae* (BORB.) JÁV., l. c., 407, 1924 [auct. "BORB."].
- Crucianella angustifolia* L. subsp. *oxyloba* (JANKA) JÁV., l. c., 1036, 1925 [auct. "JANKA"].
- Cynoglossum lanccolatum* FORSK. subsp. *geometricum* (BAKER et W. H. WRIGHT) JÁV., l. c., 842, 1925 [auct. "(BAKER et W. H. WRIGHT)"]].
- Delphinium intermedium* SOL. subsp. *alpinum* (WALDST. et KIT.) JÁV., l. c., 358 et 1284, 1925 [auct. "W. et K."].  
subsp. *nacladense* (ZAPAL.) JÁV., l. c., 1284, 1925 [auct. "ZAPAL."].  
subsp. *orthotomum* (BORB.) JÁV., l. c., 358 et 1284, 1925 [auct. "BORB."].
- Draba aizoides* L. subsp. *carpathica* (DEGEN) JÁV., l. c., 430, 1924 [auct. "DEG."].

- Genista tinctoria* L. subsp. *banatica* (SIMONK.) JÁV., l. c., 1286, 1925 [auct. "SIMK."].  
 subsp. *oligosperma* (ANDRAE) JÁV., l. c., 605 et 1286, 1925 [auct. "ANDRAE"].
- Hieracium alpicola* SCHLEICH. subsp. *depannatum* ELFSTRAND — JÁV., l. c., 1233, 1925.  
 subsp. *quasadnatum* ELFSTRAND — JÁV., l. c., 1233, 1925.  
 subsp. *rufotatum* ELFSTRAND — JÁV., l. c., 1233, 1925.
- H. ambiguum* EHRR. subsp. *pycnocephalum* (REHM.) JÁV., l. c., 1236, 1925 [auct. "REHM."].
- H. apatellium* NAEG. et PETER subsp. *micusiae* (BORB.) JÁV., l. c., 1237, 1925 [auct. "BORB."].
- H. bifurcum* M. BIEB. subsp. *sympodiale* (BORB.) JÁV., l. c., 1234, 1925 [auct. "BORB."].
- H. cymosum* L. subsp. *geotropum* (BORB.) JÁV., l. c., 1242, 1925 [auct. "BORB."].  
 subsp. *odontophyllum* (BORB.) JÁV., l. c., 1242, 1925 [auct. "BORB."].
- H. sparsum* FRIV. subsp. *zanogae* (PAX) JÁV., l. c., 1269, 1925 [auct. "PAX"].
- Potentilla recta* L. subsp. *sulphurea* (LAM. et DC.) JÁV., l. c., 527 et 1286, 1925 [auct. "LAM. et DC."].
- Pulsatilla australis* (HEUFF.) SIMONK. subsp. *flavescens* (HAZSL.) JÁV., l. c., 1284, 1925 [auct. "(HAZSL.) BORB."].
- Ranunculus trichophyllus* CHAIN subsp. *drouetii* (F. SCHULTZ) JÁV., l. c., 370, 1924 [auct. "F. SCHULTZ"].  
 subsp. *paucistamineus* (TAUSCH) JÁV., l. c., 370, 1924 [auct. "TAUSCH"].  
 subsp. *peticari* (KOCH) JÁV., l. c., 370, 1924 [auct. "KOCH"].  
 subsp. *radians* (REVEL) JÁV., l. c., 370, 1924 [auct. "REVEL"].  
 subsp. *rionii* (LAGGER) JÁV., l. c., 370, 1924 [auct. "LAGGER"; an usque GREMLI 1898?].  
 subsp. *terrestris* (GREN. et GODR.) JÁV., l. c., 370, 1924 [auct. "GREN. et GODR."].
- Rubus macrophyllus* WEIHE et NEES subsp. *poliochloros* (SABR.) JÁV., l. c., 496 et 1285, 1925 [auct. "SABR."].  
 subsp. *quadicus* (SABR.) JÁV., l. c., 496 et 1285, 1925 [auct. "SABR."].  
 subsp. *schefferi* (GÁYER) JÁV., l. c., 1285, 1925 [auct. "GÁYER"].
- Sedum roseum* (L.) SCOP. subsp. *scopolii* (KERN.) JÁV., l. c., 452, 1924 [auct. "(KERN.) ROUY et FOUC."].
- Senecio sulphureus* (BAUMG.) SIMONK. subsp. *fussii* (GRISEB. et SCHENK) JÁV., l. c., 1138, 1925 [auct. "(GRISEB. et SCH.) BECK"].  
 subsp. *heuffelii* (HOPPE et FÜRNR.) JÁV., l. c., 1139, 1925 [auct. "HOPPE et FÜRNR."].  
 subsp. *kitaibelii* JÁV. — JÁV., l. c., 1139, 1925.  
 subsp. *microrhizus* (SCHUR) JÁV. — JÁV., l. c., 1138, 1925.  
 subsp. *rupicolus* (SCHUR) JÁV., l. c., 1139, 1925 [auct. "(SCHUR) SIMK."].  
 subsp. *wolffii* (SCHUR) JÁV., l. c., 1138, 1925 [auct. "(SCHUR) SIMK."].
- Suaeda maritima* (L.) DUM. subsp. *salinaria* (SCHUR) JÁV., l. c., 294, 1924 [auct. "(SCHUR) SIMK."].  
 subsp. *salsa* (L.) JÁV., l. c., 294, 1924, 1924 [auct. "(L.) PALLAS"].  
 subsp. *vulgaris* (MOQU.-TAND.) JÁV., l. c., 294, 1924 [auct. "MOQU."].
- Thymus serpyllum* L. subsp. *alpestris* (TAUSCH) LYKA in JÁV., l. c., 898, 1925 [auct. "TAUSCH"].  
 subsp. *balcanus* (BORB.) LYKA in JÁV., l. c., 897, 1925 [auct. "BORB."].  
 subsp. *carniolicus* (BORB.) LYKA in JÁV., l. c., 900, 1925 [auct. "BORB."].  
 subsp. *comosus* (HEUFF.) LYKA in JÁV., l. c., 903, 1925 [auct. "HEUFF."].  
 subsp. *dacicus* (BORB.) LYKA in JÁV., l. c., 899, 1925 [auct. "BORB."].  
 subsp. *jankae* (ČELAK.) LYKA in JÁV., l. c., 896, 1925 [auct. "ČELAK."].  
 subsp. *macrophyllum* (REICHENB.) LYKA in JÁV., l. c., 903, 1925 [auct. "REICHENB."].  
 subsp. *marginatus* (KERN.) LYKA in JÁV., l. c., 902, 1925 [auct. "KERN."].  
 subsp. *pinifolius* (HEUFF.) LYKA in JÁV., l. c., 900, 1925 [auct. "HEUFF."].  
 subsp. *pulcherrimus* (SCHUR) LYKA in JÁV., l. c., 902, 1925 [auct. "SCHUR"].
- Trifolium lupinaster* L. subsp. *albiflorum* (SER.) JÁV., l. c., 619, 1924 [auct. "SER."].

