Generally accepted plant names based on material from the Czech Republic and published in 1753–1820

Obecně přijímaná jména rostlin založená na materiálu z České republiky a publikovaná v letech 1753–1820

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Plant names based on the original material from a restricted region are scientifically important for the study of local biodiversity. Names typified with or entirely based on the original material from the Czech Republic are studied in the present paper; the names are confined to cases of generally accepted names published and taxa described in the period 1753–1820. Some names with original material coming from a border region (mostly near the Polish border) are included, too. Brief notes and references are given to introduce the authors of names and the history of their herbarium collections. New data are given on publications and herbaria of F. W. Schmidt, T. Haenke and J. E. Pohl, including examples of their handwritings; the other authors being C. Linnaeus (and J. Burser), J. Zauschner, K. L. Willdenow, J. C. Mikan, K. Sternberg, H. A. Schrader, L. Trattinick, K. B. Presl, J. S. Presl, P. M. Opiz, I. F. Tausch and H. G. L. Reichenbach. Nomenclatural and taxonomic notes are given on *Aconitum plicatum*, *Allium senescens* subsp. *montanum*, *Gagea bohemica*, *Plantago uliginosa*, *Spergularia salina*, *Valeriana officinalis*, *V. exaltata*, *V. sambucifolia* and *Veronica triloba*. A number of names are typified (lecto-, neo-, epitypes): *Allium montanum*, *Athyrium distentifolium*, *Erysimum arcuatum* (= *Barbarea vulgaris* subsp. *arcuata*), *Schmidtia* (= *Coleanthus*) *subtilis*, *Epilobium nutans*, *Ornithogalum bohemicum* (= *Gagea bohemica*), *Hieracium sudeticum*, *Myosotis sparsiflora*, *Cynoglossum* (= *Omphalodes*) *scorpioides*, *Pedicularis sudetica*, *Phyteuma nigrum*, *Plantago uliginosa* (with an identification key), *Poa laxa*, *Soldanella montana*, *Symphytum bohemicum*, *Thlaspi caerulescens*, *Valeriana exaltata* (with notes on the typification of *V. officinalis*), *V. sambucifolia*, *Veronica triloba* (with a note on the status of names in Čelakovský's works), *Viola sudetica* and *V. saxatilis.* The other names included in the list are *Avenula planiculmis*, *Cardamine amara* subsp. *opicii*, *Eriophorum vaginatum*, *Hieracium rupestre* (= *H. schmidtii*), *Luzula sudetica*, *Mentha longifolia*, *Potentilla lindackeri*, *Rosa elliptica*, *Salix silesiaca*, *Stipa capillata* and *Viola rupestris.* A few cases of names excluded from the list are also analysed: *Achillea millefolium* subsp. *sudetica*, *Alchemilla fissa*, *Carex bohemica*, *Dactylorhiza longebracteata*, *Gagea pusilla*, *Geranium bohemicum*, *Matricaria recutita*, *Veronica dentata*, *Spergularia salina* (correct name: *S. marina*), *Gentianella obtusifolia*, *Myosotis alpestris* and *Mentha rotundifolia.* For most cases, conservation status and situation at the original localities (in many cases in protected areas) are discussed.

K e y w o r d s : conservation, F. W. Schmidt, history of botany, J. E. Pohl, K. B. Presl, nomenclature, regional biodiversity, taxonomy, T. Haenke, typification

Introduction

In the cases of plant species or subspecies with large geographical ranges and/or with an extensive variation, the problem of the exact definition of plants from the locus classicus regions (i.e. typification and taxonomic interpretation) is of great scientific importance. Nomenclatural status of names published from a region, and taxonomic, population and

conservation study of the relevant taxa should be therefore considered to understand plant diversity. Moreover, together with endemics, plants described from a certain restricted territory (a country, for instance) represent an aspect of regional biodiversity that can be regarded as a part of the national heritage and national responsibility.

In the Czech Republic, there are few endemic taxa (e.g. Krahulec 2006) so that the emphasis is placed on the other taxa described from this territory, and the problem is also closely connected with correct and accepted names at a given rank. Phytodiversity of the Czech Republic continues to be in the focus of the taxonomic and conservation research (e.g. Trávníček & Zázvorka 2005, Vašut et al. 2005, Krahulec et al. 2005, Lepší & Lepší 2006). In the following text, we give an account of current generally accepted names of species and subspecies based on or interpreted according to the material from the Czech Republic. We have restricted the list to names or basionyms published in the period from 1753 to 1820. It should be added that most of the type or authentic specimens cited below are being documented and digitized within the framework of the project titled "Diversity of European Flora in Czech Herbarium Collections from the turn of 18th and 19th Centuries – National Heritage of World Importance (II)", and are going to be available on the internet. The first author began this study in the early 1980s. He later collaborated with the late J. Holub on the same topic, without published results (but see Holub 1996). Only now it has been possible to return to the problem more systematically.

The early history of botany in Bohemia and Moravia was studied in considerable detail by several outstanding botanists and historians. The contribution by Maiwald (1904) is the most important because V. Maiwald had access to numerous sources that were later destroyed or lost during wars and other difficult periods. Other essential original papers include Kühnel (1939, 1960), Klášterský et al. (1982), Skalický (1982) etc. However, the typification, nomenclatural status, and often also the taxonomy of the names described from this territory remained unresolved in most cases.

The format adopted

The inclusion of a taxon and name in the following text depends on several criteria. The most important one is an acceptance of both the taxon and the name in important current literature (floras, checklists, monographs). However, there may be exceptions to this rule in the cases when nomenclaturally incorrect names are used in the literature. Another criterion concerns the origin of type or original material: either the complete original material originates in the territory of the Czech Republic, or the only original element or a later designated lectotype or neotype comes from this country or, finally, the name is interpreted according to an epitype coming from the Czech Republic. Exceptions to this rule may be cases when the original location is uncertain (e.g. "in Sudetis Silesiae summis humidis") but there is an indication that type plants might have been collected in the border region of the Czech Republic. Last, the restriction to the period between 1753 and 1820 is not only a result of space limitation but also corresponds to our long-term interest in the initial stages of the development of botany in the territory of the present Czech Republic.

Each name is treated according to the following format:
a. Accepted name and relevant nomenclatural synonyms, always the basionym or a type donor name (wherever appropriate, notes on the literature where the name is accepted)
b. Citation of the original localities from the protologue
c. Results of the study of the original material or type, if designated (and designation of a lectotype, neotype or epitype in the cases where appropriate and the data is satisfactorily complete)
d. Notes on the distribution and variation in the Czech Republic, whenever relevant
e. Notes on the conservation status of taxa and on the protection of localities of scientific importance, when necessary.

Brief introduction to the sources of names: authors, publications and herbarium material

There are only fifteen authors who introduced plant names (or their basionyms) before 1820 that are in current use and are based on material from Bohemia or Moravia. In this section, we briefly introduce the authors, a selection of their publications where appropriate, and the herbarium sources.

Carolus Linnaeus (1707–1778) and Joachim Burser (1583–1639)

As pointed out by many authors, one of the important sources of plant material consulted by Linnaeus before 1753 was "Hortus siccus" of J. Burser, now deposited in Uppsala (UPS); a summary of relevant facts and useful references were given by Stearn (1957). It should be emphasized that Burser's herbarium was used by Linnaeus as a tool for interpretation of the "Pinax" of C. Bauhin. The "Hortus siccus" (now bound in 24 fascicles, two volumes having been destroyed by fire in 1702) was taken to Sorø, Denmark, by Burser, and in 1660, long after Burser's death, transported to Uppsala as war booty by Swedes (Speta 2000). The origin of Burser's specimens can be found in Juel (1936) who published a detailed account of the whole collection, and it is obvious that many plants were collected in Bohemia. Speta (2000) gave a list of Burser's labels where Bohemia is mentioned among localities (Burser often listed all countries or regions where he had observed the species). Our analysis of Burser's handwriting shows that, most probably, only specimens where Bohemia is given in the first place, from among several sites, should be considered as coming from the territory of the Czech Republic (on many labels, further sites were probably added later). Several specimens of the Burser herbarium from Bohemia were designated as lectotypes of Linnaean names, and these are annotated below. The "Hortus siccus" was digitized and is available at http://www-hotel.uu.se/evolmuseum/Burser01/Burser-vol01-127.jpg and at analogous sites (for numbers see Juel 1936).

Johann B. J. Zauschner (1737–1799)

Most of our knowledge of J. B. J. Zauschner comes from the work of Maiwald (1904) who studied the archives of Charles University, Prague (the archives were stolen by German troops at the very end of the World War II and totally disappeared; there are only fragments left in the current University archives). Zauschner was mainly a physician and also specialized in mineralogy. His main botanical paper was published in 1776 and contains

a description of *Ornithogalum bohemicum* (= *Gagea bohemica*). Maiwald (1904: 66) mentioned a herbarium collection of Zauschner: "Seine Pflanzensammlung erhielt das Stift Strahow". However, the collection has not been traced in the Strahov Monastery.

Franz Willibald Schmidt (1764–1796)

During about ten years of botanical activity before his untimely death, F. W. Schmidt published a number of papers and books and created about 800, mostly unpublished drawings and watercolours (Skalický 1982, Kirschner 1988). He inherited his talent for painting from important painters in his family, particularly from his famous grandfather, W. S. T. Schmidt. A contemporary of T. Haenke, he soon became a leading personality in botany in Bohemia; he described many new species and a number of them are generally accepted now. His full botanical bibliography is given in Futák & Domin (1960) and Kubát & Skalický (1999). He was very active in correspondence and herbarium exchange (Heufler 1851, Römer 1798), in botanical travelling in Bohemia and in plant collecting. His complete herbarium collection was deposited at PRC (seen and studied by Tausch, 1828) but during the times of Prof. M. Willkomm at Prague (German) University, the collection was newly prepared and incorporated into the main collection. Specimens without exact localities were thrown away, the original folders removed (only a part of handwritten labels retained); only a few species folders escaped this treatment. Now, after decades of effort, a part of the collection (about 200 specimens) has been restored, including a number of types. A collection of Schmidt's graminoid plants was saved from the Osek Monastery by I. Klášterský (before most of the Salesian cultural collections were destroyed by communists). The graminoid collection, bound in a single volume, is now deposited in the archives of the Botany Department, National Museum (PR).

Many specimens collected by F. W. Schmidt were sent to other herbaria; some of them directly by the collector (herbarium Willdenow at B, herbarium Hoffmann at MW), others by later botanists (for instance, Count Waldstein sent several specimens to Kitaibel, now at BP). It should be added that we expect Schmidt exchanged specimens with Trattinick of Vienna or with Ehrhart of Hannover but further search is needed. Of ten generally accepted names based on European material, six can be readily typified with plants collected by F. W. Schmidt. Published and unpublished figures drawn by F. W. Schmidt are also important elements of the original material of his names; they certainly serve as a good tool for the interpretation of his names (see also Skalický 1982).

A preliminary survey of plants of F. W. Schmidt in herbaria other than PRC can be obtained from the microfiche edition of the Schlechtendal's checklist of Willdenow herbarium, in Jávorka (1926–1945) for herb. Kitaibel in BP, and in Hoffmann (1825) for the plants deposited at MW. The identification of Schmidt's specimens usually follows the label notes (mainly transcribed and describing the acquisition of the specimen, e.g. "fl. bohem. ab ipso auctore per C. W." in the case of *Viola rupestris* at BP (C. W. = Comes Waldstein), or Schmidt's handwriting was recognized on one of the labels (e.g. *Viola saxatilis* in B-W, Fig. 1). Further information is given in Maiwald (1904), F. Pohl (1943), Kirschner (1988), Kirschner & Skalický (1989).

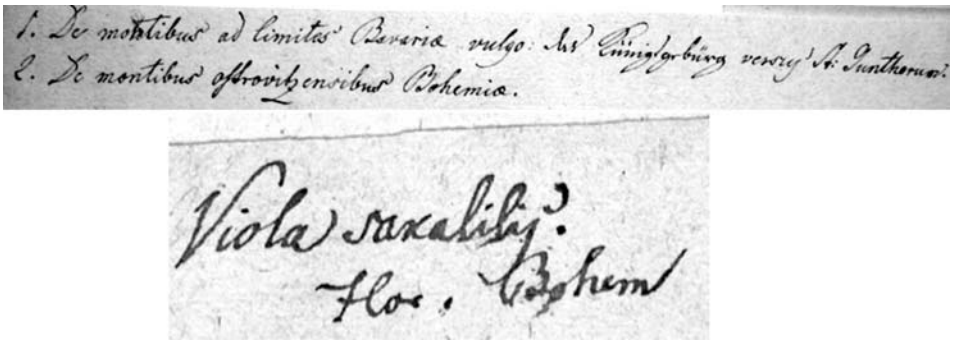

Fig. 1. – Label texts with the handwriting of F. W. Schmidt (Above: epitype of *Soldanella montana*, PRC; below: lectotype of *Viola saxatilis* F. W. Schmidt, B-W).

Thaddaeus P. X. Haenke (1761–1816 or 1817)

Among the naturalists dealt with in the present paper, T. Haenke attracted the most interest of biographers. In spite of that, there are many questions associated with his life not yet satisfactorily answered (for instance, the exact time of his death). He was born in a German family of a reeve in the village of Chřibská in N Bohemia, studied in Prague (Prof. J. G. Mikan, with whom he explored the Prague vicinity) and published several contributions to the flora of Bohemia (including the floristic report from the regions of Rakovník and Beroun). The most important of them are contributions to Jacquin's Collectanea (Haenke 1789) and botanical results of the exploration of the Giant Mts (Krkonoše, Riesengebirge) during the expedition organized by the Royal Scientific Society of Bohemia (Haenke 1791). The last botanical trips in Bohemia took place in 1786. Then, in the same year, Haenke left Prague for Vienna, where N. J. Jacquin became his patron, and Haenke travelled with his new friend J. Jacquin in S Austria. During his quite short European botanical career, Haenke described a number of new species recognized in the modern literature (e.g. *Gentiana frigida*, *G. prostrata*, *Dianthus glacialis*, *Festuca varia*) and several of them are based on material from Bohemia. In 1789, T. Haenke left Vienna to take part in the expedition of Malaspina as a Spanish royal botanist. From then on, T. Haenke became one of the most important early plant collectors in many regions (Philippines, British Columbia, California, Peru etc.) and his life and untimely death in Cochabamba was described in many books (Maiwald 1904, Kühnel 1960, Opatrný 2005). A summary of the historical data relevant to the herbarium of T. Haenke is given in Skočdopolová (1995). Recent knowledge of the Malaspina expedition is summarized in Muñoz (2001).

Visitors of the Czech Republic should not miss a visit to the small Haenke's museum at Chřibská and have a look at a memorial of T. Haenke erected by Haenke's friend František Zachariáš Römisch near Malá Skála in N Bohemia.

While the herbarium material of T. Haenke from his extra-European travels has been identified in several herbaria (mainly in PR and PRC, but also MA, W, MO etc.), the early collections prior to 1789 are difficult to recognize and it was not clear where they are de-

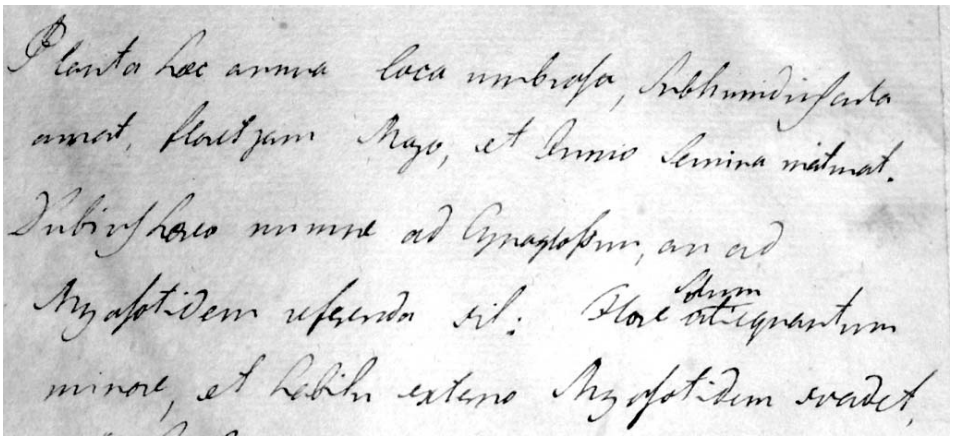

Fig. 2. – A part of the note written by T. Haenke and attached to the type specimen of *Cynoglossum scorpioides* Haenke (= *Omphalodes scorpioides*). Herbarium W. (For transliteration of the whole text, see a note on *Omphalodes scorpioides*).

posited. Four specimens were found in PR (*Pinus pumilio*, *Dianthus glacialis*, *Potentilla salisburgensis*, *Poa laxa*) but a number of them are preserved in W (herbarium of J. Jacquin; e.g. *Gentiana frigida*, *Pedicularis sudetica* [as *P. hirsuta*]; in the rare case of *Cynoglossum scorpioides*, a half-page hand written text by Haenke is attached to the herbarium sheet; Fig. 2). As far as our data goes, two names (*Gentiana elongata* and *G. prostrata*) can be typified with published illustrations, in the absence of extant herbarium material.

