

# Catalogue and typifications of new taxa of vascular plants described by Mårten Magnus Wilhelm Brenner (1843–1930)

Henry Väre

*Finnish Museum of Natural History, Botanical Museum, P.O. Box 7, FI-00014 University of Helsinki, Finland (e-mail: henry.vare@helsinki.fi)*

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Mårten Magnus Wilhelm Brenner (1843–1930) was a non-professional Finnish botanist who published 220 articles or notes. Brenner worked on East Fennoscandian vascular plants (the territory of present-day Finland and adjacent Russia). He validly published ca. 833 new taxa, especially in genus *Hieracium* (including *Pilosella*), and introduced 56 names as *nomina nuda*. Brenner had no concept of type specimens and therefore all his plant taxa need typification, and 151 of those are lectotypified here. In this paper, *nomina nuda* and the taxa whose type material was not found are also listed, except those of the apomictic genera *Hieracium* and *Taraxacum*. Many of Brenner's new taxa are forms and varieties, generally not recognised nowadays. Many of his taxa were based on single or few specimens and therefore were characterised by local distributions, whereas some include ample original material. Finnish botanists generally ignored Brenner's contributions to taxonomy. However, 11 species of *Hieracium*, 20 of *Taraxacum* and *Euphrasia stricta* var. *tenuis* (Brenner) Jalas are currently recognised, and recently also *E. wettsteinii* var. *botniensium* (Brenner) Piirainen. Together Brenner's type collection treated here consists of 254 sheets (*Hieracium* and *Taraxacum* excluded), deposited at the Botanical Museum (H), Finnish Museum of Natural History, University of Helsinki, Finland.

## Introduction and background

Mårten Magnus Wilhelm Brenner (1843–1930; Fig. 1) graduated from the Porvoo secondary school in 1861. He went on to study natural sciences at the Imperial Alexander University of Finland (currently University of Helsinki), receiving his Master's degree in 1869. He became a member of *Societas pro Fauna et Flora Fennica* (hereafter *Societas*) in 1863, holding the position of Secretary in 1866–1876,

and he was a member of the Printing Committee for the Publication Series in 1873–1878, 1884–1888 and 1890–1894 (Elfving 1921). He was elected an honorary member of the society on his 80th birthday in 1923 (Palmgren 1925).

*Societas* held its meetings at the Botanical Museum. There, he soon became acquainted with the Finnish professional botanists and zoologists and was able to study herbarium specimens.

Magnus Brenner was a passionate non-professional botanist, and one of the most produc-



c:a 1900

\* 21. 5. 1843 † 24. 4. 1930

**Fig. 1.** Mårten Magnus Wilhelm Brenner.

tive Finnish writers of his time who, during almost 60 years of botanical activity, published 220 articles or notes and a flora for pupils (Väre 2021). Most of these were brief communications from *Societas* meetings, but there were also broader reviews, especially of apomictic vascular plants. Most of them were published in *Societas'* series *Acta Societatis pro Fauna et Flora Fennica*, *Meddelanden af Societas pro Fauna et Flora Fennica* and *Notiser ur Sällskapet pro Fauna Flora Fennica*. The first two were continuations of the last-mentioned. Apart from his scientific descriptions of new taxa, he focused on floristic records and teratology.

### Early field trips

Brenner collected plants especially in places where he lived, *viz.* Inkoo and Helsinki, both in southern Finland. In his early years, he had trav-

elled in northern Finland and the Kola Peninsula, and on Suursaari in the Gulf of Finland. Young Brenner had proved to be a promising botanist, and thus, in 1876 he was invited to be an interpreter for the Jenisei expedition led by Professor Nils Adolf Erik Nordenskiöld (1832–1901). He published his extensive catalogue of vascular plants much later (Brenner 1910a), but it did not include any new taxa.

Brenner made many expeditions as a young man, probably inspired by his teacher in Porvoo, a skilled plant expert Johan Elias Strömborg (1833–1900). Strömborg had previously been plant-hunting with Erik Niklander (1835–1856), and with Professor Anders Thiodolf Saelan (1834–1921) who worked as a medical doctor at the Lapinlahti Hospital in Helsinki; e.g., in 1863, accompanied by Nils Isak Fellman (1841–1919), a bachelor of natural sciences (Fellman 1869, 1882) and Nils Johan Laurin (1842–1904), a student, Brenner collected plants from the Kola Peninsula and the coasts of the Arctic Ocean.

*Societas pro Fauna et Flora Fennica* supported Brenner's expedition to Northern Ostrobothnia (Ob; see Fig. 2) in 1864. Brenner concentrated on the coastal area of the Bothnian Bay and collected 339 vascular plant specimens for the Botanical Museum (H).

*Societas* also sponsored Brenner's trip to Northern Ostrobothnia in 1869, specifically to the southern parts of the region from east to west, including the parish of Kuusamo and some of Northern Karelia (Lindberg 1871, Elfving 1921). The 1869 travel account is brief, but hundreds of species were mentioned (Brenner 1878).