## LIST II.

### Subspecies names from Soó, Nomenclator Borbasianus (1931), attributed to JÁVORKA

- Asplenium forsteri* SADL. subsp. *dacicum* (BORB.) JÁV. ex Soó, Nomenclator Borbasianus, 1, 1931.
- Caltha laeta* SCHOTT, NYMAN et KOTSCHY subsp. *rostrata* (BORB.) JÁV. ex Soó, l. c., 13, 1931.
- Cardamine pratensis* L. subsp. *ullepiciana* (BORB.) JÁV. ex Soó, l. c., 21, 1931.
- Cytisus heuffelii* WIERZB. subsp. *leiotrichus* (BORB.) JÁV. ex Soó, l. c., 39, 1931.
- Heracleum orsinii* GUSS. subsp. *ternatum* (BORB.) JÁV. ex Soó, l. c., 47, 1931.

- Melilotus altissimus* THUILL. subsp. *paluster* (WALDST. et KIT.) JÁV. ex Soó, l. c., 40, 1931.  
*Nymphaea lutea* L. subsp. *asericca* (BORB.) JÁV. ex Soó, l. c., 17, 1931 [JÁVORKA ut *Nuphar luteum* (L.) SM.!).  
*Polygala vulgaris* L. subsp. *borbasii* JÁV. ex Soó, l. c., 29, 1931.  
*Potentilla argentea* L. subsp. *loczyana* (BORB.) JÁV. ex Soó, l. c., 34, 1931.  
*Prunus spinosa* L. subsp. *cyclopetala* (BORB.) JÁV. ex Soó, l. c., 38, 1931.  
*Rorippa barbareaoides* (TAUSCH) ČELÁK. subsp. *capillipes* (BORB.) JÁV. ex Soó, l. c., 19, 1931.  
*R. repens* BORB. subsp. *subglobosa* (BORB.) JÁV. ex Soó, l. c., 21, 1931.  
*Solanum dulcamara* L. subsp. *serpentini* (BORB. et WAISB.) JÁV. ex Soó, l. c., 50, 1931.  
*Sorbus torminalis* (L.) CR. subsp. *perincisa* (BORB. et FEKETE) JÁV. ex Soó, l. c., 32, 1931.

#### OBSERVATIONS ON SELECTED NAMES AND TAXA

##### 1. *Botrychium virginianum* (L.) SW. subsp. *europaeum* (ANGSTR.) JÁV. 1924

Publication of this combination by JÁVORKA (Magyar Fl., 18, 1924) preceded that which has normally been used for this taxon in its classification as a subspecies and originating from the monograph of *Botrychium* by R. CLAUSEN — subsp. *europaeum* (ANGSTR.) R. CLAUSEN, Mem. Torrey Bot. Club 19/2: 101, 1938. HOLUB (1964: 47) drew attention to the fact of having overlooked JÁVORKA's combination. The correct authorship of the combination was later accepted by some other authors, e.g. by Soó (1980) in his Conspectus.

##### 2. *Carex gracilis* CURT. subsp. *sphaerocarpa* (UECHTR.) JÁV. 1925

Classification of this taxon as a subspecies seems to be rather uncertain from the taxonomic viewpoint, most likely overemphasized. According to KÜKENTHAL (1909), who classified it as a variety, an earlier published subspecies name should exist for this taxon — *C. acuta* L. subsp. *pseudoaquatilis* APPEL, Deutsch. Bot. Monatschr. 10: 191, 1892. When the taxon would be classified as a subspecies, the use of the latter subspecific epithet had to be preferred as it has priority in this taxonomic rank over the epithet used by JÁVORKA in 1925. A new subspecies combination with the epithet used by APPEL should be proposed only after solving taxonomic problems, i.e. when a classification of this taxon as a subspecies would be considered justified and when the taxa "*sphaerocarpa*" and "*pseudoaquatilis*" with certainty would be taxonomically identical in this rank.