N o t e : It is also believed that T. Haenke sent a number of living plants to the University Botanical Garden in Prague (see also Skočdopolová 1995). Thus, an important source for the interpretation of names published by Haenke (1789) may be the rare print of F. W. Schmidt's Hortus Canalius (1790–1792, see also Skalický 1982). Schmidt created 400 water-colour plates of plants cultivated in the garden of Count Malabaila de Canal. Some of the plates bear names of plants ascribed to Haenke but never published, others represent species described by Haenke at almost the same time (e.g. the plate with *Campanula pusilla* Haenke was prepared in 1790 on the basis of cultivated material; the description of the species appeared in 1789). It is very probable that the cultivated plants were collected by Haenke himself and sent to Prague.

Karl Ludwig Willdenow (1765–1812)

It is fully justified to call Willdenow 'the father of Berlin botany', as pointed out by Stafleu (1972). In the latter work, the reader can find a concise biography of Willdenow and some further important connections between him and other botanists. K. (C.) L. Willdenow was one of the most outstanding botanists at the turn of the 18th and 19th centuries, and his opus magnum, "Species plantarum", is a massive though incomplete work of this great botanist. Willdenow was in contact with many important contemporary phytologists who often sent him their herbarium material (e.g. P. Kitaibel). F. W. Schmidt was among these

(several authentic specimens of taxa described by F. W. Schmidt are deposited in B-W, usually with a note 'Schmidt', in one case with a label written by F. W. Schmidt). Willdenow was surely in contact with J. C. Mikan and J. E. Pohl. In all likelihood, J. C. Mikan sent him living plants or seeds of *Soldanella montana*, and Pohl provided basic protologue data (see below). However, we failed to trace specimens of J. C. Mikan or Pohl in B-W.

The Willdenow herbarium (B-W) survived the Berlin–Dahlem disaster in 1943, and was made available in a microfiche edition (for details, see Stafleu 1972) with many specimens recorded electronically (http://ww2.bgbm.org/Herbarium/Default2.cfm).

Johann Christian Mikan (1769–1844) and Johann Emanuel Pohl (1782–1834)

These two outstanding naturalists often worked together during their careers, especially in the first decade of the 19th century. J. E. Pohl published descriptions of new taxa revealed by J. C. Mikan, either in botanical journals or in the "Tentamen florae bohemicae" (1809, 1814) and usually referred to an iconography prepared by J. C. Mikan at that time but never published (Skalický 1969). Because there is no evidence for J. C. Mikan's authorship of the descriptions, the names should be cited as J. C. Mikan ex Pohl. After 1814, they did not continue their study of the Central European flora and, again together, took part in the famous Brasilian expedition. Results of the examination of Brasilian collections of natural history specimens were published separately by each of them: J. C. Mikan, "Delectus florae et faunae brasiliensis" (1820–1825, in four volumes), and J. E. Pohl, "Plantarum Brasiliae icones et descriptiones" (1826–1833, in two volumes, each with four separate fascicles).

As regards their herbarium collections, much more is known about the Brasilian material (Pohl in W, duplicates in a number of other herbaria – primarily including L, J. C. Mikan probably in PR and perhaps also PRC – both still to be studied, rarely in W, e.g. *Metternichia principis*) than about their early gatherings from Bohemia. Fortunately, some of the 'J. C. Mikan ex Pohl' names can be typified by drawings cited by Pohl.

Thanks to the help of Dutch botanists (see Acknowledgements), we were able to trace the herbarium from the inheritance of J. E. Pohl (Figs 3, 4). There is evidence showing that Pohl's effects, including his personal herbarium, was bought by W. H. de Vriese (then professor in Amsterdam, The Netherlands) in 1836 and later deposited in the herbarium of Hortus botanicus in Amsterdam. However, the keepers of the AMD herbarium failed to find any specimen of the Pohl collection there. A preliminary search of the Leiden collec-

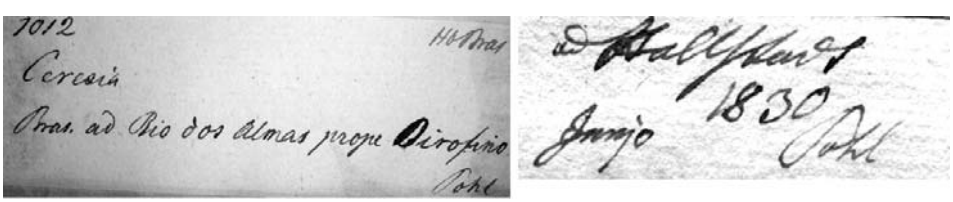

Fig. 3. – Examples of label handwriting of J. E. Pohl (left: W; right: L).

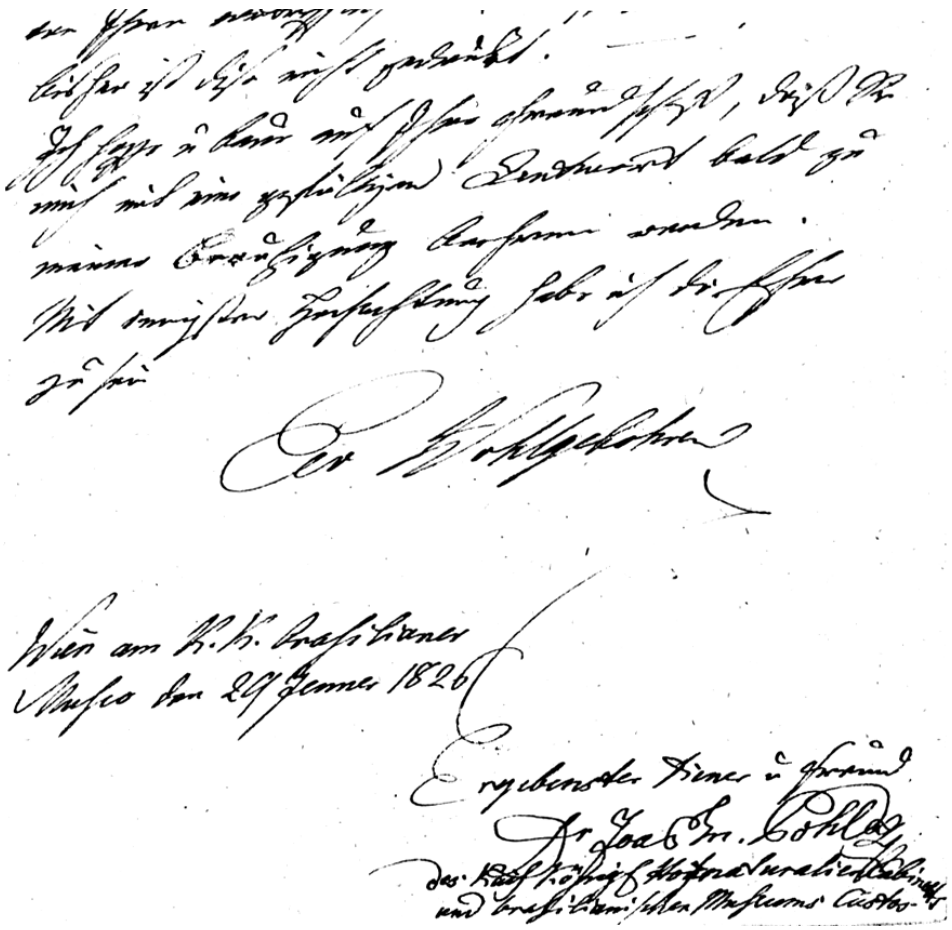

Fig. 4. – An example of the handwriting of J. E. Pohl from a letter to an unknown addressee (dated January 29, 1826). Origin: Uppsala University Archives.

tion (L) revealed two specimens collected by Pohl in Austria, probably after his return from Brasil, both under the name *Valeriana sambucifolia*. None of them can be considered as a part of the original material of the name but they represent proof that the personal herbarium of J. E. Pohl, either as a whole or as a selection of specimens, is now deposited in Leiden. One of the two *Valeriana* specimens surely bears the Pohl's handwriting. The history of the Pohl collection follows from the labels of the two specimens: One bears a note "H. H. A.", which most probably means Herbarium Horti Amstelodamensis, the other, collected by Pohl in 1830, was acquired by L with the Herbarium Oudemans (formerly a professor in Amsterdam).

As regards the handwriting of J. C. Mikan, there are several possible handwritings that might be attributed to him. The most probable candidate (from W) is shown on Fig. 5.

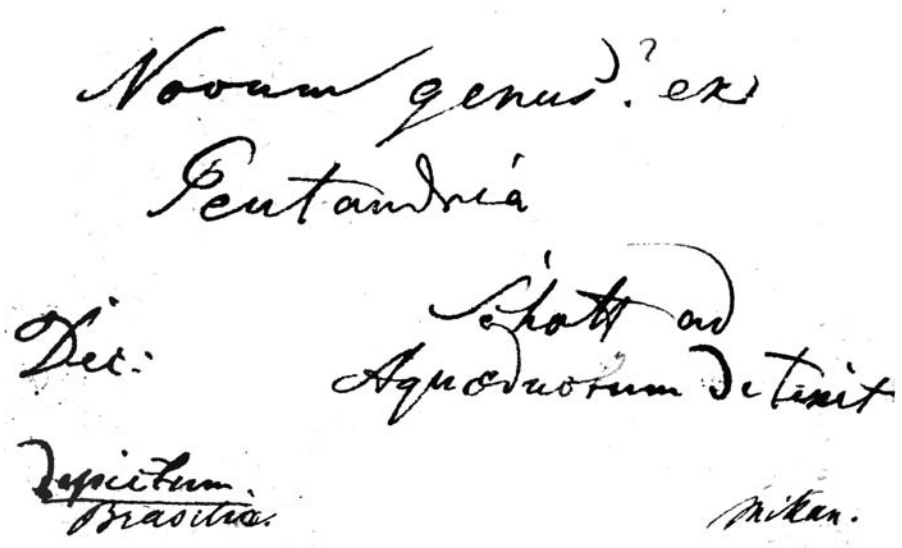

Fig. 5. – The most probable handwriting of J. C. Mikan. The text "Brasiliae. Mikan." was added by someone else. Schott's handwriting is very different from both.

Kaspar Maria Graf Sternberg, hrabě Kašpar Maria Šternberk (1761–1838)

One of the most important patrons and benefactors of botany and natural history in Bohemia was Count Kaspar M. Sternberg, one of the founders of the National Museum in 1818 in Prague. He also ranks among the most important biologists ever born in Bohemia because his Flora der Vorwelt, Versuch 1: 1–24, t. 1–13 (1820) became a starting point for the nomenclature of fossil plants. For a more detailed biography, see Maiwald (1904). Sternberg did not publish many papers dealing with flora of Bohemia, and only a single name before 1820 from the current Czech Republic is generally adopted in the literature: *Hieracium sudeticum* Sternb.

As regards the original material, the whole Sternberg collection is preserved in PR (it also includes type or authentic specimens of many names published by other authors).

Heinrich Adolph Schrader (1767–1836)

The only name from the territory of the Czech Republic published by Schrader is based on casual material: A collector, I. Seliger, sent him a specimen of *Avenula planiculmis* from the westernmost locality within the geographical range of the species, which is below the summit area of the Králický Sněžník (Glatzer Schneeberg, in N Moravia close to the Polish border). The herbarium of H. A. Schrader is preserved in LE, and scattered specimens, mostly distributed from the Göttingen Botanical Garden (where Schrader spent more than 40 years as a director), can be found in a number of herbarium collections (P, PR etc.).

Leopold Trattinick (1764–1849)

Although L. Trattinick was in close contact with Bohemian botanists (for instance, he received letters from his contemporary F. W. Schmidt, see Heufler 1851), there is only one generally accepted species from Bohemia described by Trattinick before 1820 but it is one of the most remarkable ones – *Coleanthus subtilis*. Specimens of this taxon were sent to Trattinick by Count Berchtold. The Trattinick herbarium is preserved in Vienna (W); an authentic specimen was found also in PRC.

Jan Svatopluk Presl (1791–1849) and Karel Bořivoj Presl (1794–1852)

Jan S. Presl's scientific studies of the Czech flora were short and he soon concentrated on the development of scientific terminology and nomenclature in the Czech language. His most important taxonomic contributions were published jointly with Count Berchtold in Rostlinář (e.g. new names of families and a description of *Nymphaea candida* in 1821, see Tomšovic 1995). His younger brother, K. B. Presl, became undoubtedly the most famous botanist emanating from Bohemia. His "Reliquiae Haenkeanae" (1825–1835) and "Tentamen pteridographiae" (1836) belong to the world heritage of botanical literature. Most of the species names based on plant material from Bohemia that are generally accepted nowadays were published together by both brothers in the early period of their botanical career in "Flora Čechica" (1819) and in "Deliciae Pragenses" (1822). Their later professional committments involved working at both Prague University and the National Museum (and their private studies) in a way leading to certain confusion regarding the places where their material is deposited. A part of the Czech herbarium material for the above two works is deposited at PRC (e.g. *Spergularia salina* or *Barbarea arcuata*); other specimens are found in PR (e.g. *Thlaspi caerulescens*, *Cardamine opicii*). However, almost all names introduced by the Presl brothers before 1820 can be typified by material deposited in the two Prague herbaria (PR, PRC). A detailed survey of the history of voucher material and circumstances of the research of the Presl brothers is given in Skalický (1995).

Ignaz Friedrich Tausch (1793–1848)

Ignaz F. Tausch was undoubtedly one of the most talented botanists in Bohemia in the first half of the 19th century. From 1815 to 1826 he worked as a lecturer in botany and as a botanist responsible for the botanical garden of Count Malabaila de Canal (1745–1826). He published the first volumes of another edition of "Hortus canalius" (1823), and extensively travelled and collected plants in Bohemia. It is probable that he started to collect material for his later exsiccate series (Plantae selectae, Agrostotheca bohemica, Dendrotheca bohemica, Herbarium florae bohemicae) during this early period. Only two names from before 1820 survived and are in current use (*Potentilla lindackeri* and *Rosa elliptica*). The majority of important works of Tausch were published later.

The main part of the herbarium of I. F. Tausch is deposited in PRC, including the majority of type or authentic specimens. A great number of duplicates were distributed (sold) to many other herbarium institutions as a part of the exsiccata mentioned above. As regards typification, the main problem posed dating of the exsiccates (versus the other authentic plants) in some cases.

Philipp Maximilian Opiz (1787–1858)

The most important botanical activities of P. M. Opiz (especially the Plant Exchange Institution – Pflanzentauschanstalt and the better known publications) fall in a period after 1820. The early years of his extremely active amateur's interest in botany were devoted to plant collecting; first published results appeared in rather rare journals (Hesperus, Kratos etc.). The enormous herbarium of P. M. Opiz is now deposited in PR but numerous plants are in many other collections (mainly PRC, the exchange duplicates in most major herbarium collections in Europe). In the case of the earliest collections, there are sometimes difficulties in locating the type material.

Heinrich Gottlieb Ludwig Reichenbach (1793–1879)

One of the most important botanists in Central Europe; he studied in Leipzig and as early as 1818 became an extraordinary professor at Dresden. Only one species of those he described from Bohemia or Moravia was published in the early period before 1820 and remains accepted nowadays – *Aconitum plicatum*. He regularly botanised in the border mountain ranges between Saxony and Bohemia, and was sent a rich collection from the Sudeten Mts by Johann Christian Gottlieb Koehler (1759–1833). The main part of his collections was destroyed by fire in Zwinger of Dresden in 1857, a smaller part is incorporated in the Vienna collection of Reichenbach fil. (W). However, the *Ranunculaceae* (including *Aconitum*) material was again burnt at the end of the WW II.