In 1867, *Societas* funded Brenner's expedition to the islands on the eastern side of the Gulf of Finland (Lavansaari, Suursaari, Tytärsaari and some lesser ones). He described the names of the places and the flora in great detail (Brenner 1871b), having found 412 species of vascular plants, 285 of which were dicotyledons, 108 monocotyledons, 18 pteridophytes, and one alga (*Chara aspera*). He also mentioned six subspecies (\*), 33 varieties (var.) and 20 forms (f.). Brenner consistently used these abbreviations in his articles for taxonomic ranks, as well as subvar. for subvarieties, and subf. for subforma. He re-visited the islands four times between 1870 and 1873. The known number of vascular

plant taxa in the islands by then was 422 (Brenner 1884).

## Career

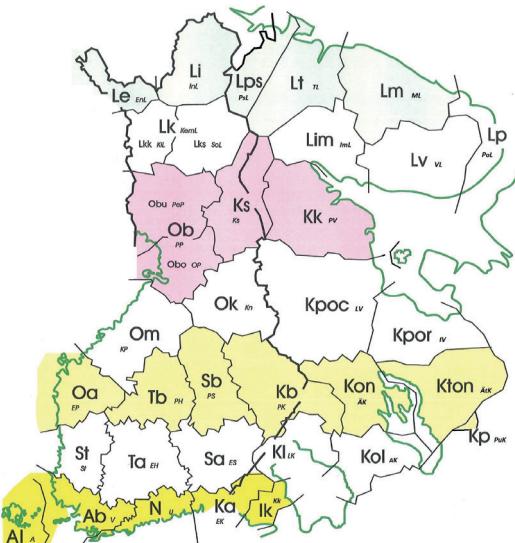
Brenner was a lecturer at the Helsinki Lyceum from 1868 until 1873, and thereafter he taught mathematics and natural history at the “Ressu” Upper Secondary School where he also served as Headmaster until the school closed in 1896 (Elfving 1930, Haapasaari 1994). Thereafter, he was able to complete his main work, a compilation of Northern Ostrobothnian plants (Brenner 1899), which he later corrected and supplemented (Brenner 1911a). Brenner’s (1899) summary of plants in Northern Ostrobothnia is still a significant source as it contains information on the species in the area at that time.

## Brenner’s flora for pupils

Brenner (1886d) published a textbook for pupils entitled *Floristik Handbok*. As part of their educational programme pupils had to prepare an extensive herbarium. Brenner’s flora has its merits, such as its descriptions of some new plant families, its explanations of the scientific names and acronyms used by the authors and its extensive list of terminology, with explanations. The flora covered the politically defined Finland of the time, but species occurring only in northern Finland, such as in the Province of Lapland, were not included. Six new varieties were described (M. Br. as the auctor acronym, later officially Brenner) without locality information.

## “Microspecies”, varieties and forms

Brenner enthusiastically devoted himself to polymorphic genera and species, and to describing new varieties and forms. However, he lacked a broader view on the variation in morphology of a species throughout its range. It was obviously important for him to name as many new taxa as possible. Producing detailed infraspecific classifications was common practice in those times, apparently inspired by the German school



**Fig. 2.** Biogeographical provinces of eastern Fennoscandia. Al = Alandia, Ab = Regio aboensis, N = Nylanitia, Ka = Karelia australis, Ik = Isthmus karelicus, St = Satakunta, Ta = Tavastia australis, Sa = Savonia australis, Kl = Karelia ladogensis, Kol = Karelia olo-netsensis, Oa = Ostrobothnia australis, Ta = Tavastia borealis, Sb = Savonia borealis, Kb = Karelia borealis, Kon = Karelia onegensis, Kton = Karelia transonegensis, KP = Karelia Pudogensis, Om = Ostrobothnia media, Ok = Ostrobothnia kajanensis, Kpoc = Karelia pomorica, Kpor = Karelia pomorica orientalis, Obo = Ostrobothnia ouluensis, Obu = Ostrobothnia ultima, Ks = Regio kuusamoënsis, Kk = Karelia keretina, Lkk = Lapponia kittilensis, Lks = Lapponia sompiensis, Lim = Lapponia Imandrae, Lv = Lapponia Varsugae, Lp = Lapponia ponojensis, Le = Lapponia enontekiensis, Li = Lapponia inarensis, Lps = Lapponia petsamoënsis, Lt = Lapponia tulomensis, Lm = Lapponia murmanica.

of taxonomy, known later as the Aschersonian approach and represented in Finland by e.g. Harald Lindberg (1871–1963), custodian of the Alexander University Herbarium (Väre 2010, 2012).