##### 3. *Carex sempervirens* VILL. subsp. *laxiflora* (SCHUR) JÁV. 1925

The plants of this calciphilous taxon of *Carex sempervirens* described originally from the East Carpathians have long, narrow, linear leaves, often only 1 mm broad and spikelets very narrow and distant; it belongs to the series of narrow-leaved taxa occurring in the whole distribution area of the species in calcareous mountain ranges. In the circumscription accepted by JÁVORKA, var. *tatorum* ZAPAL. from the West Carpathians is included. For the latter a subspecies name was proposed by PAWŁOWSKI in 1931 (cf. HOLUB 1963), i.e. later than the subspecies name by JÁVORKA. The type taxon of *C. sempervirens* VILL. also belongs to this series of narrow-leaved taxa. Whether the East Carpathian or Carpathian taxon is fully identical with the type by VILLARS or is a parallel geographic taxon to it, is not known at present; the second possibility does seem to be more probable. Till now the taxonomy of *C. sempervirens* was solved only for individual mountain ranges and an attempt at a summarization by DOMIN (1931) represents also such a regional approach. Only a critical comparison of plants from the whole distribution

area of the species from the Pyrenees to the East Carpathians and Bulgaria on the basis of population analyses can satisfactorily solve the taxonomic problems within *C. sempervirens*. For the time being it is necessary to accept regional taxa; two such races occur in the West Carpathians (HOLUB 1963). On the basis of a long-term cultivation experiment with West Carpathian specimens of *C. sempervirens*, the present author has concluded that the two races differ in their ecology (calcicolous and silicicolous) and should have been classified as subspecies. When the taxonomic opinion by JÁVORKA is accepted, i.e. that West Carpathian calciphilous narrow-leaved plants are taxonomically identical with analogous plants from the East Carpathians, the correct name of them is subsp. *laxiflora* (SCHUR) JÁV. 1925, having priority over subsp. *tatrae* (ZAPAL.) PAWL. 1931 (cf. HOLUB 1963). For plants of habitats with silicate bedrock, characterized by their lower and more robust habit, broader leaves and dense and approximate spikelets, the designation subsp. *sempervirens* has been erroneously used in Czechoslovak floristic literature (the last case is DOSTÁL, 1982; see, however, an earlier opposite opinion by HOLUB, 1963). These siliciphilous plants represent a taxon analogous to that described from silicate mountains in West Europe (mostly from the Pyrenees) given under the names var. *schkubriana* BONNET et RICHTER and subsp. *granitica* (BR.-BL.) VICIOSO; our plants are not identical with this West European taxon (as comparison with the plants by LAZARE, 1982, gives a good evidence of this) and therefore they should be accepted as a separate subspecies. However, the relationship of the West Carpathian siliciphilous plants (designated here preliminarily as subsp. *silicicola* HOLUB nomen provis. ad interim) to the East Carpathian subsp. *pseudotrists* (DOMIN) PAWL. 1937 (Ochrona Przyrody 17 : 96, 1937) is not clear at present and its solution is left to a separate paper (HOLUB, in prep.).

#### 4. *Cochleria pyrenaica* DC. subsp. *tatrae* (BORB.) JÁV. 1924

This West Carpathian endemic plant is often (and perhaps more justifiably) classified as a separate species, e.g. in the Flora Europaea (1 : 314, 1964). It was also classified as a subspecies by DOMIN who proposed the combination *C. officinalis* L. subsp. *tatrae* (BORB.) DOMIN, Věda Pěst. 18 : 53, 1937. In his notes to the second edition of JÁVORKA et ČSAPODY, Iconographia, Soó (1975) gives BRAUN-BLANQUET as the author of the above mentioned JÁVORKA's combination. However, this author used that combination not earlier than 1930 in results of the Fifth IPE through Czechoslovakia and Poland, so that the name by JÁVORKA has clear priority. }

#### 5. *Delphinium intermedium* SOL. ex AIT. = *D. elatum* L.

From three subspecies of *D. intermedium* accepted by JÁVORKA in his "Magyar flóra" in 1925, two are usually classified to the type subspecies — subsp. *ortotomum* (BORB.) JÁV. and subsp. *alpinum* (WALDST. et KIT.) JÁV.; the first is taxonomically unclear, the second is often used in taxonomic classifications, at present usually as a variety. For the latter the valid subspecies name under *D. elatum* L. was published by NYMAN in 1878 and later by SIMONKAI in 1887. The third subspecies by JÁVORKA, subsp. *nacladense* (ZAPAL.) JÁV., is taxonomically more important, having its stem and gynoecia pubescent and being confined to the East Carpathians. ZAPALOWICZ described the plant originally as a species and Soviet authors have accepted this classification (ČEREPANOV 1981). The taxon was classified as a separate

species by DEYL (1937), too. He used the name *D. pubicaule* (BORB.) DEYL. This name is based on *Delphinium elatum* L. var. *pubicaule* BORB. 1904 (Magyar Bot. Láp. 3 : 26, 1904), which also was used as the basionym of DOSTÁL's subspecific combination published by him validly in 1948 — *D. elatum* subsp. *pubicaule* (BORB.) DOSTÁL (Květena ČSR, 148, 1948). Excepting Soviet authors, the taxon has been overlooked in classifications of the last period (as in Flora Europaea, vol. 1) or classified only as a variety (cf. Flora RPR 2 : 459, 1953); regarding its characteristic distribution area and degree of morphological differentiation, its classification as a subspecies (as proposed by DOSTÁL earlier) does seem to be appropriate. As the subspecies epithet "nacladense" was published by JÁVORKA in the subspecies rank in 1925 (and "pubicaule" by DOSTÁL only in 1948), it is necessary to use JÁVORKA's epithet for the taxon when classified on the subspecies level. A new nomenclatural combination — *Delphinium elatum* subsp. *nacladense* — is proposed below.

#### 6. *Draba aizoides* L. subsp. *carpathica* (DEGEN) JÁV. 1924

JÁVORKA (Magyar Fl., 430, 1924) quotes for this new subspecies name a synonym — subsp. *zmudae* ZAPAL. 1912. DEGEN's epithet is absolutely earlier than that by ZAPALOWICZ — var. *carpathica* DEGEN apud HULJÁK (Magyar Bot. Láp. 7 : 242, 1908), but it became a subspecific epithet only in JÁVORKA's "Magyar flóra" in 1924. With regard to the priority of the directly subjoined name subsp. *zmudae* ZAPAL., the above subspecies name by JÁVORKA is incorrect.