Account of names published from 1753 to 1820 on the basis of the material from the Czech Republic and accepted as correct names or basionyms for generally accepted taxa[1]

Aconitum plicatum Koehler ex Reichenb., Uebers. Gatt. Aconitum. 29 (1819)

L o c a l i t y : The protologue refers to a single gathering of J. C. G. Koehler: "Hab. in Sudetis. Koehler!". The locality may be situated in the Czech or Polish side of the Krkonoše / Karkonosze Mts with an equal probability; other Koehler's specimens cited by Reichenbach in his Uebersicht often come from the Czech side.

O r i g i n a l m a t e r i a l : As far as we know, the herbarium of H. G. L. Reichenbach in Dresden was destroyed by fire in the 19th century; some other specimens survived in the herbarium of Reichenbach fil. at W but the *Ranunculaceae* collection in W was destroyed during the WW II. Thus, W. Starmühler designated a neotype, a drawing probably based on the original type plants. – Type: [icon in] Reichenbach, Icon. Fl. Germ. Helv. 4: tab. 98, no. 4708d, 1840 (neotype: seen in PRC library etc., fide Starmühler, Feddes Repert. 108: 103, 2001, also reproduced in Mitka 2003: 89, plate 1).

C z e c h R e p u b l i c : Widely distributed in the border mountain areas surrounding most of the N, SW and W parts of the country, only to a limited extent reaching the neighbouring countries. – Conservation note: Type locality region is protected within the Krkonoše National Park. Protected as §3, V, also IUCN Red List (rare).

[1] Abreviations used in the text: CR – critically endangered, E – endangered, V – vulnerable, LR – lower risk (cf. Procházka 2001), § – protected by law in the Czech Republic or in the European Union.

N o t e : There is another name with an equal priority referring to the same taxon. It is *Aconitum amoenum* Reichenb., Uebers. Gatt. Aconitum 23 (1819), validated through a brief diagnosis ("Die Blumen sind an dieser Art fast himmelblau.") and with a reference to a single locality from the Sudetes (Polish side): "In Sudetis ad casam Hempelsbaude. Koehler !" The usage of *A. plicatum* was secured by the acceptance of the latter name by Starmühler in Wisskirchen & Haeupler (1998) where *A. amoenum* was simultaneously relegated to the synonymy of *A. plicatum*. This is not affected by the fact that he erroneously cited *A. amoenum* from a later publication of Reichenbach.

Other names referable to *A. plicatum* and published by Reichenbach from the Sudetes later are *A. callibotryon* Reichenbach 1821 (used by Skalický, 1988, in the Flora of the Czech Republic), *A. hians* Reichenbach 1821 etc. The name *A. laetum* Reichenbach 1819 refers to *Aconitum napellus* sensu Haenke [Haenke 1791] but Haenke did not give any diagnosis when mentioning *A. napellus*, and *A. laetum* Reichenbach was validated only in 1821 (again based on the material from the Sudetes).

N o m e n c l a t u r a l n o t e : The monograph published by Mitka (2003) is a taxonomically sound, carefully documented study. However, it suffers from a number of nomenclatural errors. For instance, neither *A. koehleri* Reichenbach nor *A. rigidum* Reichenbach were published validly in the Uebersicht in 1819 and the epithets were validated at the rank of variety later. Type designations for the two latter names by Mitka (2003) do not take effect because the typifications are contrary to Art. 7.11.

The name *Aconitum clusii* Reichenbach 1819 is a later homonym of *A. clusii* Pohl 1814, nom. illeg. Reichenbach published a substitute name, *A. clusianum* Reichenbach 1821 (repeating all the original elements of his illegitimate *A. clusii* and mentioning *A. clusii* Pohl). Thus, the name *A. clusianum* Reichenbach 1821 must be typified by one of the original elements listed in the protologue of *A. clusii* Reichenbach, and an attempt to designate a new type (Mitka 2003) does not take effect for two reasons: the typification is again contrary to Art. 7.11, and the lectotype is not a part of the original material of the name. The following original material elements are available for the typification of *A. clusii* Reichenbach 1819 in the absence of herbarium specimens: "Clus. hist. V. p. 97, Bauh. hist. III. p. 658, Chabr. sciagr. 531. F. 6, Moris. hist. III. 464. 12. t. 3. f. 17." It is obvious that none of the above drawings is based on the material from the Sudetes and the combination *A. plicatum* var. *clusianum* (Reichenbach) Mitka 2003 has a very different taxonomic meaning than that intended by the author of the combination.

Finally, both Starmühler (1997, 2001) and Mitka (2003) disregarded the fact that the name *A. napellus* cannot be typified by the neotype designated by Skalický (1982) and the typification (not yet effectively completed) must be based on the original material extant.

Allium senescens subsp. *montanum* (Pohl) Holub, Folia Geobot. Phytotax. 5: 341 (1970)

≡ *Allium montanum* F. W. Schmidt, Fl. Boem. 4: 28 (1794), nom. illeg., non Schrank 1785
≡ *Allium angulosum* var. [β] *montanum* [F. W. Schmidt] Pohl, Tent. Fl. Bohem. 2: 9 (1814)
≡ *Allium fallax* * [unranked] *montanum* (Pohl) Fr., Novit. Fl. Suec. Mant. 2: 18 (1839)
≡ *Allium acutangulum* subsp. *montanum* (Pohl) Čelak., Květ. Okolí Praž. 51 (1870)

L o c a l i t y : "… in praeruptis saxosis apricis ad undas Moldavae" [F. W. Schmidt regularly collected plants in the rocky canyon of the Vltava N of Prague, C Bohemia, and this is the most probable locus classicus. However, F. W. Schmidt also visited the Vltava canyon

in several regions south of Prague, e.g. Zbraslav, Drbákov, Osečany, and his description might have been based on the southern plants, too.].

Original material: Not extant (Kirschner 1988; herbarium collections PR, PRC, MW, B and BP consulted); there is no drawing of this *Allium*, either (Skalický 1982). – Type: C Bohemia, Štěchovice, Brunšov, rocks along the Vltava River, c. 750 m to the E of a bridge, c. 245 m a.s.l., 49°51'11" N, 14°24'52" E, 18 August, 2006, L. Kirschnerová & J. Kirschner 1609 (**neotype, designated here**: PRA 076; isoneo: PRC, PR).

Taxonomic note: From time to time, this well established subspecific name was replaced by the name *A. lusitanicum* Lam. However, the complex of *A. senescens* L. represents a complicated variable system of disjunct and partially parapatric populations where unnecessary splitting (e.g. Friesen in Gregory et al. 1998) is not a productive method. The subspecific solution was also accepted in Flora Europaea (Tutin et al. 1980) and preferred even by some authors who otherwise adopted a quite narrow species concept (Holub et al. 1970, Vvedenskiy 1935).

Czech Republic: At suitable habitats (usually base rich rocks) it is quite common in warmer areas in Bohemia and Moravia, not threatened, variation restricted. – Conservation note: LR. Several localities of possible origin of the authentic material are protected by law, e.g. in Podbaba (Natural Monument of Podbabské skály) or Drbákov (National Nature Reserve of Drbákov–Albertovy skály).

Nomenclatural notes: (1) The name *Allium montanum* F. W. Schmidt is an illegitimate later homonym. The first publication where the epithet appeared in a legitimate combination is Pohl's Tentamen (1814). The other combinations are therefore treated as referring to Pohl's name as a basionym (the other references, e.g. Holub's reference to Fries, see above, are understood as bibligraphic errors and are corrected in the relevant citation, see Arts. 33.4, 33.6). — (2) Although there were reports on the subspecific status of asterisked (*) names in Fries (l. cit.), Fries used a term "varietas primaria" for *Glyceria* infraspecific names marked with asterisk in that part of his *Mantissa altera*, which excludes their subspecific treatment (in another case, *Polygonum*, the asterisked names are to be treated as subspecies); because of the various ranks attributed to the asterisked names in that work, *Allium* names must be treated as unranked. — (3) As regards the subspecific names in Čelakovský (1870), their status was elucidated by Hendrych (1958). We can only add that Čelakovský used the Czech term "plemeno" for the names marked with Latin letters; in the parallel publications (Czech version of Prodromus and, naturally, in the German version, 1867, 1868) he equated the term "plemeno" as "subspecie" and "Unterart", respectively (for the original text see comments on *Veronica triloba*). Thus, these names in Čelakovský (1870) are, in all likelihood, to be treated as subspecies. The nomenclature of the group of *A. senescens* L. generally suffers from all sorts of nomenclatural errors and requires a thorough revision.

Athyrium distentifolium Tausch ex Opiz, Kratos 2 (1820)/1: 14 (1820) [also cited as Tent. Fl. Cryptogam. Bohem. but never issued separately]

Locality: The only locality explicitly given by Opiz is "auf dem Brunnberg am Riesengebirge unter Knieholz" [Mt Studniční in the Krkonoše Mts, NE Bohemia].

O r i g i n a l m a t e r i a l : There are several elements included in the protologue and seen by Opiz: a) "*Aspidium distentifolium* Tausch, Riesengebirg, 1819", [possibly P. M. Opiz], PR [= *A. distentifolium*], b) herb. Opiz, under the name *Polypodium distentifolium* Tausch, PR [= *A. distentifolium*], c) Funk, Cryptogam. Gew., no 408 ut *Polypodium alpestre*, [D. H. Hoppe], PRC (probably seen but not annotated by P. M. Opiz) [= *A. distentifolium*], d) Schkuhr, Kryptogam. Gew. 1: 58, tab. 60 (1806) [identification uncertain], e) Chabreus, Stirp. Icon., p. 554 (1677) [n. v.]. As the name was originally introduced by Tausch and adopted by Opiz, the best candidate for the typification is the specimen b. – Type: *Polypodium distentifolium* Tausch, sine coll., herb. P. M. Opiz [Opiz, Auth. Herb.], description on the label perfectly matches that in the protologue, all the text having been written by P. M. Opiz (**lectotype, designated here**: PR 162376; see also Plate III b in Fuchs 1974).

N o t e : Fuchs (1974) attributed a great importance to specimens from the Tausch collection (PR, PRC). These plants were distributed in Tausch's exsiccate series – Plantae Selectae Fl. Bohem. (printed labels but unnumbered, PRC) and Herbarium Fl. Bohem. (as no. 1838, PR, PRC) – both under the name *Polypodium rhaeticum* L. and both from the locality cited by P. M. Opiz: "Von Brunberge [sic!] im Riesengebirge". It is possible that the specimen seen by Opiz and annotated as *distentifolium* comes from the same gathering as the exsiccates. However, there are certain doubts about both the date of their collection and the date of their distribution and we consider it as advisable not to treat the exsiccate specimens as syntypes or isosyntypes. Opiz (1823: 116) later mentioned only one collection of *Athyrium distentifolium* seen by him – "Im Riesengebirge (Tausch)".

N o m e n c l a t u r a l n o t e : The nomenclature of "alpine lady fern" was thoroughly revised by Fuchs (1974).

C z e c h R e p u b l i c : In mountain areas, the species is relatively common. – Conservation note: Not protected. In the Krkonoše Mts, the type locality (Studniční hora) is protected within the limits of the National Park.

Avenula planiculmis (Schrad.) Sauer et Chmelitschek, Mitt. Bot. Staatssamml. München 12: 533 (1976)

≡ *Avena planiculmis* Schrad., Fl. German. 1: 381 (1806)

L o c a l i t y : "In humidis montis Schneeberg in Com. Glazensi Silesiae" [collector: I. Seliger]. The locality is situated in N Moravia, Czech Republic: the Králický Sněžník Mts, where, in the summit area above the timberline near the sources of the Morava River, a small population of the species survives.

O r i g i n a l m a t e r i a l : As there is a single locality cited in the protologue, the plants collected by I. Seliger in N Moravia should be regarded as syntypes. Another element of the original material is a nice detailed drawing of the inflorescence (tab. VI, fig. 2a, b, c). In the herbarium LE [collection Schrader (type collection of General Herbarium)], there probably were two specimens, one with the label text: "Silesia, m. Seliger", but we have failed to find the other, the one cited by Tzvelev (Tzvelev 1974) with the label text: "Gipfelwiese des Spieglitzer Schneeberges bei der Quelle des Moravaflusses [Moravia, a meadow near the spring of R. Morava, summit area of the Králický Sněžník Mts], I. Seliger". We refrain from selecting a lectotype as the latter syntype may still be found.

The collector of the type material of *Avena planiculmis* is Ignaz Seliger (1752–1812), a priest in Wölfelsdorf in Grafschaft Glatz [now Wilkanów, region of Kłodzko, Poland].

C z e c h R e p u b l i c : The locus classicus population still exists in the vicinity of the source of the River Morava. There are also populations in the Hrubý Jeseník Mts (locality: Velká kotlina, about 50 plants). – Conservation note: E; the locus classicus is protected as a National Nature Reserve.

Barbarea vulgaris subsp. *arcuata* (Opiz ex J. Presl et C. Presl) Hayek, Prodr. Fl. Penins. Balcan. 387 (1925)

≡ *Erysimum arcuatum* Opiz ex J. Presl et C. Presl, Fl. Čechica 138 (1819)
≡ *Barbarea arcuata* (Opiz ex J. Presl et C. Presl) Reichenb., Flora (Regensburg) 5: 296 (1822)

L o c a l i t y : There is a single locality given in the protologue – "Arva, segetes Pragae m. Žižkov". The place is situated on a plateau elevated above central Prague, originally called Vítkov, later Žižkov (the latter name is now used for the whole quarter of Prague). Although the elevated plateau is not wholly covered by residential areas, its appearance has altered radically (now it is partly covered by secondary woodland and scrub; there are no longer places that could be described as "arva, segetes").

O r i g i n a l m a t e r i a l : The locality given in the protologue refers to specimens collected by P. M. Opiz at Žižkov [= Mt Vítkov, Prague, C Bohemia] and deposited in PRC. There are two specimens having the same label (see below), one of them does not represent the typical *B. arcuata* whilst the other is fully eligible for the typification. – Type: "*Erysimum arcuatum* mihi, Žižkow", Opiz, sine dato. (**lectotype, designated here**: PRC, herb. typ. 548).

Dvořák (1992: 74) mentioned the authentic specimen as deposited in PR, which is a mistake.

T a x o n o m i c n o t e : This taxon is accepted at the rank of subspecies in a number of Central European floras; most recently in Fischer et al. 2005, Jäger & Werner 2005, Kubát et al. 2002. On the other hand, it is not recognized in other, equally important floras, including the Flora Europaea. Specialists in Cruciferae quite frequently accept the taxon.

C z e c h R e p u b l i c : LR. Scattered in warmer areas; extinct in the locus classicus.

Cardamine amara subsp. *opicii* (J. Presl et C. Presl) Čelak., Prodr. Fl. Böhm. 3: 449 (1875)

≡ *Cardamine opicii* J. Presl et C. Presl, Fl. Čechica 136 (1819)

L o c a l i t y : The protologue includes two localities, one from the Králický Sněžník Mts (N Moravia), the other from Mt Studniční (the Krkonoše Mts, NE Bohemia): "cum priori [= glacký Schneeberg = Králický Sněžník Mts] et in Brunnberg Sudet.".

O r i g i n a l m a t e r i a l : The material in PR (herb. P. M. Opiz) was studied by Marhold & Hrouda (1993); the only herbarium sheet belonging to the original material bears two specimens collected by Opiz, one from Glatzer Schneeberg [= Králický Sněžník Mts], the other from Brunnberg. The latter was selected as the lectotype of this name. – Type: Brunnberg, P. M. Opiz sine dato (lectotype: PR, code P4T 4683, fide Marhold & Hrouda 1993).

T a x o n o m i c n o t e : The whole group of *Cardamine amara* L. was revised by Marhold (1995) and our taxon is treated as a subspecies.

C z e c h R e p u b l i c : In the region of the lectotype locality, subsp. *opicii* is relatively rare and threatened; in the E part of the Sudetes (the Králický Sněžník, the Hrubý Jeseník) it is less rare but only scattered at suitable habitats (vicinity of springs above timberline or in glacial cirques). – Conservation note: CR, §1. The lectotype locality is protected within the Krkonoše National Park, the residual syntype locality is in a National Nature Reserve.

Coleanthus subtilis (Tratt.) Seidl ex Roemer et J. A. Schult., Syst. Veg. 2: 276 (1817)

≡ *Schmidtia subtilis* Tratt., Fl. Österr. Kaiserthums 1: 12, tab. 451 (1816)
≡ *Schmidtia utriculosa* Seidl ex Sternb., Flora 2/1: 1, 6 (1819), nom. illeg.
≡ *Wilibalda subtilis* (Tratt.) Sternb. [Flora 2/1: 6 (1819)] ex Roth, Enum. Pl. Phaen. Germ. 1/1: 92 (1827)

L o c a l i t y : The only exact locality cited ("In piscinis exsiccatis copiose circa Wosseck in dominio Zbirow circuli Beraunensis in Bohemia") most probably refers to Osek near Rokycany (W Bohemia) because there is a number of botanical records from the first decades of the 19th century from there. Sternberg published a history of the detection of the new grass (Sternberg 1819). J. S. Presl and K. B. Presl collected the species in 1811, and the material, obviously sent to several botanists, was also sent to Trattinick by Count Berchtold (two specimens). Trattinick mentioned also specimens received from H. Thomann and H. v. Portenschlag, without any exact site given. The most probable pond to be considered as the original locality at Osek is the former Schlossteich, the biggest pond in the vicinity, now no longer existing.

O r i g i n a l m a t e r i a l : One of the specimens cited in the protologue was also nicely depicted on the plate accompanying the description. After a detailed search in W, we found a syntype, a specimen from the herbarium of H. v. Portenschlag cited by Trattinick. The specimen comes from the original gathering of K. B. Presl and J. S. Presl. In the herbarium PRC, there is one element of the original material (another syntype) that reached the herbarium through the acquisition of herb. Johann Bapt. Zahlbruckner (1782–1851) who received a specimen collected by Presl from Trattinick. The label bears a text "In Bohemia prope Pilsen … leg. Presl ! Accepi ab Trattinick" [Pilsen is not far from the type locality, Wosseck = Osek]. Another element eligible for a lectotype is the drawing itself. – Type: *Schmidtia subtilis* Trattin., "Fratres Presl circa Wossek [= Osek, Vosek] in dominio Zbirow [= Zbiroh] circuli Berauniensis in humidiusculis anno [1]811 Septem. inveniunt " (**lectotype, designated here**: W). – Residual syntype: PRC.

C z e c h R e p u b l i c : *Coleanthus subtilis*, mainly due to its peculiar ecology (sandy, oligotrophic bottoms of ponds during regular dry management; for a summary see Šumberová et al. 2006), is regarded as threatened in the Czech Republic (over 60 localities were recorded in the last decade). The region of its regular, relatively frequent occurrence is the vicinity of Třeboň, S Bohemia. In W Bohemia, not far from the original locality near Osek, the species was collected repeatedly near Mýto, also recently (c. 1990, Štěpánský rybník). – Conservation note: E, also §EU protected, in the Bern Convention List and in the IUCN Red List (rare). See also Holub (1999: 103).

N o t e : For the sake of completeness, we add the generic synonymy. There are three homotypic generic names referable to our taxon, all fully based on the original material from Osek, W Bohemia.

Coleanthus Seidl ex Roemer et J. A. Schult., Syst. Veg. 2: 11 (1817), nom. cons.

≡ *Schmidtia* Trattinick, Fl. Österr. Kaiserthums 1: 12 (1816), nom. illeg., non Moench 1802
≡ *Wilibalda* Sternb. ex Roth, Enum. Pl. Phaen. Germ. 1/1: 92 (1827), nom. illeg.

Epilobium nutans F. W. Schmidt, Fl. Boem. 4: 82 (1794)

L o c a l i t y : "Habitat in turfosis alpinis. In montibus Iserae majoris fluvii; sylva Bohemica; in pratis turfosis circa Gottesgaab" [= the Jizerské hory Mts; the Šumava Mts; vicinity of Boží Dar, W Bohemia, respectively]

O r i g i n a l m a t e r i a l : There are two specimens collected by F. W. Schmidt, one (without exact locality, only with the text identifying the collector: "flor. bohem. ab ipso auctore", see also Jávorka 1929) in herb. Kitaibel (BP-KIT, no. 254a), the other from the vicinity of Boží Dar (PRC). The former has a rather uncertain identity. The latter, perfectly corresponding to what is generally understood as *Epilobium nutans*, was annotated by I. F. Tausch (see also Tausch 1828) and is selected as the lectotype. Another original element is represented by an ineffectively published (only two copies printed) drawing in F. W. Schmidt, Hortus Canalius 4: tab. 350 (1792), deposited in the Library of National Museum, Prague, under 36 A 16. – Type: "De pratis turfosis ad Gottesgaab Bohemiae", [F. W. Schmidt], sine dato (**lectotype, designated here**: PRC).

The specimen is annotated by I. F. Tausch who added a note "et e Sudetis Tau." (Fig. 6).

C z e c h R e p u b l i c : Rare in the highest mountain ranges along the border. – Conservation note: E; the lectotype locality is protected as a National Nature Reserve of Božídarské rašeliniště but it is doubtful whether the species still occurs there. Most of the other areas of occurrence are protected in the Czech Republic.

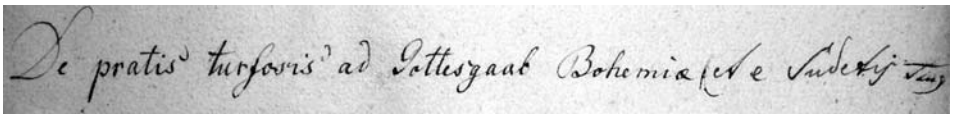

Fig. 6. – Label locality text of the lectotype of *Epilobium nutans* (PRC). The added text "et e Sudetis Tau." was written by I. F. Tausch.

Eriophorum vaginatum L., Sp. Pl. 52 (1753)

L o c a l i t y : The locus classicus depends on the typification in this case (see Original material). The label text is quite complicated: "In Bohemiae sylvis paludosis, Rhaetia, et monte S. Bernhardi Helvetior. item in Fionia copiose et Seelandia". An examination of the label shows that the first locality is to be considered as original for the collection; the others (in view of slightly different ink and handwriting) were probably added later. Thus, Bohemia is the type region, in all likelihood. As Burser lived in Annaberg near the NW border of Bohemia, we can expect that the most probable region of the collection is the Krušné hory Mts (Erzgebirge) where *Eriophorum vaginatum* is quite common now.

O r i g i n a l m a t e r i a l : Simpson in Jarvis et al. (1993) selected the lectotype, herb. Burser I: 43 (UPS). The specimen was seen in the microfiche and the internet collection; the text was also interpreted by Juel (1936) and Speta (2000). – Type: "In Bohemiae sylvis paludosis" [later added: "Rhaetiae et monte S. Bernhardi Helvetior …"], J. Burser [1616–1624] (lectotypus: UPS-Burser, Hortus Siccus, I: 43, fide Simpson in Jarvis et al. 1993: 45–46), see also http://www-hotel.uu.se/evolmuseum/Burser01/Burser-vol01-043.jpg.

N o t e : Novoselova (2001: 53) attempted to typify the name with the LINN specimen 72.1. The lectotypification did not take effect because it is in conflict with Art. 7.11 of the Code, and was published later than the publication of Simpson in Jarvis et al. (1993).

C z e c h R e p u b l i c : Quite frequent or scattered at suitable habitats, preferably in the mountains. – Conservation note: Not protected nor threatened.

Gagea bohemica (Zauschner) Schult. et Schult. f., Syst. Veg. 7: 549 (1829)

≡ *Ornithogalum bohemicum* Zauschner, Abh. Privatges. Prag 2: 121 (1776)
≡ *Ornithogalum zauschneri* Pohl, Tent. Fl. Bohem. 2: 14 (1814), nom. illeg.

L o c a l i t y : The author of this early name gives a single locality: "Scharka" [= Šárka in the W part of Prague]. Through the reference to the locality of what Zauscher called *Ornithogalum uniflorum*, we can reconstruct the exact locality: [translation from German] "It grows in Scharka near Prague on the side that approaches Moldau R." [= Vltava R.].

O r i g i n a l m a t e r i a l : A selected specimen was mentioned by Zauschner (1776); its importance was emphasized in a way that corresponds to the designation of a holotype according to modern standards: [translated from German] "In my collection of native Czech plants I keep a well preserved specimen of this [species]; by means of this original specimen ["Originalstück"] no doubts will be left about the real existence of this [species]". However, Pohl (1806) did not comment on any specimen seen by him. No original material has survived in the herbarium collections consulted; the collection was not traced in the Strahov Monastery, either (cf. Maiwald 1904). There is, however, a nice drawing accompanying the description that represents one of the elements of the original material. As the only original element extant, it must be selected as a lectotype of the name *Ornithogalum bohemicum* Zauschner (Fig. 7). According to Art. 9.17 (a), the previous "lectotype" (in fact, a neotype) published by Heyn & Dafni (1977, see also Rix & Woods 1981) must be superseded. Although the figure in Zauschner (l. cit.) was considered as bad ("mala") by Pohl (1806), it is a nice engraving made according to living plants and well represents the species. As the species is quite complex taxonomically, we designate an epitype from the vicinity of the original locality. – Type: [Bohemia, Scharka], [icon in] Zauschner, Abh. Privatges. Prag 2: tab. IV, 1776 (**lectotype, designated here**; publication deposited, e.g. in Library of National Museum, Prague, or Library of Strahov Monastery, Prague, copy in PRA). – Epitype: "*Ornithogalum bohemicum* Zauschneri, De saxosis undis Moldavae" [kanyon of the Vltava R., probably N of Prague], [F. W. Schmidt], sine dat. (**epitype, designated here**: PRC; isoepitype: B-W, no 6590).

N o t e o n t h e t y p i f i c a t i o n : The previous lectotype which is superseded by the real original element, is a specimen, a plant sent to Willdenow by F. W. Schmidt and deposited in B-W under no 6590, that should never have been considered as a lectotype (at the time of publication of the name, F. W. Schmidt was twelve, and the plant may not have

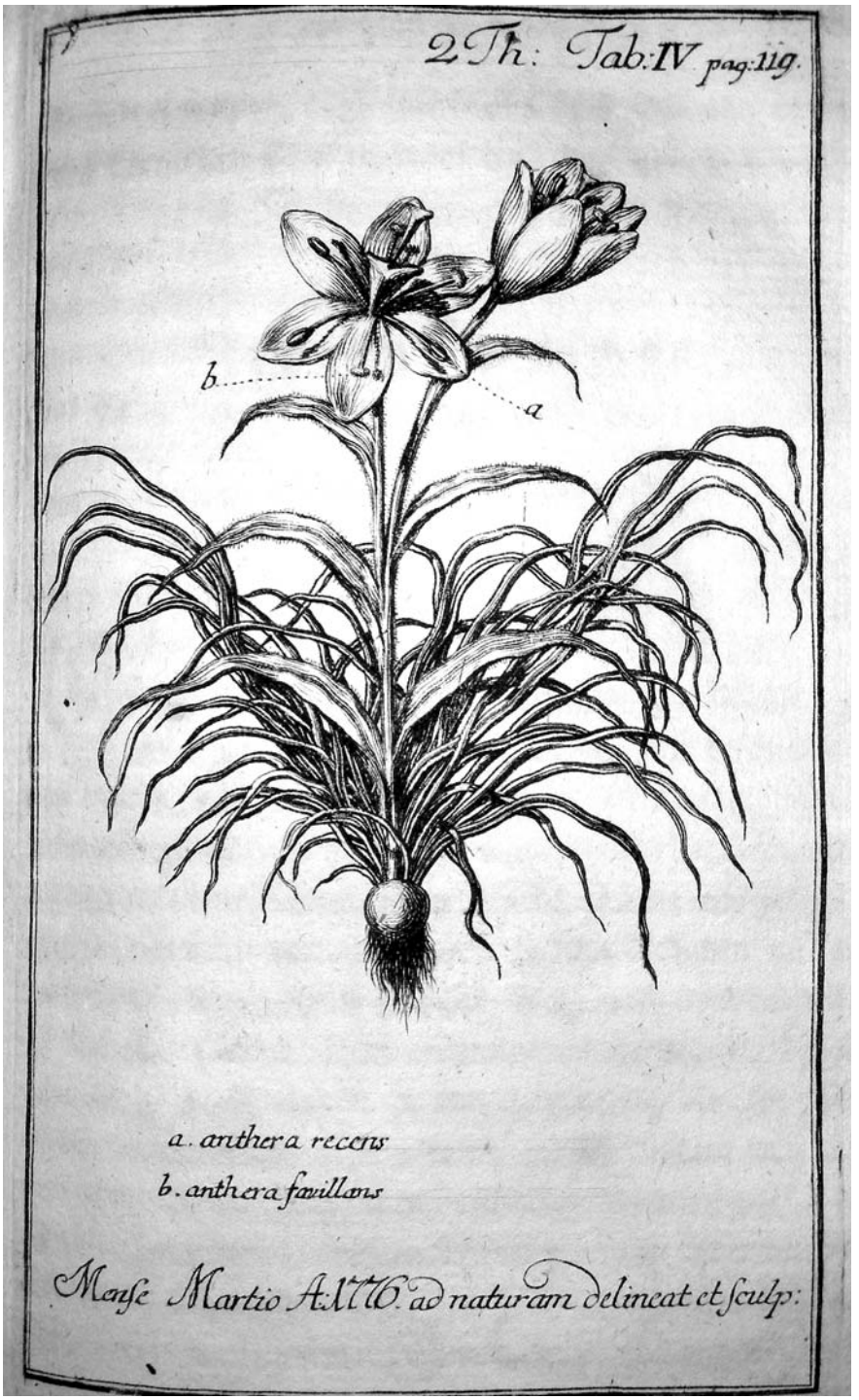

Fig. 7. – Lectotype of *Ornithogalum bohemicum* Zauschner (= *Gagea bohemica*). From Zauschner (1776).

come from the original locality: "Habitat in Bohemiae undis saxosis"). This specimen, designated by Heyn & Dafni (1977) as type, cannot automatically become an epitype (in the sense of Art. 9.8) because (Art. 9.7) when an epitype is designated, the holotype, lectotype or neotype that the epitype supports must be explicitly cited, which was not the case. Moreover, the B-W specimen is rather imperfect and not suitable for this role. On the other hand, F. W. Schmidt was one of the few botanists who was in close contact with Zauschner, and his interpretation of the name surely was based on the original idea of Zauschner. That is why the epitype selected above comes from the same source – the F. W. Schmidt collection, the material in PRC being of excellent quality. The B-W material may be considered as an isoepitype.

T a x o n o m i c n o t e : The plants from Bohemia are invariably pentaploid and asexual with vegetative spreading (Hrouda 1989) and differ in many respects from plants from other regions.

C z e c h R e p u b l i c : The description of the original locality nowadays corresponds to rocky slopes in the vicinity of Podbaba, near the confluence of the Šárecký potok [brook] and Vltava. *Gagea bohemica* is known to occur there even after 230 years. A detailed account of the localities in Bohemia is given by Hrouda (1989), together with the conservation status of the localities. – Conservation note: E, §1. The population is protected in the Nature Monument of Podbabské skály (Kubíková 1982).

Hieracium schmidtii Tausch, Index Pl. Hort. Canal, p. 6 (1821) [*Schmidtii*]

≡ *Hieracium rupestre* F. W. Schmidt, Neuere Abh. Böhm. Ges. Wiss. 1: 58, fig. 9 (1790)

This name will be dealt with separately by J. Chrtek jun. (in prep.); we limit ourselves to the fact that the figure cited above is the only original element extant.

Hieracium sudeticum Sternberg, Denkschr. Königl. Bayer. Ges. 2: 62 (1818)

L o c a l i t y : The protologue text refers to the summit region of the Krkonoše Mts: "Habitat in Sudetis circa fontes fluvii Albis [= sources of the Labe R.] et in graminosis ad apicem Veigestein dictam [= Mt Violík at the Polish border]".

O r i g i n a l m a t e r i a l : In addition to the drawing published in the protologue, there is a herbarium sheet in PR, with a label in Sternberg's handwriting that corresponds to the protologue data (but see the note below). The sheet obviously bears plants from both protologue localities, and there is no way to tell how the two provenances differ. We select the middle plant on the sheet (the one with the highest leaf number) as the lectotype. The lectotype plant most closely approaches another protologue element, the drawing on Plate I. – Type: "*Hieracium sudeticum* mihi [scr. Sternberg] – Am Elbe Ursprung und auf den Vogelstein [sic!] im Riesengebirge gesam[m]elt 1815", Sternberg (**lectotype, designated here**: PR, s. no.).