#### 7. *Genista tinctoria* L.

Two subspecies are accepted within this species in the Appendix to JÁVORKA's book — subsp. *banatica* (SIMK.) JÁV. 1925 and subsp. *oligosperma* (ANDRAE) JÁV. 1925. The first taxon was originally described by SIMONKAI as a variety — *G. tinctoria* L. var. *banatica* SIMONK., Természetrájsi Füzetek 3 : 166, 1879. Regarding its relationship within the broadly circumscribed *G. tinctoria* agg., Flora RPR (5 : 65, 1957) places it near to the type subspecies of *G. tinctoria* L. s. s. Its most important distinguishing character is the greyish-white pubescent indumentum of the legume. The taxonomic problems of *G. tinctoria* agg. are very difficult. This was the reason why the aggregate (with some clearly defined species) was left without any classification in Flora Europaea (2 : 95—96, 1968) and accepted in such a circumscription, which is entirely unnatural. A whole series of taxa having hairy legumes exist in southern Europe within this conglomerate of taxa, which, however, belong to various partial taxonomic groups of the aggregate. From the taxa described till now the most similar (or related?) taxa to *G. banatica* are *G. mantica* POLLINI 1814 from northern Italy and *G. perreymondii* LOISEL. 1807 from France. Also some taxa from the group of *G. depressa* M. BIEB. occurring in the Balkan Peninsula are very similar, but their real relationship to the taxa under discussion is unclear at present. Recently the problems of the aggregate were studied by NEISCHLOVÁ et MÁJOVSKÝ (1970) for the area to Slovakia and adjoining regions. For practical reasons, they consider all main taxa of the aggregate at the same taxonomic level, as minor species. Rather in accord with this practical aspect of the classification already used, than as an expression of my own taxonomic decision, a new species name — *Genista banatica* — is proposed for this taxon below.



The second subspecies, *G. tinctoria* subsp. *oligosperma* (ANDRAE) JÁV., is confined to the high mountains of the East Carpathians (Transsilvanicum). Although described originally as a variety, elevation of this epithet to the species level was made by SIMONKAI in 1887. However, in the meantime SCHUR described a species *G. alpicola* SCHUR (Enum. Plant. Transsilv., 145, 1866), the name of which is the correct one for this taxon when classified as species. Use of the species name *G. oligosperma* (ANDRAE) SIMONK. 1887, connected together with inclusion of the earlier name *G. alpicola* SCHUR 1866 as a name of one of its forms in Flora RPR (5 : 61, 1957), is a nomenclatural mistake. The first author who transferred the epithet "*oligosperma*" to the subspecies rank is JÁVORKA (1925). Later, the subspecies status was also used by DEYL (1934) and DOSTÁL (1948 — here without any author of the combination); these two authors were unaware of JÁVORKA's earlier subspecific classification of this taxon.

#### 8. *Hieracium alpicola* SCHLEICH.

Publication places of three ELFSTRAND's subspecies (see List I) are not known to the present author, at the moment. These taxa are fully omitted in summarization works on *Hieracium* compiled by ZAHN. They are included in List I only provisionally — for completeness. If these names were validly published by ELFSTRAND as subspecies names under *H. alpicola*, they would have to be excluded from the survey of JÁVORKA's subspecies names.

#### 9. *Hieracium bifurcum* M. BIEB. subsp. *sympodiale* (BORB.) JÁV. 1925

The plants belonging here are taxonomically identical with subsp. *langii* NAEG. et PETER 1885. This name is also given by JÁVORKA himself in the synonymy of his taxon. BORBÁS used the epithet "*sympodiale*" for a variety, and the subspecies name by JÁVORKA is later than that by NAEGELI et PETER. Therefore the name by JÁVORKA must be considered as incorrect.

#### 10. *Hieracium sparsum* FRIV. subsp. *zanogae* (PAX) JÁV. 1925

From the taxonomic viewpoint, it seems to be more appropriate to subjoin this taxon rather to *Hieracium borbasii* UECHTR. ex BORB. 1904 from the group of *H. silesiacum* agg. than to the real *H. sparsum* FRIV. In this classification the present author follows NYÁRÁDY (Flora RPR 10 : 493, 1965) and Soó (1975). However, it is not possible to use the epithet "*zanogae*" (according to some authors the orthography "*zanoogae*" should be more correct — cf. ZAHN in ASCHERSON et GRAEBNER, Synopsis Mitteleurop. Fl. 12/3 : 651—652, 1938) in this taxonomic transfer for the taxon under consideration in its new position, as was already (invalidly) proposed by Soó (1975). The epithet "*zanogae*" reached the subspecies level in JÁVORKA's book later than the epithet "*sparsiforme*" for the same taxon published in 1906 in the combination *H. sparsiflorum* (FRIV.) FR. subsp. *sparsiforme* DEGEN et ZAHN (Magyar Bot. Láp. 5 : 79, 1906). The latter name is also quoted by JÁVORKA in the synonymy of the name under discussion. ZAHN in 1922 proposed for this taxon an unjustified new subspecific epithet *H. sparsum* FRIV. subsp. *nomophilum* ZAHN, ENGLER Pflanzenreich 4/280, 79 : 1021, 1922, with regard to the fact that according to his opinion the epithet "*sparsiforme*" was pre-occupied. However, this opinion followed from his merging specific and subspecific epithets as having been published in the same taxonomic rank. For such a practice the Code ICBN (STAFLEU et al. 1978) gives no legal basis;

on the contrary, the Code sharply distinguishes specific and subspecific epithets as different and separate cases. In the concrete case the epithet "*sparsiforme*" was used in different taxonomic ranks for different taxa with different nomenclatural types. DEGEN et ZAHN used it for a subspecies of a species from the group of *H. sparsum* in 1906, whereas its earlier use in 1885 by NAEGELI et PETER refers to a species of the group (genus) *Pilosella*. Therefore, the newly proposed epithet "*nomophilum*" applied by ZAHN is superfluous and illegitimate. The epithet "*sparsiforme*" remains henceforth justified. When transferring the taxon under discussion to *H. borbasii* the latter epithet must be used in the newly proposed nomenclatural combination — *Hieracium borbasii* subsp. *sparsiforme* (see below).