N o t e : On the label, one of the sites reads "Vogelstein", which would correspond to Mt Ptačí kámen, a locality quite remote from the sources of Labe (Elbe). In the publication itself, the name is changed to "Veigestein", also spelled Veilgestein or Veilchenstein, now Mt Violík. The label text is probably wrong because the Labe sources and Mt Violík are about half a kilometer from one another, and that may be why Sternberg put all the plants collected at both places on one herbarium sheet.

C z e c h R e p u b l i c : Restricted to the Krkonoše Mts (also found on Polish side of this mountain range) and the Jizerské hory Mts – Conservation note: V. In Bohemia, it grows only in the National Park of Krkonoše. An endemic species.

Taxonomic note: A distinct apomict, intermediate between *H. alpinum* and *H. prenanthoides*.

Luzula sudetica (Willd.) Schult., Oesterr. Fl., ed. 2, 1: 573 (1814)

≡ *Juncus sudeticus* Willd., Sp. Pl. 2: 221 (1799)

L o c a l i t y : There are three elements in the protologue that may refer to the territory of the Czech Republic: The name itself (the epithet *sudeticus* usually refers to the Krkonoše Mts), a phrase name of Micheli (1729: 42), *Juncoides bohemicum panicula minore nigricante*, *scapo super eandem erecto et longius producto*, and finally the locality given ("In Sudetis Silesiae summis humidis"). The latter region referred to is divided by the Czech/Polish border and the material may come from both countries.

O r i g i n a l m a t e r i a l : There is a specimen in the Willdenow herbarium that corresponds to the protologue and bears a label with the text: "in Sudetis". The specimen was selected as the lectotype of the name by Kirschner (1990: 113). – Type: "in Sudetis", collector unknown [probably collected or sent by F. W. Schmidt] (lectotype: B-W, no. 6837).

C z e c h R e p u b l i c : In the Krkonoše Mts, the species is quite common on wet, peaty or mineral soils, often also on slightly disturbed places. In Bohemia, it grows in almost all mountain areas, often descending to peat-bogs at lower altitudes (about 600–700 m). – Conservation note: V. The type region is protected as a National Park.

Mentha longifolia (L.) Huds., Fl. Angl. 221 (1762)

≡ *Mentha spicata* var. *longifolia* L., Sp. Pl. 576 (1753)

L o c a l i t y : The label information reads "In Bohemia sponte", which does not allow a more detailed localisation. As this is the only region mentioned on the label, there is no doubt about the inclusion of *Mentha longifolia* among names described from the Czech Republic.

O r i g i n a l m a t e r i a l : Tucker et al. (1980) selected a lectotype for the name *Mentha longifolia* from Herbarium Burser. An earlier attempt to typify the name (Hedge & Lamond, Notes Roy. Bot. Gard. Edinb. 28: 95, 1968) through an unspecified reference to the Clifford herbarium is not associated with any eligible specimen and does not take effect. – Type: In Bohemia sponte, J. Burser [1616–1624] (lectotypus: UPS-Burser, Hortus Siccus, XIII: 9), see also http://www-hotel.uu.se/evolmuseum/Burser13/Burser-vol13-009.jpg.

C z e c h R e p u b l i c : The species is common in most of the country; it is quite homogenous morphologically, invariably diploid (2n=24, see Štěpánek 1998). The species is not protected in the Czech Republic.

Myosotis sparsiflora J. C. Mikan ex Pohl, Bot. Zeitung (Erlangen) 5 (3): 41 (1806)

L o c a l i t y : In the protologue, a few sites from Prague and its vicinity are given: "Habitat Bohemiae in locis humidis umbrosis, nemorosis, ad radices fruticum praesertim ad S. Prokopj [= Svatý Prokop] – Baumgarten [= Stromovka] – Stern [= Hvězda] – Scharka [Šárka] etc."

O r i g i n a l m a t e r i a l : No original material is extant. Pohl (1806) mentioned a drawing by J. C. Mikan but it remained unpublished and later disappeared from the set of figures forming Icones plantarum selectarum of J. C. Mikan (1804), see also Skalický (1969, 1971, 1982). We consider it as appropriate to select a neotype stabilizing the application of the name in the modern sense. – Type: Czech Republic, N Bohemia, Velemín, valley of Opárenské údolí, about 60 m W of a viaduct at a tourist track junction Velemín – Opárno, alt. 275 m, 50°32'32" N, 14°00'16" E, 7 May 2007, L. Kirschnerová & J. Kirschner 1612 (**neotype, designated here**: PRA 089; isoneo: PR, PRC, W, K).

N o t e : There is a specimen, B-W no. 3272, that bears the above name but without the citation of the author on the label ("Habitat in Bohemia"). It might have been sent to Willdenow before the publication of the name but there is no evidence for attributing higher importance to it.

C z e c h R e p u b l i c : In Central Bohemia, particularly in Prague and its vicinity, the species is quite frequent at suitable sites. – Conservation note: LR. All the above localities belong to protected areas of various ranks.

Omphalodes scorpioides (Haenke) Schrank, Denkschr. Akad. Wiss. München 3: 222 (1812)

≡ *Cynoglossum scorpioides* Haenke in Jacq., Collect. Bot. 2: 3 (1789)

L o c a l i t y : The species was observed at many places by Haenke and he lists the following sites: "… frequens in horto Baumgarten dicto Pragae Bohemorum metropoli non procul [= park of Stromovka in Prague], si colles ad dextram salutaveris; frequentissima vero in nemoribus ad ripas Albis prope trajectum Stephan Ueberfuhr [a former Labe ferry now called Štěpánský Přívoz], atque ad Moldavae cum Albi unionem supra Melnick regiam urbem [= near the confluence of Vltava and Labe above Mělník]; nec uspiam alibi visa".

O r i g i n a l m a t e r i a l : No original material referable to this species is preserved in the Prague herbaria (PR, PRC). A nice specimen collected by T. Haenke, however, is deposited in W. – Type: *Cynoglossum scorpioides*, Bohemia, [T.] Haenke [herb. J. Jacquin] (**lectotype, designated here**: W).

N o t e : On the reverse side of the sheet (as often in the Jacquin's collection), there are handwritten notes and, more importantly, a mounted sheet of paper with notes written by T. Haenke. There he hesitates about the generic position of his plants: "Planta haec annua loca umbrosa, subhumidiuscula amat, floret jam Mayo, et Junio semina maturat. Dubius haereo numne ad Cynoglossum, an ad Myosotidem referenda sit: Flore solum aliquantum minore, et habitu externo Myosotidem svadet, at si semina 4 annularia latere interno styli affixa considerentur, pro Cynoglossi specie omni jure haberi possit. Semina matura a me ipso collecta rem dubiam sequenti anno solvent. Crescit in vicinia Pragensi, ad Carlsstein, et St. Ivan".

C z e c h R e p u b l i c : In warmer areas, the species is scattered, not really rare. – Conservation note: LR; the confluence area of the Vltava and Labe is a Nature Reserve of Úpor; Stromovka, also called Královská obora, represents a Nature Monument.

Pedicularis sudetica Willd., Sp. Pl. 3 (1): 209 (1800)

L o c a l i t y : "Habitat in montibus Sudetis inque Sibiria".

O r i g i n a l m a t e r i a l : In the herbarium B-W, there are several specimens of *P. sudetica*, with an accompanying label listing the collectors, probably in the same order (also corresponding to the Schlechtendal's list of herb. Willdenow. The first specimen, probably collected by F. W. Schmidt, is selected as a lectotype. – Type: "Habitat in Sudetis" [collector probably F. W. Schmidt, sine dat.] (**lectotype, designated here**: B-W, no. 11200-1).

N o t e : Another probable original element is a Willdenow specimen in the herbarium Kitaibel (BP-KIT, no. 40, see Jávorka 1934: 187). Willdenow, l. cit., gave also a reference to a *Pedicularis an hirsuta*? in Haenke, Bot. Beobacht. Riesengeb., p. 86 (1791). The specimen named *P. hirsuta* and collected by Haenke in the Giant Mts (the Krkonoše, Riesengebirge) was detected in W (herb. J. Jacquin). It represents a part of the original material and corresponds to the current concept of *P. sudetica*.

C z e c h R e p u b l i c : In the Krkonoše Mts, *P. sudetica* (subsp. *sudetica*) is quite rare and generally in decline; it used to be known from a number of localities but recently it was observed only at a few of them. – Conservation note: CR, §1, §EU. The type region is protected as a National Park. Also listed by the Bern Convention and the IUCN Red List.

Phyteuma nigrum F. W. Schmidt, Fl. Boem. 2: 87 (1793)

L o c a l i t y : The protologue gives a single site: "Habitat copiose in pratis nemoribusque circa Thermas Carolinas" [= in the vicinity of Karlovy Vary, W Bohemia].

O r i g i n a l m a t e r i a l : There is a specimen in PRC, fully corresponding to the protologue; another element of the original material is a drawing, F. W. Schmidt, Fl. Boëm. Icon. Illustr. 2: tab. 228 (1793), plates published in two printed copies only (also reprinted by F. Pohl 1943: 190). – Type: "De pratis ad margines sylvarum Bohemiae ad Thermas Carolinas" [= Karlovy Vary], [F. W. Schmidt] sine dat. (**lectotype, designated here:** PRC).

C z e c h R e p u b l i c : Restricted mostly to the W half of Bohemia, including the very north and south but excluding C Bohemia; in the regions of its occurrence, it is not rare. – Conservation note: V.

Plantago uliginosa F. W. Schmidt, Samml. Physikal. Aufsätze (Mayer) 1: 199 (1791)

L o c a l i t y : There is only a single locality given in the protologue: "… in uliginosis undis & pratis Moldavae fluvii inter Pragam & Koenigsaal" [= along the Vltava R. between Prague and Zbraslav]

O r i g i n a l m a t e r i a l : A single specimen was found in PRC; it fully corresponds to the protologue. – Type: "In inundatis versus flumen Moldavam inter Pragam & Koenigsaal" [= Zbraslav], [F. W. Schmidt] sine dat. (**lectotype, designated here**: PRC).

C z e c h R e p u b l i c : Scattered at suitable habitats in most of the country, not rare, nor endangered (but on a decreasing number of sites because of its more oligotrophic nature). It is not protected.

T a x o n o m i c n o t e : The taxonomic treatment of what is called *Plantago uliginosa* here varied much in the literature, and the taxon often is accepted at the rank of subspecies

in floras and identification keys (usually under the name *P. major* subsp. *intermedia*). There is a detailed study and a statistical analysis of the characters of *P. major* and *P. uliginosa* that (because it is written in Czech) usually escaped the attention of other authors (Pěnková 1986). The study not only analyses the population variation of the characters but also tests their stability in cultivation. The results, together with the rarity of the hybrid between the two taxa, supports the treatment of *P. uliginosa* as a separate species. For the sake of convenience, we have compiled a key to the two species using the most stable and reliable characters (there is no overlap between the ranges of means of the quantitative attributes used):

a. Seeds per capsule usually 9–40, usually 0.8–1.2 mm long, 0.5–0.7 mm wide; capsule cap usually 2–3.4 mm long, cylindrical in lower part and then tapering to the apex; split (fissura) not visible (covered by calyx segments); leaves adaxially hairy (more than 90% of individuals) ..... *Plantago uliginosa* F. W. Schmidt
b. Seeds per capsule usually 4–14, usually 1.2–1.9 mm long, 0.7–1.0 mm wide; capsule cap usually 1.5–2.5 mm long, conically tapering from the very base; split (fissura) visible above (sometimes between) calyx segments; leaves usually adaxially glabrous ..... *Plantago major* L. subsp. *major*

Poa laxa Haenke in Jirasek et al., Beobacht. Reise Riesengebirge 118 (1791)

L o c a l i t y : "[Haenke 1791: 116, Schneekoppe] der kahle, steinigte Gipfel" [= the summit area of Mt Sněžka, NE Bohemia, at the Polish border]

O r i g i n a l m a t e r i a l : We have located an authentic specimen in the herbarium PR. It represents a single plantlet with a label written by T. Haenke (also commented on by Sternberg: "Auch eine Haenkische Pflanze aus dem Meyerischen Herbarium", which means a herbarium of J. Mayer of the Royal Scientific Society of Bohemia). The label was probably written in late 1786 or early 1787, after Haenke's arrival from his trip to the Krkonoše [Riesengebirge], probably at the time when Haenke was preparing his manuscript for a publication that appeared in 1791. The specimen is selected as a lectotype below (Fig. 8). Because of the scarcity of the type material, we also designate an epitype coming from the locus classicus region. – There are also two drawings cited by Haenke, and these represent the original material extant. They are: "Scheuchz. Agrost. 163. Prodr. 19. Tab. IV.", [icon in J. Scheuchzer, Agrostographia, sive Graminum, Juncorum, Cyperorum, Cyperoidum iisque affinium historia, Tiguri, Bodmer, 1719, Tab. IV (second fig. from the left, general habit), Gramen Alp. paniculatum minus …] and "Scheuchz. It. 6. pag. 457. Tab. 6. fig. 16". Of these, the former figure very faithfully represents what is generally understood as *Poa laxa*. – Type: "*Poa laxa* a me descripta in Actis Societ. Boh. Anno 1787. *Poa* Halleri historia Nr. 1457. Lecta in Sudetis et in Styriae Alpibus" [T. Haenke] (**lectotype, designated here**: PR). – Epitype: Bohemia, the Krkonoše Mts, Mt Sněžka, scree site just below the summit plateau at the beginning of the track called Jubilejní cesta, 50°44'10" N, 15°44'25" E, 3 Jul 2007, J. Zahradníková & L. Harčariková s. n. (**epitype, designated here**: PRA 349; isoepitype: PR, PRC).

C z e c h R e p u b l i c : Restricted to the highest parts of the Krkonoše Mts; still relatively common in and below the summit area of Mt Sněžka. – Conservation note: E, §2. Species protected and the localities within the National Park.

Potentilla lindackeri Tausch, Flora (Regensburg) 2: 466 (1819)

L o c a l i t y : There are two sites listed in the protologue, both situated in the Vltava valley S of Prague: "Auf den grasigen Anhöhen des Berges hinter Grosskuchel [= Velká Chuchle in the southern part of Prague] mit *Pot. opaca*. Um Königsaal [= Zbraslav]. Opiz."

O r i g i n a l m a t e r i a l : There are three syntype sources mentioned in the protologue: A plant (or plants) from Grosskuchel collected by Tausch, then a plant collected by Opiz from Königsaal. An important part of the protologue discusses another syntype, a plant collected by Lindacker [locality not given, perhaps also Velká Chuchle] and deposited in the herbarium of Sternberg [now PR, specimen not located], originally under the name *Potentilla tormentilloides* J. Mayer.

The name was typified by Soják (2005: 69). The lectotype is a specimen deposited in LE (a rich authentic material collected by Tausch is also found in PRC and PR); the other syntypes (Opiz, Lindacker) were disregarded; Soják interprets the label text as a "vicinity of Prague". – Type: "De coll.[ibus] ad Pragam", [I. F.] Tausch, sine dat. (lectotype: LE, fide Soják 2005: 69); iso: "*Potentilla Lindackeri* Tau., De collibus ad Pragam" [written by I. F. Tausch], [I. F.] Tausch, sine dat. (isolectotype: PR, no. P4S683/4803); iso: "De collibus Boh.", [I. F.] Tausch, sine dat. (isolectotype: PRC).

N o t e : In PR the following authentic herbarium sheets with well-developed specimens of *P. lindackeri* are preserved: "De collibus Bohemiae (Tausch ipse scripsit) *Potentilla Lindackeri* Tausch ! Originale ex herb. Tauschiano" [a transcription of the original label with notes of F. Čelakovský; possible original syntype, i.e. isolectotype] (PR, no. P4S683/5026). – "Von Hügeln bei Prag, *Potentilla lindackeri* Tausch", [Tausch] Plantae selectae s. no. [C. Koch sent this sheet to Lehmann] (PR, s. no.). – "v. Hügeln um Prag" Tausch, Herb. Fl. Bohem., no 437b (PR 215767).

As regards the recent taxonomic evaluation of *P. collina*, *P. lindackeri* and their allies, two papers should be referred to: Gregor et al. (2003) and Gregor & Müller (2005).

C z e c h R e p u b l i c : Rarely in C Bohemia, exceptionally elsewhere (Saxony), always in rocky slopes in river canyons or similar sites. – Conservation note: E, §3. The locality near Velká Chuchle (now in Prague) is protected as a Nature Reserve; another reserve (Nad Závodištěm) at the rank of Nature Monument may also refer to the type locality but the species surely no longer grows there.

Rosa elliptica Tausch, Flora 2: 465 (1819)

L o c a l i t y : "Auf den dürren Abhängen des Berges hinter Grosskuchel" [= Velká Chuchle in the southern part of Prague]

O r i g i n a l m a t e r i a l : There are several specimens that were collected by Tausch and (later) identified as "*R. rubiginosa* var. *elliptica* Tau." by him. All were distributed in the exsiccate series of Tausch, Herb. Fl. Bohem., under no 492. All sheets bear a label with the text "Hügel um Kuchelbad", which fully corresponds to the type locality. There are certain doubts about the date of their collection but they probably can be considered as a part of the original material. We refrain from designating a lectotype because the search for original material continues. – Original material: Hügel(n) um Kuchelbad, I. F. Tausch, sine dat. (PR 14592; PR sine no.; PRC sine no.).

C z e c h R e p u b l i c : Unevenly scattered throughout most of the country. Conservation note: A species not protected. The locality near Velká Chuchle (now in Prague) is protected as a Nature Reserve.

Salix silesiaca Willd., Sp. Pl. 4 (2): 660 (1806)

L o c a l i t y : "Habitat in Silesiae montibus (vidi specimina)"

O r i g i n a l m a t e r i a l : There are several specimens in the herbarium B-W, no. 18116 (1-4), requiring further study and interpretation of the labels and other notes. Some of the plants probably come from the Polish side of the Krkonoše Mts (Karkonosze), where the species probably is quite common, as it is on the Czech side of the range.

C z e c h R e p u b l i c : In the northern mountains from the NE Moravia to the Krkonoše Mts and Mt Ještěd, generally not rare. – Conservation note: Many sites are protected as a part of larger reserves, including the Krkonoše National Park.

Soldanella montana Willd., Enum. Pl. Horti Reg. Bot. Berolin. 1: 192 (iv. 1809)

≡ *Soldanella montana* J. C. Mikan ex Pohl, Tent. Fl. Bohem. 1: 191 (ix. 1809) [homotypic by lectotypification, see below)

N o t e : The name *Soldanella montana* appeared, almost at the same time but probably later, also in Pohl (1809) as *S. montana* J. C. Mikan ex Pohl. Although there is no reference to the source of the name, it is highly probable that Willdenow obtained the live material of the species from J. C. Mikan, cultivated it in Hortus Berolinensis and published it in the "Enumeratio"; Pohl also was in contact with J. C. Mikan and published the name on the basis of roughly the same original material.

L o c a l i t y : Willdenow cites an abbreviated form of the localities listed by Pohl (1809): "Habitat in montibus Bohemicis [probably meant the Šumava Mts] et Passaviensibus [= Passau, Bavaria, the same mountains from the Bavarian side]". Pohl, on the other hand, listed a number of sites, mostly taken from Lindacker (1793) and Schmidt (1794).

O r i g i n a l m a t e r i a l : We have failed to trace any original herbarium material in the Willdenow collection, and the original material must be restricted to drawings. There is a reference to *Soldanella alpina* sensu F. W. Schmidt in both works, and F. W. Schmidt published a picture of the species in two iconographies, Hortus Canalius 2: 122 [errore 123] [printed in two copies in 1791], and Fl. Boëm. Icon. Illustr. 2: tab. 175 (1793), later there was also a figure in J. C. Mikan, Icones plantarum selectarum quae aut in Bohemia sponte crescunt aut Pragae in hortis coluntur, 1804, but the plate is lost, see Skalický 1971, append. 2, for discussion see also Skalický 1969). Zhang & Kadereit (2004) very wisely selected the same type for the two probably closely connected names and made them homotypic. The figure, however, does not retain the important details essential for comparison with other taxa, and we consider it as advisable to select an interpretative epitype (Fig. 9). – Type: [icon, unpublished] *Soldanella alpina* sensu F. W. Schmidt, Fl. Boem. 2: 49, plate 175 (1793) (lectotype, designated by Zhang & Kadereit 2004: 744–745: National Library, Prague, 16AA29; also photo: MJG, PRC). – Epitype for *Soldanella montana* Willd.: "*Soldanella alpina* [F. W. Schmidt scripsit], [Bohemia] De montibus ad limites Bavariae vulgo … Künigschgebürg [= Královský hvozd] versus St. Guntherum [= Dobrá Voda near Hartmanice]", [F. W. Schmidt], sine dat. (**epitype**, **designated here**: PRC). – Epitype for

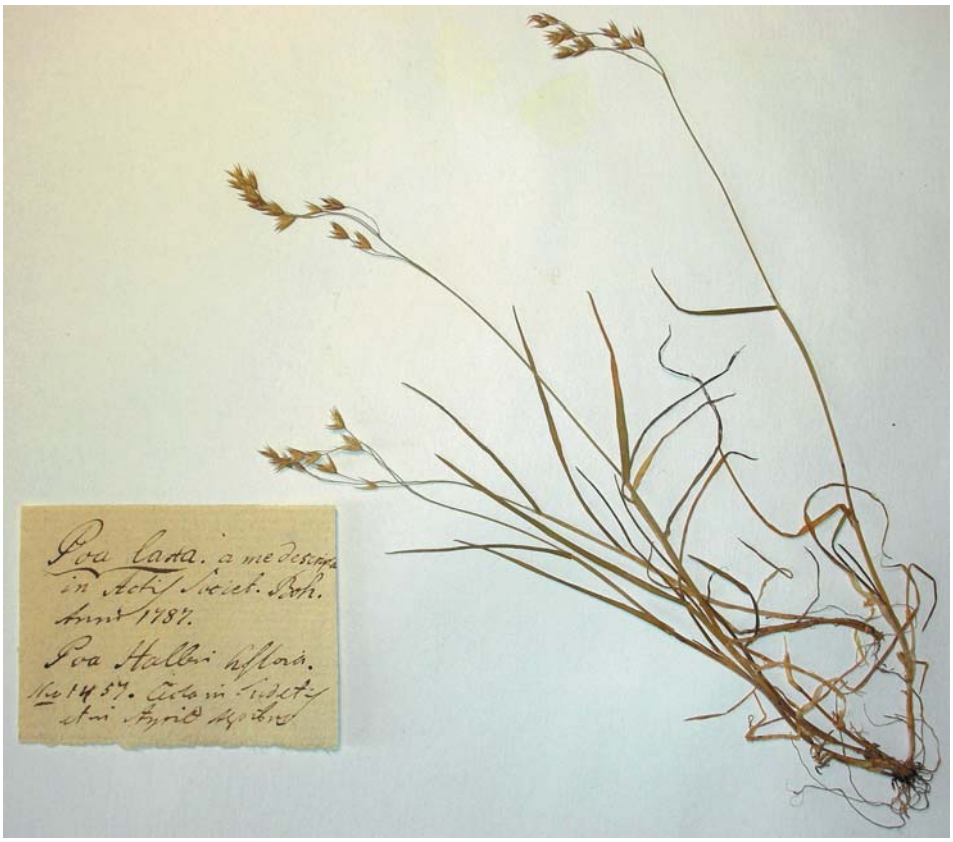

Fig. 8. – Lectotype of *Poa laxa* Haenke (PR).

Fig. 9. – Epitype of *Soldanella montana* Willd. (F. W. Schmidt, PRC). For a photo of the label text, see introductory paragraph on F. W. Schmidt. Note the sealing wax used by F. W. Schmidt.

Fig. 10. – Lectotype of the name *Valeriana sambucifolia* J. C. Mikan ex Pohl. From Mikan (ca. 1804: Plate VI).

Soldanella montana J. C. Mikan ex Pohl: "*Soldanella alpina* [F. W. Schmidt scripsit], [Bohemia] De montibus ad limites Bavariae vulgo … Künigschgebürg [= Královský hvozd] versus St. Guntherum [= Dobrá Voda near Hartmanice]", [F. W. Schmidt], sine dat. (**epitype**, **designated here**: PRC). (One specimen plays a role of both epitypes.)

C z e c h R e p u b l i c : Scattered in S Bohemia. – Conservation note: V §3; many sites in the area of origin of the original material are protected within the Šumava National Park.

Stipa capillata L., Sp. Pl., ed. 2, 1: 116 (1762)

L o c a l i t y : The protologue statement ("… in Germania, Gallia") refers to a rather diverse material requiring a careful selection of the lectotype in order to retain the current usage of the name (Freitag 1985). The lectotype specimen label reads "In Bohemia" without further details. However, it leaves no doubt about the origin of the material in the current territory of the Czech Republic.

O r i g i n a l m a t e r i a l : The name *Stipa capillata* was typified by Freitag (1985) who selected a specimen from the herbarium Burser. – Type: "In Bohemia", J. Burser [1616–1624] (lectotypus: UPS-Burser, Hortus Siccus, I: 127 [1]), see also http://www-hotel.uu.se/evolmuseum/Burser01/Burser-vol01-127.jpg.

C z e c h R e p u b l i c : This species belongs to the three most common *Stipa* species in the country and is distributed (scattered) at suitable habitats in C and N Bohemia and in C and S Moravia, quite often in protected areas. It is not seriously threatened in the Czech Republic. – Conservation note: LR; it grows in many protected areas.

Symphytum bohemicum F. W. Schmidt, Fl. Boem. 3: 13 (1794)

L o c a l i t y : The protologue refers to a group of localities in the lowlands in the N part of C Bohemia: "Habitat in pratis paludosis ad Albim fluvium non procul Melnik [= by the Labe R. near Mělník, C Bohemia] in der Auen; etiam bei der Stephansüberfuhr [= Štěpánský Přívoz]".

O r i g i n a l m a t e r i a l : There is a single plant collected by F. W. Schmidt and corresponding to the protologue; it must be considered a syntype and is deposited in PRC. – Type: "De pratis udis Bohemiae ad Melnik", [F. W. Schmidt] sine dat. (**lectotype, designated here**: PRC).

T a x o n o m i c n o t e : Although the species is not always accepted in Floras, it represents a taxon characterized by a peculiar ecology (mineral rich to subsaline alluvial meadows) and karyology (a diploid with 2n=24, Májovský 1978). It is not to be confused with a pale flowered form of the tetraploid *S. officinale*.

C z e c h R e p u b l i c : Only in the N part of Bohemia, mostly along the Labe river (see also the map in Holub 1999: 362). – Conservation note: E §3; it has become quite rare.

Thlaspi caerulescens J. Presl et C. Presl, Fl. Čechica 133 (1819)

L o c a l i t y : "Humida ad rivulos: Karlowé wary, Gottesgab, Joachimsthal; arida m. Žižkow Pragae" [Karlovy Vary, Boží Dar, Jáchymov; Mt Vítkov, Žižkov in Prague, respectively].

O r i g i n a l m a t e r i a l : In spite of several localities given in the protologue, after a detailed search of the relevant herbarium collections (PR, PRC), we found only a single

herbarium sheet with plants that must be considered as a part of the original material. The specimen is deposited in the herbarium PR (collection of Sternberg) and its label requires a certain explanation: K. B. Presl used to be in contact with Count Sternberg and presented him material of his *T. caerulescens* from several localities. All these plants, together with one plant collected by Sternberg, were mounted together on one sheet. We select a well developed specimen as the lectotype. – Type: "Bohemia ad Pragam, ad Karlsbad, Gottesgab, Joachimsthal, ad Žatec etc. Ad Březinam prope Darova [= Darová]. Specimina in diversis locis collegit K. B. Presl. Illust. comes de Sternberg jam 1809 in suis terris collegit." [all written by K. B. Presl], sine dat. [bottom left specimen designated] (**lectotype, designated here**: PR 199567).

Note: Meyer (2006: 134) designated a neotype (a specimen from Prague, collected by W. Mann in 1820, PR 199569) for *Thlaspi caerulescens*. In view of the fact that a part of the original material was detected, the neotype must be superseded by the above lectotype.

Czech Republic: Relatively common in several quite restricted areas (e.g. W Bohemia). – Conservation note: Not protected.

Valeriana officinalis L., Sp. Pl. 31 (1753)

Locality: The original locality in the Linnaeus' work is quite general – "Hab. in Europae nemoribus paludosis" – and the C European origin of the lectotype material is not much more helpful ("In Lusatia, Bohemia, Seelendia", see below). The interpretation of the name as coming from the Czech Republic is a result of the epitype selection.

Original material and type: Details of the typification procedure and the relevant argumentation is being published separately (J. Kirschner, in prep.) while the typification itself is effectively published in Jarvis (2007). Other relevant remarks on the original material of the Linnaean *Valeriana* species are found in Savage (1936). – Type: *Valeriana sylvestris major* Bauh. In Lusatia, Bohemia, Seelandia [= Lausitz, Bohemia, Sjaelland], J. Burser, Hortus Siccus, Vol. VIII, no. 100 (lectotype: UPS, fide Kirschner in Jarvis, Linn. Pl. Names & Types, p. 913, 2007). – Epitype: Czech Republic, S Bohemia, Písek, along the railway between Ražice and Heřmaň, alt. 380 m, 49°14'31" N, 14°07'30" E, 16 Aug 2006, J. Kirschner & M. Soukup no. 1608 (epitype: PRA 072; isoepitype: BM; fide Kirschner in Jarvis, Linn. Pl. Names & Types, p. 913, 2007).

Note on the location of Burser's plants in Hortus Siccus: The description of the Burser's collection was given by Juel (1928, 1936) and details of plants probably collected in Bohemia are found in Speta (2000). It should be emphasized that the locality descriptions on many labels in Hortus Siccus probably were written chronologically (on some labels it is visible that either the line thickness or the handwriting appearance differ within one label), and that, in all likelihood, only specimens with labels where Bohemia is written as the first (or the only) one may be considered as of the Czech origin. Thus, the specimen VIII: 100 probably comes from Lausitz, Germany (close to the Czech border).

Note on the typification: An attempt to typify the name *Valeriana officinalis* with the LINN specimen (Grubov 2001) does not take effect because of the conflict with Art. 7.11.

Note: A plant from the epitype population was examined karyologically; the chromosome count is 2n= c. 14 (Counted by V. Jarolímová).

A note on *Valeriana exaltata*: *Valeriana exaltata* J. C. Mikan ex Pohl, Tent. Fl. Bohem. 1: 41 (1809) has been most frequently interpreted as a synonym of *V. officinalis* L. s. str. We have failed to find any authentic herbarium material from the localities mentioned in the protologue ("Im Isergebürge, bey Königgrätz, und auf dem Schneeberge an der mährischen Gränze. Mikan. Im englischen Garten von Blattna. Pohl.") and an unpublished figure cited in the protologue is not extant, either (Skalický 1969, 1971). It is therefore advisable to stabilize the above interpretation by an appropriate neotype selection. As the neotype we select the same plant as that designated as the epitype of the name *V. officinalis* L. – Type: Czech Republic, S Bohemia, Písek, along the railway between Ražice and Heřmaň, alt. 380 m, 49°14'31" N, 14°07'30" E, 16 Aug 2006, J. Kirschner & M. Soukup no. 1608 (**neotype, designated here**: PRA 072; isoneotype: BM).

Valeriana sambucifolia J. C. Mikan ex Pohl, Tent. Fl. Bohem. 1: 41 (1809)

≡ *Valeriana officinalis* subsp. *sambucifolia* (Pohl) Čelak., Prodr. Fl. Böhm. 2: 270 (1871); isonym: Hayw., Bot. Pocket-Book 70 (1872).
≡ *Valeriana excelsa* subsp. *sambucifolia* (Pohl) Holub, Preslia 68 (1996): 286 (1997)

L o c a l i t y : The protologue text ("Im Isergebürge") refers to the Jizerské hory Mts in N Bohemia.

O r i g i n a l m a t e r i a l : There is no specimen that might be considered as the type material of the name, unless we consider as a possible syntype a specimen B-W, no 805 (*Valeriana sambucifolia*, "Habitat in Bohemia", Hortus botanicus Berolinensis, without citation of the publication place), which is uncertain. However, in an unpublished iconography of Mikan (1804: 6, see also Skalický 1969, 1971, 1982) there is a picture of a valerian under the name *Valeriana sambucifolia*; the picture is cited in the protologue of the name. Pohl (1806) also cited the J. C. Mikan's picture of *Myosotis sparsiflora* from the same iconography. The former picture (Fig. 10) is therefore the only original element eligible as the lectotype. The picture is so attractive and scientifically accurate that there is no necessity to designate any epitype; the correct interpretation is assured. – Type: [icon, unpublished] J. C. Mikan, Icones plantarum selectarum quae aut in Bohemia sponte crescunt aut Pragae in hortis coluntur, Plate 6, 1804 (**lectotype, designated here**: State Library, Prague, code 16AA73, see Skalický 1971, for discussion see also Skalický 1967; an equal copy at PRA).