11. *Potentilla recta* L. subsp. *sulphurea* (LAM. et DC.) JÁV. 1925

The problem of names of "paragraph" taxa added to *P. recta* in JÁVORKA, Magyar flóra, was already solved in the introductory text to this paper. Also in the most recent literature JÁVORKA has been ascribed to names of several subspecies of this species as their author, e.g. DOSTÁL (1982) gives JÁVORKA as the author of the names of subsp. *auriflora*, subsp. *leucotricha* and subsp. *semilaciniosa* (perhaps on the lines of Soó). However, this is hardly justified. Other authors must be found having published those subspecies names validly. The basionym of only one combination published by JÁVORKA — subsp. *sulphurea* (LAM. et DC.) JÁV. 1925 — is considered in contemporaneous taxonomic classifications of *P. recta* as a name belonging to the type subspecies of that species, which must be named subsp. *recta*; JÁVORKA's combination passes over therefore into its synonymy. JÁVORKA clearly accepted *P. obscura* WILLD. as the type taxon of *P. recta* L., which follows directly from the synonymy subjoined to the species name *P. recta* in his book.

12. *Prunus spinosa* L. subsp. *cyclopetala* (BORB.) JÁV. ex Soó 1931

In 1881 BORBÁS described this taxon as a species; JÁVORKA (1924) transferred it to infraspecific taxa of *P. spinosa* L. and placed it as a "paragraph" taxon without indication of certain taxonomic rank. This was given to this taxon only by Soó in 1931, who is therefore the real author of the above given subspecies combination. JÁVORKA (1924 : 592) mentioned the possibility that the taxon might have originated from the hybridization *P. domestica* L. × *P. spinosa* L. With regard to the very probable hybrid origin of the taxon it seems more appropriate to include *P. cyclopetala* rather to (the hybridogeneous) *P. domestica* than to *P. spinosa* (cf. Soó, Synopsis 2 : 253, 1966) and to place it there in the group of subsp. *praecox* WERNECK 1958. As the epithet "*cyclopetala*" has priority in the subspecies rank over all epithets from this group, the necessity to propose a new nomenclatural combination with this epithet follows — *Prunus domestica* subsp. *cyclopetala* (see below).

13. *Pulsatilla australis* (HEUFF.) SIMONK. subsp. *flavescens* (HAZSL.) JÁV. 1925

This name by JÁVORKA designates an interesting taxon confined only to the eastern part of the Great Hungarian Plain (Nagy Alföld) in Eastern Hungary and Southeastern Slovakia. Its taxonomic classification has very fluctuated (even by the same author) regarding both the determina-

tion of its relationship to allied species and its rank, from the original description as a variety by HAZSLINSZKY, to its acceptance as a species or as a subspecies in recent classifications. When classified as an infraspecific taxon, it was usually subordinated to *P. pratensis* (L.) MILL. or *P. nigricans* STÖRCK. Only JÁVORKA (see above) considered it to be a member of *P. australis* (HEUFF.) SIMONK., a variant of the Sub-Mediterranean species *P. montana* (HOPPE) REICHENB. occurring mostly in the area of the Banatus. Classification of the taxon under discussion to *P. pratensis* is considered by the present author as the most justified, both from the viewpoint of its morphological features and of its ecogeographic characteristics. Soó concerned himself with this taxon several times, in detail especially in 1932 (Soó 1932); it is therefore interesting, that he always had overlooked the validly published name by JÁVORKA in the rank of subspecies; the reason might have been rooted in the fact that the name was published in the Appendix to JÁVORKA's book. Soó himself proposed for this taxon names in species and subspecies ranks with alternatives within *Anemone* and *Pulsatilla*. The names of species were published by him in *Journal of Ecology* 17 : 337, 1929, the names of subspecies in *Botanikai Közlemenyek* 29 : 124, 1932. Of these four names including the epithet "hungarica" only one, the less taxonomically important *Anemone hungarica* Soó, represents a correct name in the position and the rank used; all three other names by Soó, *Pulsatilla hungarica*, *P. pratensis* subsp. *hungarica* and *Anemone pratensis* subsp. *hungarica*, are superfluous and thus illegitimate. The first two of them have been incorrectly used in recent flora manuals (*Flora Europaea* 1 : 220, 1964; Soó Synopsis 2 : 46, 1966; *Flóra Slovenska* 3 : 132, 1982; DOSTÁL Seznam, 68, 1982). Within *Pulsatilla* the correct names of this taxon are *Pulsatilla flavescens* (HAZSL.) BOROS 1924 or *P. pratensis* subsp. *flavescens* comb. nova, respectively. The species name by BOROS was overlooked in the later literature and is not included in *Index Kewensis*. The basionym for the name of the taxon under study was published by HAZSLINSZKY in 1873 in his plant determinator of Hungarian flora; the description is given in Hungarian and is based on plants from the surroundings of Debrecen. Some authors, such as the monographers of *Pulsatilla* AICHELE et SCHWEGLER (1957), quote to the name by HAZSLINSZKY the year 1851 (i.e. *Verh. Zool. Bot. Ges. Wien* 1 : 207, 1851); however, in this place the yellowish flowering plants from eastern parts of the Nagy Alföld are mentioned, but not named. This incorrect date was taken over later also by Soó (1972). The taxon under study was named several times as *P. zichyi* SCHUR (*Oesterr. Bot. Zeitschr.* 13 : 317, 1863). This name refers, however, to plants of *P. nigricans* STÖRCK with yellowish coloured flowers and representing only a colour aberration on the individual level (thus taxonomically a form or a lusus). The varietal epithet "flavescens" of HAZSLINSZKY was used in the binomial *P. flavescens* by BORBÁS in 1893 (*Természettudományi Közlöny* 25 : 331, 1893); from the text, it is, however, not clear that a species name was proposed in that publication place. Rather, only a binomial for an infraspecific taxon was published by BORBÁS in his observation on colour variations of *P. nigricans* as this was often used at that time and as it was especially characteristic of BORBÁS himself. The real author of the species binomial *P. flavescens* is BOROS (1924), who ascribed that combination to BORBÁS. JÁVORKA was influenced by BOROS, accepted his approach in the Appendix and changed there his own