C z e c h R e p u b l i c : The taxon usually called *V. officinalis* subsp. *sambucifolia* (Pohl) Čelak. or *V. excelsa* subsp. *sambucifolia* (Pohl) Holub, belongs to the complex of octoploid stoloniferous taxa that is taxonomically very intricate in many parts of Europe. In N Bohemia (in the mountains – mainly in the Jizerské hory Mts, the Krkonoše Mts) and eastwards (including the W Carpathians of Slovakia and Poland), the complex is represented by an early flowering, subglabrous to sparsely hairy taxon characterized by leaves with 2–4 pairs of leaflets. The name therefore refers to the above form. In N Bohemia, *V. sambucifolia* grows in communities that are generally threatened by the nitrogen immissions – they are gradually replaced by nitrophilous herbs. – Conservation note: LR; it occurs in a number of protected areas, including those in the Jizerské hory Mts and the Krkonoše National Park.

Veronica triloba (Opiz) Opiz, Naturalientausch 11: 467 (1826)

≡ *Veronica hederifolia* var. *triloba* Opiz, Hesperus 1815 (41): 327 (1815)
≡ *Veronica hederifolia* subsp. *triloba* (Opiz) Čelak., Prodr. Fl. Böhm. 2: 333 (1871)

N o t e : The subspecific status of the names published by Čelakovský in the German version of the Prodromus was repeatedly confirmed by nomenclaturists. The argumentation is based on the explanation of ranks in the Introduction to the first vol. of Prodromus (Čelakovský 1867: vi–vii, German version; 1868: vi–vii, Czech version): [vi] "… nimmt Man aber Rücksicht auf die bedeutenderen Abarten oder **Unterarten im Sinne des Prodromus**, die von mehreren guten Floristen noch gegenwärtig als Arten aufgezählt werden …"; [vii] "Bedeutendere Abarten, Rassen oder Unterarten …habe ich überall (unter lateinischer Buchstaben) angeführt …" (1867); [vi] "vezmeme-li však ohled na významnější odrůdy neb **poddruhy (subspecie) ve smyslu mého spisu**, kteréž někteří dobří floristové posud co zvláštní druhy uvádějí …"; [vii] "Důležitější odrůdy, poddruhy neb plemena ustálená … všude jsem (za latinským písmenem) vyčetl …" (1868). [vi: "However, if we take into account more important varieties or **subspecies in the meaning of the present publication** which have been treated as separate species by some good botanists up to now …"; vii: "More important varieties, subspecies or stabilised races … are always (following a Roman letter) listed …"]

L o c a l i t y : The protologue lists four localities in C Bohemia where P. M. Opiz observed the new taxon: "Auf Aeckern und in Saaten bei Kollin [= Kolín], um Opočinek bei Přelauč [= Opočínek E of Přelouč], dann auf der Hetzinsel [= Štvanice, a Vltava island in Prague], und um St. Prokop bei Prag [= Svatý Prokop, Prague]".

O r i g i n a l m a t e r i a l : In spite of a detailed search in herbarium collections (BRNM, PR, PRC, W, WU) we have failed to find any specimen referable to the original material. There are a few herbarium sheets with *V. triloba* and collected by Opiz under the name *V. lappago* [sensu] F. W. Schmidt or *Cochlidiospermum lappago* Opiz; these plants correspond taxonomically to the modern concept of *V. triloba* and the name change was advocated by Opiz himself (Opiz 1854). We consider it as advisable to designate a neotype for *V. hederifolia* var. *triloba*. – Type: Central Bohemia, E of Beroun, c. 1.3 km NNE of Bubovice village, arable field, calcareous soil (flowers deep blue), alt. 432 m, 49°58'49" N, 14°10'30" E, 10 Apr 2007, L. Kirschnerová & J. Kirschner 1611 (**neotype, designated here**: PRA 093; isoneo: PR, PRC, WU).

N o t e : By means of flow cytometry, plants from the neotype population were determined as diploids (2n≈18) by P. Trávníček.

Nomenclatural note: Wiesbaur, Oesterr. Bot. Zeitschr. 28: 217 (1878), is usually given as a validating publication place for the combination *Veronica triloba*. Most students looked for the combination in Opiz but after finding the name *V. hederifolia* var. *triloba* again in Naturalientausch 9: 103 (1826) they failed to examine the later lists of names in the same periodical where the epithet is accepted at the rank of species.

C z e c h R e p u b l i c : Not frequent in warmer, usually lowland areas of Bohemia and S Moravia. Details of its ecology, phytosociology and distribution are given in Kropáč (2006). – Conservation note: E; type localities are not known to be protected.

Viola lutea subsp. *sudetica* (Willd.) Nyman, Consp. Fl. Europ. 81 (1878)

≡ *Viola sudetica* Willd., Enum. Pl. Horti Reg. Bot. Berolin., suppl., p. 12 (1813)

L o c a l i t y : Not given. However, the name itself indicates the origin of the material – the Krkonoše Mts in N Bohemia.

O r i g i n a l m a t e r i a l : There is a single specimen in the Willdenow herbarium, with two very well developed and characteristic plants, and it is selected as the lectotype. – Type: "Habitat in Sudetis", collector unknown (**lectotype, designated here:** B-W, no. 4934-01).

C z e c h R e p u b l i c : A subendemic of the Sudetic Mts – Conservation note: E, §2, also IUCN Red List; protected in the Krkonoše National Park, in the Králický Sněžník and in the Hrubý Jeseník (Protected Landscape Area). There are various sources of threat, e.g. changes in the meadow management and the genetic erosion (Krahulcová et al. 1996).

Viola rupestris F. W. Schmidt, Neuere Abh. Böhm. Königl. Ges. Wiss., ser. 2, 1: 60 (1790)

L o c a l i t y : "In saxis Moldavae [the Vltava valley probably not far from Osečany], Pragae ad St. Procopium [Svatý Prokop, now in Prague], in circulo Pilsnensi in monte Schwannberg & opposito Schafsberg [two hills near Krasíkov in the vicinity of Planá u Mariánských Lázní]".

O r i g i n a l m a t e r i a l : There are at least two clear elements of the original material of the name *Viola rupestris* F. W. Schmidt. First, it is a plate accompanying the original description (Plate 10 in Schmidt 1791). A herbarium specimen in BP was sent to Kitaibel by Count Waldstein and represents an only syntype (see Kirschner & Skalický 1990). – Type: "*Viola rupestris* flor. bohem. ab ipso auctore per C. W." [= Comes Waldstein], [F. W. Schmidt] (lectotype: BP, herb. Kitaibel, no. IX/196, fide Kirschner & Skalický 1989: 315; the lectotype plant photo on p. 316; see also Jávorka 1936: 115).

N o t e : The type plant is pubescent.

C z e c h R e p u b l i c : Rare to scattered at suitable habitats and very rare in the region of the locus classicus. – Conservation note: V. The St. Prokop region and the two sites near Krasíkov are protected.

Viola tricolor subsp. *saxatilis* (F. W. Schmidt) Arcang., Comp. Fl. Ital. 77 (1882)

≡ *Viola saxatilis* F. W. Schmidt, Fl. Boem. 3: 60 (1794)

L o c a l i t y : The protologue sites are centred in the N Prague vicinity: "Habitat in saxosis gramineis, declivibus. Circa Pragam in der Podbaba, Scharka et in alliis saxis undarum Moldavae" [near Prague in Podbaba, Šárka and in other rocky places along Vltava]

O r i g i n a l m a t e r i a l : The only specimen that can be traced back to F. W. Schmidt has been found in the Willdenow herbarium. – Type: "*Viola saxatilis* Fl. Bohem." [the text was written by F. W. Schmidt], collector unknown (**lectotype, designated here:** B-W, no. 4935-01).

C z e c h R e p u b l i c : Scattered in rocky slopes of canyons in C Bohemia. – Conservation note: V; it occurs in several protected areas, especially reserves of Divoká Šárka and Dolní Šárka (Nature Monument) or Podbabské skály (Nature Monument).

Notes on selected names not included in the main list

Achillea millefolium subsp. *sudetica* (Opiz) Oborny, Fl. Mähren 657 (1885)

≡ *Achillea sudetica* Opiz, Hesperus 1813 (78): 623 (1813).

The name is based on a collection from the vicinity of a little mountain lake Mały Staw in the Polish part of the Krkonoše (Karkonosze) Mts; the original text says "1812 in der Gegend des kleinen Teiches" and the plant was observed by P. M. Opiz together with W. Erxleben. P. M. Opiz signed the paper (1813) as "Botanophil Opiz" and the accepted rank and name is given in the title of the paper. We have not located the original specimen (PR).

As the name is based on the plant from Poland (although very close to the Czech border), we do not include the name in the main list above.

Alchemilla fissa Guenth. et Schumm., Sched. Cent. Siles. Exs. 9, no. 2 (1819)

Not included in the list because it is described from the territory of Poland (Polish side of the Krkonoše Mts), see Plocek (1995).

Carex bohemica Schreb., Beschr. Abbild. Gräser 2 (2): 52, tab. 28. fig 3 (1772)

O r i g i n a l m a t e r i a l : The name is derived from the phrase name of Micheli, Nova Pl. Gen. p. 70, tab. 33, fig. 19 (1729), *Carex bohemica aquatica annua*; the picture in Micheli (l. cit.) probably was drawn according to a specimen collected by Micheli near Prague in 1712 ("In Bohemiae udis, et ad piscinarum margines copiosa, vide licet eundo Praga …"). (The specimen, however, is missing from the Micheli collection at FI). The picture represents one of the two original elements that can readily be interpreted as what is understood as *C. bohemica* currently (in the absence of the original herbarium specimens of Schreber). The other syntype was studied by Schreber himself and served as a model for a very nice drawing (tab. 28, fig. 3). The plant (not located, either) was collected by Dr. Heise of Dresden "bey Morizburg" [= Moritzburg N of Dresden]. The latter picture would be a very good candidate for the lectotype of the name provided that no earlier typification attempt takes effect. – Typification: In the Flora of the European Part of the USSR, a paragraph dealing with the type or origin of the protologue material is added after the text of each species. Egorova (1976: 213) restricted the original material to Bohemia ["Tip: Bogemiya (Bohemia)"]. If the figure in Micheli (1729) is considered as the only element from the Czech Republic, Egorova might have typified the name in an acceptable way. However, further analysis of the original material extant will be done to make a definite conclusion.

Dactylorhiza longebracteata (F. W. Schmidt) Holub, Folia Geobot. Phytotax. 18: 204 (1983)

≡ *Orchis longebracteata* F. W. Schmidt, Samml. Physikal. Aufsätze (Mayer) 1: 233, fig. 2 (1791)

Holub (l. c.) equated this name with a later *Dactylorhiza fuchsii* Druce. However, the only element of the original material extant is the drawing cited above. From the drawing, it is obvious that Holub's interpretation (originally based on another, later drawing of F. W. Schmidt; Holub, pers. comm.) is erroneous, and the name *D. longebracteata* cannot be listed among accepted names. The original drawing depicts a flower surely belonging to a species of *Orchis* (lower tepal with linear lateral lobes and deeply bifid middle lobe), which is a shape never found in *D. fuchsii* and its relatives.

Gagea pusilla (F. W. Schmidt) Sweet, Hort. Brit. 418 (1826)

≡ *Ornithogalum pusillum* F. W. Schmidt, Fl. Boem. 4: 41 (1794)

In the protologue, F. W. Schmidt listed four localities from Prague and its vicinity: "Podbaba, Troja, Liben, Mothol". One of the problems is the origin of the material used by F. W. Schmidt – *Gagea pusilla* in the modern sense is not known to have ever occurred in Bohemia; it just reaches the southernmost part of Moravia. The plant was seen by Tausch (1828) but (in view of the fact that F. W. Schmidt did not attribute much importance to the localities of his plants) it might have come from other regions, including S Moravia where F. W. Schmidt also botanised (Schmidt 1791). However, no plant referable to the original material of the name *Ornithogalum pusillum* is preserved in the herbarium collections known to have specimens collected by F. W. Schmidt (PRC, MW, BP, B).

The name was recently typified by Tisson & Perret (2004) who selected the only extant element, [icon] *Ornithogalum Pannon. luteo flore* Clusius, Rar. Pl. Hist. 189 (1601), as the lectotype. It remains to consider whether the figure needs an interpretative plant, an epitype to serve properly the nomenclatural stability.

Gentianella obtusifolia (F. W. Schmidt) Holub, Folia Geobot. Phytotax. 2: 118 (1967)

≡ *Hippion obtusifolium* F. W. Schmidt, Fl. Boem. Inch. 2: 27 (1793)

Kirschnerová & Kirschner (1997) analyzed the original material of the name and other relevant sources. It is clear that the name is based on plant material from Salzburg, Austria, as also noted by Tausch (1828). The specimen corresponding to the original (unpublished) drawing (and to another later drawing, see the analysis cited above) is suitable for lectotypification. – Type: "1. Ex fissuris rupium in alpibus Salisburgensibus, 2. De summis alpibus Salisburgensibus, dictis Tannengebürg, 3. De summis cacuminibus ad nives alpium Salisburgensium" [the three plants on the sheet are not correspondingly numbered], [J. Jirasek], top right specimen (**lectotype, designated here**: PRC, herb. F. W. Schmidt).

The relevant taxon most often appears under the name *Gentianella aspera* (Hegetschw.) Skalický, Chrtek & Gill, Preslia 38: 92 (1966) in the literature.

Geranium bohemicum L., Cent. Pl. (Torner) 2: 25 (1756)

In the protologue, three original elements are listed: A specimen (now in LINN) annotated "Habitat in Bohemia ? Miller" and obviously coming from the Chelsea Physic Garden, and two drawings, Dillenius, Hort. Elth.159, tab. 133, fig. 160 (1732) and Morison, Pl. Hist. Univ. Oxon. 2: sect. 5, 511, tab. 15, fig. 1 (1680). The latter, however, was not considered as good enough by Linnaeus ("mala"), and is not eligible as a lectotype. The epithet "*bohemicum*" doubtfully refers to Bohemia; according to Dillenius, the earliest usage of the epithet (as *suevicum seu bohemicum*) dates back to Joncquet, Hortus (Paris.), 1659, and may more probably be attributed to the contemporary Latin and French names for gypsies (the plant often grows on places of the former camp fires). The Linnaean name was typified by Novoselova, Nov. Sist. Vyssh. Rast. 31: 150 (1998), and later also by Jonsell & Jarvis, Nordic. J. Bot. 22: 79 (2002), and in both cases the LINN specimen no 858.69 was selected.

It should be added that both figures cited in the protologue can be traced back to the respective herbarium specimens, both representing *G. bohemicum* in the current meaning (Druce 1907, 1914).

Matricaria recutita L., Sp. Pl. 891 (1753)

C. Jeffrey in Jarvis (1992) selected *Matricaria recutita* L. as the type of the genus *Matricaria* L. and simultaneously typified the name itself by the following specimen: [Czech Republic, Moravia] in ruderatis ad urbem Brno, ca. 180 m, 15 vi 1925, J. Podpěra in Fl. Exs. Reipubl. Bohem.-Slov. 946/II (neotype: K; isolecto: BRNU, BRNM, PRC, PR). However, the name *M. recutita* L. is not generally accepted for the taxon in question; a possible accepted usage of the epithet might be *M. chamomilla* var. *recutita* (L.) Fiori. Applequist (in Taxon 51(4): 757–761, 2003) gives a detailed review of the nomenclature associated with this name, and accepts Jeffrey's type choice. Although both *M. chamomilla* L. and *M. recutita* L. (which has also been used for the species) date from 1753, Applequist argues that *M. chamomilla* is the correct name for chamomile, Visiani having been the first to combine the two in 1844 whilst preferring *M. chamomilla*. In view of the medicinal importance of this species, it is quite possible that an earlier simultaneous use of the two names (with *M. chamomilla* relegated to the synonymy of *M. recutita*) might be found, and the latter name would become correct (unless the former is listed among nomina conservanda).

Mentha rotundifolia (L.) Huds., Fl. Angl. 221 (1762)

≡ *Mentha spicata* var. *rotundifolia* L., Sp. Pl. 2: 576 (1753)

The name *Mentha rotundifolia* is referred to as a species described from Bohemia. The locality citation "In Bohemia sponte" appeared in Harley (in Davis, Fl. Turkey 7: 394, 1982) and later also in an authoritative article on the typification of Linnaean names in *Mentha* (Tucker et al. 1980: 235 and fig. 4, p. 244). However, as already noted by Juel (1936), the correct reading of the label [lectotype: Herb. Burser XIII: 8 (UPS), fide Tucker et al. 1980] is "In Bavaria sponte".

Another problem is associated with the interpretation of the name *M. rotundifolia*. Taxonomic interpretation in the above works corresponds to the hybrid *M. longifolia* × *M. suaveolens*, i.e. *M.* ×*niliaca* Juss. ex Jacq. 1776. However, the type plant in the Burser's herbarium represents, in all likelihood, a widespread C European morphotype of the triplod hybrid between *M. spicata* × *M. suaveolens*, and the name *M.* ×*rotundifolia* should probably replace the name *M.* ×*villosa* Huds. 1778. Further research is needed.

Myosotis alpestris F. W. Schmidt, Fl. Boem. 3: 26 (1794)

Schmidt listed three regions with the occurrence of the new species: "Habitat locis paludosis montium Iserae majoris fluvii [= the Jizerské hory, N Bohemia], Sudetorum [= the Krkonoše, N Bohemia], sylvae Bohemicae [= the Šumava Mts, S Bohemia]". It makes the impression that the species is relatively widespread in Bohemia but *M. alpestris* has never been found as a native plant in the Czech Republic. The species used to grow in a few sites on the Polish side of the Krkonoše Mts and might even have been seen by Schmidt there (now it is probably extinct from the Krkonoše Mts). There is no specimen in

PRC that might have been studied by F. W. Schmidt and could be considered as an element of the original material of the name. I. F. Tausch (1828) was the last to see *Myosotis alpestris* in Schmidt's herbarium and concluded that the plant came from the Alps. A neotype material should therefore be chosen from the E Alpine region (for karyological evidence see Štěpánková 2006).

Spergularia salina J. Presl et C. Presl, Fl. Čech. 95 (1819)

In many (if not most) floras and checklists, the above name, based on plant material from N Bohemia: "Salsa pascua: Zagečice [= Zaječice]" is preferred to *Spergularia marina* (L.) Bess., Enum. Pl. Volhyn. 97 (1822), often cited as (L.) Griseb., Spicil. Fl. Rumel. 1: 213 (1843). The essential question of this nomenclatural problem is whether the name *Arenaria rubra* var. *marina* L., Sp. Pl. 423 (1753) was elevated to the species rank before 1819. Rauschert (1973: 646) gave a detailed argumentation in favour of the fact that Allioni, Fl. Pedemont. 2: 114 (1785), did not refer his *Arenaria marina* to the Linnaean basionym but to another name; the name *Arenaria marina* (L.) Roth, Tent. Fl. Germ. 2: 482 (1789) is therefore a later homonym. However, there is a name *Stipularia marina* (L.) Haw., Syn. Pl. Succul. 104 (1812), that is based on the Linnaean basionym and represents the first name at the rank of species for the taxon in question. The name *Spergularia marina* (L.) Bess. is therefore nomenclaturally correct and *Spergularia salina* J. Presl et C. Presl must be relegated to its synonymy.

Type of *Spergularia salina* J. Presl et C. Presl: "Zagečice" [= Zaječice, N Bohemia], [scr. C. Presl], sine dat. (**lectotype, designated here**: PRC, herb. typ. 423).

Veronica dentata F. W. Schmidt, Fl. Boem. 1: 20, tab. 36, 37 (1793)

The name is no longer generally accepted and is annotated here for the sake of completeness. In the past, it appeared quite frequently as a variety or subspecies of *V. austriaca* L. in the literature.

Original material: There are two nice plates (unpublished) by F. W. Schmidt, and a specimen in BP (without original label, see Kirschner 1988: "a Schmidt auctore fl. bohem.", see also Jávorka 1936: 102). – Type: [icon] F. W. Schmidt, Fl. Boem. 1: tab. 36 (1793), unpublished (lectotype, designated by M. Martínez-Ortega, E. Rico & M. A. Fischer, Taxon 50: 189 (2001): icon, plate 36 (National Library, Prague, no. 14AA29); plate reprinted in Pohl 1943: 188. – Epitype, designated by M. Martínez-Ortega, E. Rico & M. A. Fischer, Taxon 50: 189 (2001): [Czech Republic] "vom Berge Welikahora bei Karlstein" [Velká hora near Karlštejn, C Bohemia], collector and date unknown (epitype: WU 20360).

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Souhrn

V předložené práci jsou důkladně prostudovány případy druhů a poddruhů, jejichž jména jsou založena na originálním materiálu (nebo pozdější typifikaci) z území České republiky a jsou obecně přijímána ve významných botanických pracích. Samostatnými poznámkami jsou uvedeni i autoři těchto jmen. Práce je omezena na jména publikovaná v nejstarším období české botaniky (1753–1820).

C. Linnaeus a J. Burser: Základním zdrojem pro interpretaci taxonů uvedených v Bauhinově „Pinaxu" byl pro C. Linnéa herbář sbíraný J. Burserem na začátku 17. století. Protože Burser žil po řadu let na saské straně Krušných hor, řada rostlin pochází i z Čech (jsou to zatím nejstarší herbářové sběry, které se z našeho území dochovaly). Z Burserova herbáře (UPS) byly v novější době vybrány četné lektotypy linejských jmen, a některé z nich prokazatelně z Čech. Jsou to ***Eriophorum vaginatum***, ***Mentha spicata* var. *longifolia*** (= *M. longifolia*), ***Stipa capillata***. Jméno ***Valeriana officinalis*** L. je založeno na Burserově rostlině lektotypifikací s lokalizací; do našeho soupisu patří toto jméno díky výběru epitypu. – **J. B. J. Zauschner** popsal jediný rostlinný druh, a to v r. 1776: ***Ornithogalum bohemicum*** (= *Gagea bohemica*). Popis původní lokality dnes odpovídá skalnímu ostrohu v blízkosti Podbaby na soutoku Šáreckého potoka a Vltavy (herbářový materiál je nezvěstný). – **F. W. Schmidt:** Z 10 obecně přijatých a akceptovaných jmen rostlin publikovaných F. W. Schmidtem z Evropy jich bylo 6 typifikováno Schmidtovým rostlinným materiálem. ***Epilobium nutans*** (1794, vybrán lektotyp od Božího Daru), ***Phyteuma nigrum*** (1793, lokalita lektotypu se nachází v okolí Karlových Varů), ***Plantago uliginosa*** (1791, lektotyp sbíraný mezi Prahou a Zbraslaví), ***Symphytum bohemicum*** (1794, lektotyp od Mělníka), ***Viola rupestris*** (1791, lektotyp bez přesné lokality), ***Viola saxatilis*** (1794, = *V. tricolor* subsp. *saxatilis*), jediná položka, kterou se podařilo vypátrat je uložena v herbáři B-W, a byla vybrána jako lektotyp, scheda je psána Schmidtovým rukopisem. Nepodařilo se najít žádný Schmidtův materiál ani obrázek se vztahem k jeho ***Allium montanum*** (*Allium senescens* subsp. *montanum*). Schmidt tento taxon popsal z údolí Vltavy a donedávna bylo jméno v ranku poddruhu obecně přijímáno v botanické literatuře. Nomenklatura tohoto taxonu je ovšem natolik složitá a zatížená nesčetnými omyly, že problému bude nutno věnovat samostatnou studii. Krátce je zmíněno jméno ***Hieracium schmidtii*** Tausch (***H. rupestre*** F. W. Schmidt). – **Tadeáš P. X. Haenke:** Botanik, který světově proslul jako objevitelský sběratel materiálu z řady zámořských oblastí, materiálu, který byl po Haenkeho smrti zpracován K. B. Preslem a dalšími v díle „Reliquiae Haenkeanae". Jeho první botanické práce se týkají území dnešní ČR: floristický příspěvek z okolí Rakovníka a Berouna, botanické výsledky z expedice do Krkonoš. Během svého krátkého působení v Evropě popsal několik rostlin uznávaných v současné literatuře, některé z nich jsou založeny na materiálu z Čech. U ***Cynoglossum scorpioides*** (= *Omphalodes scorpioides*) se dochovala položka v herbáři J. Jacquina. Je to jedna z mála položek u níž je delší poznámka psaná samotným Tadeášem Haenkem (obr. 2). U ***Poa laxa*** (1791) se autentický materiál podařilo nalézt v herbáři PR; nese i poměrně dlouhý Haenkeho text na schedě, psaný nejspíš ke konci r. 1786. – **K. (C.) L. Willdenow:** Tento berlínský botanik úzce spolupracoval s botaniky našimi. Některé vlastní sběry zaslal Willdenowovi (jehož herbář je uložen v B-W) sám F. W. Schmidt (v jednom případě dokonce s původním Schmidtovým rukopisem). ***Juncus sudeticus*** (1799, = *Luzula sudetica*) – typová položka "in Sudetis" je pravděpodobně sbíraná F. W. Schmidtem a byla vybraná jako lektotyp. ***Pedicularis sudetica*** (1800). – Lektotypem byla opět vybraná položka pravděpodobně sbíraná F. W. Schmidtem. ***Salix silesiaca*** (1806) – v herbáři B-W je několik položek originálního materiálu pocházejícího z Krkonoš. Vyžaduje další studium. ***Soldanella montana*** (1809) – v témže roce, avšak o pár měsíců později popsal druh pod stejným jménem také J. E. Pohl s odkazem na J. Ch. Mikana. Jako lektotyp jména byl již dříve vybrán obrázek od F. W. Schmidta a nyní jako epityp Schmidtova rostlina ze Šumavy. – ***Viola sudetica*** (1813, =*Viola lutea* subsp. *sudetica*) – jediná položka ve B-W pochází od neznámého sběratele; vybrána byla jako lektotyp. – **J. Ch. Mikan** a **J. E. Pohl:** V prvním desetiletí pracovali oba biologové často společně, poté se oba zúčastnili velké expedice do Brazílie (1817–1821) a po návratu se již české květeně nevěnovali. J. E. Pohl publikoval popisy nových taxonů, které objevil a (některé) nechal

vyobrazit J. Ch. Mikan (nepublikovaná ikonografie, Mikan, c. 1804). ***Myosotis sparsiflora*** (1806) – v protologu je uvedeno několik lokalit na území dnešní Prahy avšak originální materiál nebyl nalezen; byl proto vybrán neotyp. Obdobně je tomu u ***Valeriana exaltata*** (1809) – je synonymem k *V. officinalis*; jako neotyp *V. exaltata* byla vybrána rostlina, která hraje roli epitypu *V. officinalis*. ***Valeriana sambucifolia*** (1809) – jako lektotyp byl vybrán nepublikovaný obrázek citovaný v protologu a nyní uložený v Národní knihovně ČR. Donedávna zůstával neznámý jak rukopis J. E. Pohla, tak i uložení jeho herbáře. Rukopis je ukázán na obr. 4; podařilo se zjistit, že Pohlův osobní herbář byl po jeho smrti zakoupen do Amsterdamu a poté byl převezen do Leidenu. Rukopis J. Ch. Mikana však s naprostou jistotou ještě identifikován nebyl (pravděpodobně může být shodný s rukopisem na obr. 5); herbář tohoto autora byl hledán, ale zjištěny byly pouze jednotlivé rostliny ve W. – **Hrabě Kašpar Maria Šternberk:** Jeho sbírky vytvořily základ fondu Národního muzea, které spoluzakládal; herbářová kolekce zahrnuje také mnoho typů či autentického materiálu rostlin popsaných jinými autory. Šternberk sám je autorem jména ***Hieracium sudeticum*** (1818), v protologu jsou uvedeny dvě lokality z Krkonoš, což odpovídá i lektotypu. – **H. A. Schrader:** Schraderův hlavní herbář je uložen v LE a některé položky mohou být nalezeny i v několika dalších herbářových sbírkách, např. P, PR. Druh ***Avena planiculmis*** (= *Avenula planiculmis*) byl popsán Schraderem r. 1806 na základě rostlin z Králického Sněžníku (sbíral I. Seliger). – **L. Trattinick:** Trattinickův herbář je uložen ve Vídni, kde byl také nalezen jeden ze syntypů jména ***Schmidtia subtilis*** (1816, = *Coleanthus subtilis*); další syntyp, který se přes Trattinicka a Zahlbrucknera dostal zpět do Prahy je uložen v PRC. Všechny původní rostliny sbírali a rozeslali řadě botaniků bratři Preslové, kteří tento nový, památný rod a druh nalezli r. 1811 u Oseka – rostliny poslal Trattinickovi hrabě Berchtold. – **J. S. Presl** a **K. B. Presl:** Před r. 1820 popsali bratři Preslové z území Čech řadu rostlin ve „Flora Čechica“: ***Cardamine opicii*** (1819, = *Cardamine amara* subsp. *opicii*) – originální materiál je dochován z Krkonoš i z Králického Sněžníku. Jako lektotyp byla již dříve vybrána rostlina z lokality první. ***Thlaspi coerulescens*** (1819) – v protologu je uvedeno sice 5 lokalit, ale existuje pouze jediná položka s originálním materiálem v PR (Šternberkův herbář). Položka je složená z několika exemplářů z různých lokalit; jednu rostlinu sem přidal Šternberk, ostatní rostliny sbíral K. B. Presl. ***Erysimum arcuatum*** (1819, *Barbarea vulgaris* subsp. *arcuata*) – typová lokalita na Žižkově (lektotyp sbíral P. M. Opiz) dnes již neexistuje. – **I. F. Tausch:** Těžiště činnosti tohoto nadaného botanika leží v pozdějším období, avšak do r. 1820 pojmenoval několik obecně uznávaných taxonů rostlin pocházejících z našeho území. ***Potentilla lindakeri*** (1819) – jméno bylo typifikováno Sojákem (2005), lektotyp je uložen v LE. Autentický materiál je ovšem i v PRC a PR. Podle protologu je typovou lokalitou Velká Chuchle nebo Zbraslav. ***Rosa eliptica*** (1819) – typovou lokalitou je Velká Chuchle, originální materiál je uložen v PR a PRC. – **P. M. Opiz:** Jeden z nejpilnějších badatelů při zkoumání české květeny publikoval před r. 1820 jen několik obecně přijímaných jmen. ***Athyrium distentifolium*** (1820) bylo platně uveřejněno Opizem na základě Tauschových sběrů ze Studniční hory v Krkonoších. ***Veronica hederifolia*** **var.** ***triloba*** (1815, = *V. triloba*) – v protologu jsou uvedeny 4 lokality, avšak žádná Opizova položka vztahující se k originálnímu popisu nebyla nalezena. Byl proto vybrán neotyp z Českého krasu. – **H. G. L. Reichenbach:** Významný středoevropský botanik (Lipsko) se ve svém raném období zabýval rodem *Aconitum* a jedno z jím zavedených jmen je nyní badateli obecně přijímáno. ***Aconitum plicatum*** (1819) – typová lokalita je v Krkonoších, buďto na české nebo polské straně; obojí se stejnou pravděpodobností. Herbářové doklady studované Reichenbachem se nedochovaly a již dříve byl pro toto jméno vybrán jako neotyp obrázek v pozdější Reichenbachově práci.

Krátké poznámky jsou věnovány jménům, které nebyly zahrnuty do hlavního seznamu. Některé proto, že jejich originální materiál nepochází z ČR nebo k typifikaci takovým materiálem nejsou vhodné podmínky (*Achillea sudetica*, *Carex bohemica*, *Ornithogalum pusillum*, *Geranium bohemicum*, *Hippion obtusifolium*, *Mentha rotundifolia*, *Myosotis alpestris*, *Alchemilla fissa*); dalším důvodem bylo, že nejsou v současné taxonomické literatuře obecně přijímána (*Orchis longebracteata*, *Matricaria recutita*, *Veronica dentata*), popř. jména jsou přijímána a jsou založena na materiálu z ČR, ale nepředstavují správná jména pro daný taxon (*Spergularia salina*).

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