original classification from the proper text of "Magyar flóra" (p. 364), where HAZSLINSZKY's taxon was included to *P. zichyi* SCHUR, given as a "paragraph" taxon to *P. nigricans* STÖRCK. The correct orthography of HAZSLINSZKY's epithet was erroneously changed by GÁYER (Magyar Bot. Láp. 16 : 56, 1917) to "*P. flavicans* HAZSL.". Some authors, most recently FUTÁK (Flóra Slovenska 3 : 132, 1982) and DOSTÁL (1982 : 68), give the species name *P. flavescens* with the authorship by BORBÁS in the synonymy as an inapplicable name with regard to the existence of a homonymic *P. flavescens* (ZUCC.) JUZEPČUK (Fl. SSSR 7 : 296, 1937); however, the name by BOROS has a clear priority: BOROS 1924 vs. JUZEPČUK 1937.

On the contrary, the name by JUZEPČUK is a later homonym of the justified name by BOROS and has to be substituted. This taxon belongs to the group of *P. patens* agg. and replaces the type taxon of that species as a geographic vicariant in southern regions of Siberia. Its relationship to further Siberian taxa of this group is not fully clear. ZAMELS (1926) classified this taxon as a subspecies of his very broadly circumscribed *P. patens*. In this circumscription the distribution area of *P. patens* agg. reaches from Central Europe to East Asia and from Alaska to central parts of North America. Within this distribution area a chain of taxa of various ranks exists, including species, subspecies and small races, the limits of which can usually be stated only with great difficulties. Marginal taxa of the chain — the European *P. patens* (L.) MILL. and the North American *P. nuttaliana* (DC.) BERCHT. et J. PRESL — are relatively well differentiated but the North Asiatic complex of taxa, where also JUZEPČUK's *P. flavescens* belongs, needs further study. The yellow-flowered plants (with exclusion of the plants from the Ural Mts.) may be excluded from the conglomerate of races under the name *P. angustifolia* TURCZ. 1840 em. JUZEPČUK 1937, described from East Siberia (the Jacutian region). The normal yellow-flowered race of the southern part of West and Central Siberia may be subordinated to this species as a subspecies, for which in this rank it is necessary to use the epithet "*flavescens*" from the name *A. flavescens* ZUCC., as this epithet was already used for a subspecies by ZAMELS in the combination *P. patens* (L.) MILL. subsp. *flavescens* (ZUCC.) ZAMELS 1926. The new combination *Pulsatilla angustifolia* subsp. *flavescens* is proposed below.

The taxon of the group of *Pulsatilla nigricans* occurring in the Great Hungarian Plain, when classified as a species, should be named *P. flavescens* (HAZSL.) BOROS 1924. In the subspecies level, which is preferred by the present author with regard to close relationship to other infraspecific members of *P. pratensis* (L.) MILL., it is necessary to propose a new nomenclatural combination. In this proposal, the use of HAZSLINSZKY's epithet "*flavescens*" in the subspecies rank by JÁVORKA has to be taken into consideration. The newly proposed name will be *Pulsatilla pratensis* subsp. *flavescens* (see below).

#### 14. *Ranunculus trichophyllus* CHAIX subsp. *ronii* (LAGGER) JÁV. 1924

Soó in his various nomenclatural papers ascribed this combination to himself (as published by him in 1938) and this is given by this author also in his rectifications to the second edition of JÁVORKA and CSAPODY, Iconographia (Soó 1975). However, JÁVORKA has clear priority over Soó in this case. It cannot be excluded, that this combination might have been published

even earlier than by JÁVORKA (1924); since DOSTÁL (1982) gives GREMLI as the author of this combination (from 1898?), which could not be revised by the present author, at the moment. Unfortunately, JÁVORKA's subspecies names are not given in the text on *Batrachium* in *Flóra Slovenska* (vol. 3, 1983), even though the whole area of Slovakia was covered by JÁVORKA's book.

15. *Rubus macrophyllus* WEIHE et NEES subsp. *schefferi* (GÁYER) JÁV. 1925

This taxon was described by GÁYER (*Magyar Bot. Láp.* 22 : 87, 1923) as an infraspecific taxon designated by an asterisk, but without giving a certain taxonomic rank or some explanation on the use of that symbol. It was included in JÁVORKA's book only in the Appendix of corrections by JÁVORKA himself. This nomenclatural combination is of no taxonomic importance, as further investigation demonstrated that the plant was identical with *Rubus villicaulis* KÖHLER (SCHEFFER 1940).

16. *Senecio sulphureus* (BAUMG.) SIMONK.

Subspecies names by JÁVORKA are correctly mentioned in the synonymy of *S. papposus* in *Flora RPR* (vol. 9, 1964). On the contrary, the monographer CUFODONTIS (1933 : 257) gave them erroneously as varieties only. These names were taken into consideration at the transfer of the corresponding epithets under the generic name *Tephrosieris* (REICHENB.) REICHENB. (HOLUB 1973).

17. *Suaeda maritima* (L.) DUM.

In this case, no „paragraph” taxa were established, all infraspecific taxa having been described together in a paragraph where the term „alfaj” was finally used for them. The combination subsp. *salsa* (L.) JÁV. 1924 for the generally accepted taxon precedes the later homonymic combination by Soó from 1951, published in the plant determinant of Hungarian flora (Soó et JÁVORKA 1951) and generally accepted from there in further literature of summarizing character (e.g. *Flora Europaea*, vol. 1; EHRENDORFER, *Liste*, ed. 2., etc.). Subsp. *vulgaris* (MOQU.-TAND.) JÁV. 1924 refers (most probably) to the type subspecies of *S. maritima*. Subsp. *salinaria* (SCHUR) JÁV. 1924 is said to be taxonomically identical with subsp. *prostrata* (PALL.) Soó 1951 and should therefore substitute that name with regard to its priority. However, taxonomic problems of the taxon by SCHUR are not clear, this refers especially to the determination of its relationship to the type subspecies of *S. maritima* and to its identity with the plant of PALLAS. The two subspecies (*maritima* and *prostrata*) are combined together in *Flora Europaea* (vol. 1, 1964).

18. *Thymus serpyllum* L.

Publication of subspecies names by LYKA under *Thymus serpyllum* L. in JÁVORKA's plant determinant precedes the publication of the same combinations in the journal *Botanikai Közlemenyek* 22 (1924–1925), edited in 1925 with certainty after the publication of the whole JÁVORKA's book. The third part of „Magyar flóra” including *Thymus* was published in April 1925; the journal *Botanikai Közlemenyek* was edited in only one number for two years (1924–1925) and contains information about the festive meeting of Hungarian botanists held at the occasion of the completion

of the edition of JÁVORKA's book on June 10th [cf. p. (34)]. By this fact the place of publication of *Thymus* subspecies names given in List I is JÁVORKA, Magyar flóra. From the taxonomic viewpoint, these subspecies combinations are less important, as the classification of all Central European (and further) members of the genus *Thymus* under only one species hardly will be accepted by competent specialists in future. Subspecies in *Thymus* are not given as "paragraph" taxa, this most probably with regard to the fact that a determination key had to be prepared for a great number of subspecies and that many infraspecific taxa on the level of formae were included to the *Thymus* subspecies. The fact that another botanist, LYKA, was the author of this text has also to be taken into consideration when explaining this different method of giving subspecies in this book. A further distinction in this genus is that subspecies are numbered in the same manner as species, so that the running numbers of species passes through without any change at the level of subspecies and continues further at the level of species. A somewhat analogical graphic arrangement is used in the genus *Mentha* (compiled by R. TRAUTMANN), but the term "alfaj" = subspecies has never been used there. Minor species of *Mentha* are numbered in the same manner as *Thymus* subspecies and some of them also have their own "paragraph" taxa. Certain subspecies names in *Mentha* were later clearly proposed by JÁVORKA in Iconographia (JÁVORKA et CSAPODY, 1929—1934); but none can be so designated from his "Magyar flóra".

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#### NEW COMBINATIONS AND NEW NAMES

- Delphinium elatum* L. subsp. *nacladense* (ZAPAL.) HOLUB, comb. nova. — Bas.: *Delphinium nacladense* ZAPALOWICZ Krytyczny Przegląd Roślinności Galicji 2 : 202, Kraków 1908. — Syn.: *Delphinium intermedium* SOL. subsp. *nacladense* (ZAPAL.) JÁV. Magyar Fl., 1284, 1925.
- Genista banatica* (SIMONK.) HOLUB, status novus. — Bas.: *Genista tinctoria* L. var. *banatica* SIMONKAI, Természetrajzi Füzetek 3 : 166, Budapest 1879.
- Hieracium borbasii* UECHTR. ex BORB. subsp. *sparsiforme* (DEGEN et ZAHN) HOLUB, comb. nova. — Bas.: *Hieracium sparsiflorum* (FRIV.) FR. subsp. *sparsiforme* DEGEN et ZAHN, Magyar Bot. Láp. 5 : 79, Budapest 1906.
- Prunus domestica* L. subsp. *cyclopetala* (BORB.) HOLUB, comb. nova. — Bas.: *Prunus cyclopetala* BORBÁS Bekésmegye Fl., 100, 1881. — Syn.: *Prunus spinosa* L. subsp. *cyclopetala* (BORB.) JÁV. ex Soó Nomenclator Borbasianus, 38, 1931.
- Pulsatilla angustifolia* TURCZ. subsp. *flavescens* (ZUCC.) HOLUB, comb. nova. — Bas.: *Anemone flavescens* ZUCCARINI, Flora 9 : 371, Regensburg 1826. — Syn.: *Pulsatilla patens* (L.) MILL. subsp. *flavescens* (ZUCC.) ZAMELS, Acta Horti Bot. Univ. Latviensis 1 : 95, Riga 1926.
- Pulsatilla pratensis* (L.) MILL. subsp. *flavescens* (HAZSL.) HOLUB, comb. nova. — Bas.: *Anemone pratensis* L. var. *flavescens* HAZSLINSZKY Magyarhon Edényes Növényeinek Füveszeti Kézikönyve, 163, Pest 1872. — Syn.: *Pulsatilla australis* (HEUFF.) SIMONK. subsp. *flavescens* (HAZSL.) JÁV. Magyar Fl., 1284, 1925.

#### SUMMARY

The important plant determinator "Magyar flóra" by JÁVORKA edited in 1924—1925 for the area of Hungary, in its delimitation at the beginning of this century, includes infraspecific taxa in ranks from the variety to the minor species as well as taxa originating in culture usually without indication of their rank. These taxa are given after the species names in separate paragraphs (so called "paragraph" taxa). They are designated in individual cases as subspecies by using

the Hungarian term "alfaj". The names published validly here perhaps for the first time were selected and List I was compiled from them, containing 55 subspecies names. List II contains 14 subspecies names from Soó's revision "Nomenclator Borbasianus" where Soó used names of JÁVORKA's "paragraph" taxa in the rank of subspecies for explanation of names proposed by BORBÁS; Soó ascribed JÁVORKA's authorship to these subspecies names.

Observations of nomenclatural and sometimes also of taxonomic character were added to some of these subspecies names (18 cases). Important nomenclatural results of this study can be summarized into three following points:

1. Selection of subspecies names from JÁVORKA, Magyar flóra, which may be important for use in contemporary taxonomy and nomenclature:  
*Botrychium virginianum* (L.) Sw. subsp. *europaeum* (ANGSTR.) JÁV. 1924  
*Carex sempervirens* VILL. subsp. *laviflora* (SCHUR) JÁV. 1925  
*Cochlearia pyrenaica* DC. subsp. *tatrae* (BORB.) JÁV. 1924  
*Genista tinctoria* L. subsp. *banatica* (SIMONK.) JÁV. 1925,  
subsp. *oligosperma* (ANDRAE) JÁV. 1925  
*Suaeda maritima* (L.) DUM. subsp. *salsa* (L.) JÁV. 1924.
2. Proposal of new subspecific combinations on the basis of the use of subspecies names by JÁVORKA:  
*Delphinium elatum* L. subsp. *nacladense* (ZAPAL.) HOLUB  
*Pulsatilla pratensis* (L.) MILL. subsp. *flavescens* (HAZSL.) HOLUB.
3. Proposal of new nomenclatural combinations on the basis of a study of certain taxa included in JÁVORKA, Magyar flóra:

*Genista banatica* (SIMONK.) HOLUB

*Hieracium borbasii* UECHTR. ex BORB. subsp. *sparsiforme* (DEGEN et ZAHN) HOLUB

*Prunus domestica* L. subsp. *cyclopetala* (BORB.) HOLUB

*Pulsatilla angustifolia* TURCZ. em. JUZEPEČUK subsp. *flavescens* (ZUCC.) HOLUB.

From the viewpoint of taxonomy, problems of classification of *Carex sempervirens* VILL. were shown. For temporary classification of West Carpathian plants occurring on silicate bedrock, the name subsp. *silicicola* HOLUB nomen prov. ad inter. is proposed.

## SOUHRN

Jávorkovo významné určovací dílo „Magyar flóra“ vydané v letech 1924–1925 pro území starých Uher obsahuje vnitrodruhové taxony v rámci taxonomických hodnot varieta – drobný druh (většně kulturních taxonů) zpravidla bez přesnějšího určení jejich taxonomické hodnoty. Tyto taxony jsou uvedeny za druhovým jménem v samostatných odstavcích (odtud označení „odstavcové“ taxony). V jednotlivých případech jsou však některé tyto taxony určeny jako subspecie pomocí maďarského termínu „alfaj“. Jména těchto subspecií byla vybrána a byl z nich sestaven abecední seznam – „List I.“, obsahující celkem 55 validně publikovaných jmen. Vzhledem k těsné návaznosti Soóva revizního nomenklatorického díla „Nomenclator Borbasianus“, kde Soó užil jména Jávorkových „odstavcových“ taxonů jako oprávněná jména subspecií, byla provedena ještě i nomenklatorická revize tohoto díla. Jména subspecií s askribovaným autorstvím Jávorkovým byla vybrána a z nich sestaven druhý abecední seznam – „List II.“, obsahující celkem 14 jmen.

K vybraným 18 případům byly připojeny nomenklatorické a zčásti i taxonomické poznámky. Důležitější nomenklatorické výsledky předložené studie lze shrnout do tří následujících bodů:

1. Stanovení jmen subspecií z Jávorkova díla „Magyar flóra“, která mohou být užitečná pro současné taxonomické klasifikace:  
*Botrychium virginianum* (L.) Sw. subsp. *europaeum* (ANGSTR.) JÁV. 1924  
*Carex sempervirens* VILL. subsp. *laviflora* (SCHUR) JÁV. 1925  
*Cochlearia pyrenaica* DC. subsp. *tatrae* (BORB.) JÁV. 1924  
*Genista tinctoria* L. subsp. *banatica* (SIMONK.) JÁV. 1925  
subsp. *oligosperma* (ANDRAE) JÁV. 1925  
*Suaeda maritima* (L.) DUM. subsp. *salsa* (L.) JÁV. 1924.
2. Navržení nových subspecifických kombinací na základě Jávorkových jmen subspecií:  
*Delphinium elatum* L. subsp. *nacladense* (ZAPAL.) HOLUB  
*Pulsatilla pratensis* (L.) MILL. subsp. *flavescens* (HAZSL.) HOLUB.
3. Navržení nových nomenklatorických kombinací na základě studia nomenklatorické a taxonomické problematiky určitých taxonů Jávorkova díla „Magyar flóra“:  
*Genista banatica* (SIMONK.) HOLUB

*Hieracium borbasii* UECHTR. ex BORB. subsp. *sparsiforme* (DEGEN et ZAHN) HOLUB

*Prunus domestica* L. subsp. *cyclopetalata* (BORB.) HOLUB

*Pulsatilla angustifolia* TURCZ. em. JUZEPČUK subsp. *flavescens* (ZUCC.) HOLUB.

Z taxonomického hlediska byla věnována pozornost problematice diferenciac *Carex sempervirens* VILL.; pro dočasné označení rostlin silicikolního plemene ze Západních Karpat bylo navrženo jméno subsp. *silicicola* HOLUB nomen prov. ad inter.

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