## Some motivators

At the beginning of his career, Brenner described *Euphrasia micrantha* as a new species to science (Brenner 1878), and later — inspired by Richard Wetstein’s (1863–1931) *Monographie der Gattung Euphrasia* (Wettstein 1896) — wrote several articles on that genus. Kihlman (1896) pointed out that *E. micrantha* Brenner was a later

homonym of *E. micrantha* Rchb., and re-named it as *E. bottnica*. This irritated Brenner, and he illegitimately renamed his *E. micrantha* as *E. hebecalyx*.

Inspired by Frenchman Claude Thomas Alexis Jordan (1814–1897), who described at least 42 taxa (e.g. Jordan 1864; see also <https://www.ipni.org/>), Brenner observed the variability in *Viola tricolor*, and described three new varieties, nine forms and two subforms as new to science (Brenner 1893, 1904c, 1921c). His enthusiasm re-appeared when Veit Brecher Wittrock (1839–1914) published his *Viola studier* in two parts (Wittrock 1895, 1897).

Again inspired by Jordan who described almost 55 species (Jordan 1852, 1864), Brenner described five species and one form of *Erophila* (Brenner 1904b). Keen taxic splitters are sometimes referred to as Jordananalogists.

Henning E. Petersen (1877–1946) of Denmark and his studies on *Pimpinella* (Petersen 1921) motivated Brenner (1925d) to study *Pimpinella saxifraga* in Finland. Inspired by Wittrock's (1907) studies, Brenner began to investigate *Linnaea borealis*, in which the colour and shapes of the spots in the corolla is highly variable. He described 22 new taxa (Brenner 1908b, 1909, 1910c, 1911b, 1912).

### **Rosa canina s. lato**

Sigfrid Oscar Immanuel Almquist (1844–1923) and Lars Peter Reinhold Mattsson (1870–1938) sparked Brenner's serious interest in *Rosa*, especially *R. canina* s. lato about which they both wrote in Swedish floras (Mattsson 1901, Almquist 1918). The descriptions were complex, with 16 species, 7 hybrids and 196 varieties listed in Mattsson (1901), and 205 species and 270 subspecies listed in Almquist (1918). In 1918 and 1919, Almqvist identified many rose specimens at H. Brenner collected some 70 specimens (H) mainly in Inkoo, near his home, and described one species, two subspecies and two forms (Brenner 1906c, 1921b, 1925h).

Brenner (1885a, 1908e, 1910b, 1917a, 1917b, 1918a, 1918b, 1920, 1925e, 1925f) was also very interested in the variation in conifers, especially *Picea abies*, but many of his new taxa

were based on environmentally induced temporary modifications.

From eastern Fennoscandia, Brenner described 192 taxa (*Hieracium* and *Taraxacum* excluded): 8 species, 3 subspecies, 32 varieties, 1 subvariety, 131 forms and 17 subforms of angiosperms. He also described 594 *Hieracium* taxa (374 species, 2 subspecies, 154 varieties, 2 subspecies, 62 forms) (Sennikov 2002, Väre 2021) of which 11 are accepted in the *Checklist of the vascular plants of Finland* (Kurtto et al. 2019, 2020), and 47 *Taraxacum* taxa (29 species, 1 subspecies, 10 varieties and 7 forms) of which 20 species are accepted based on priority (Lundevall & Øllgaard 1999). *Hieracium* and *Taraxacum* are listed in Lundevall and Øllgaard (1999), Sennikov (2002) and in Väre (2021). For Brenner's botanical publications, see Väre (2021).

The above totals 833 described plant taxa, including 411 species, 6 subspecies, 196 varieties, 1 subvariety, 199 forms and 17 subforms. Brenner also introduced 56 names without description (*nomina nuda*). In spite of this prolific output, other botanists generally ignored Brenner's contributions to taxonomy in their floras (e.g., Cajander 1906, Hiitonen 1933 and later ones).

At the time, the type concept was not yet established and hence Brenner did not assign any material as types. He did not cite any specimens in particular in his articles, so the sheets selected here are based on the localities he gave in the protologues. Very often (not always) he gave the new name on the labels.

In previous works, only Brenner's plant taxa in *Euphrasia* (Jalas & Kukkonen 1973) and *Taraxacum* (Lundevall & Øllgaard 1999) were listed, taxonomically evaluated and lectotypified. Except for *Hieracium*, most of the remaining Brenner's taxa (151) are lectotypified here. In many cases, each taxon is based on a single or few specimens and generally characterised by a local distribution; however, several new taxa were based on many collections. Most of his original material is deposited at H, but much of what is described in Brenner (1886b) was not found. Lecto- and isolectotypes are kept in the type collection, most of the other original material in *Herbarium Fennoscandicum*, and some in *Herbarium Generale*.

Brenner's extensive herbarium was donated posthumously to the Botanical Museum, now the

Botanical Museum (H), Finnish Museum of Natural History (LUOMUS), University of Helsinki, and he himself had donated several batches of plant specimens he collected during trips funded by the Society. Some duplicates, at least of *Hieracium*, are at S and UPS (Sennikov 2002).

## List of taxa published by Magnus Brenner

Spelling of Brenner's scientific names is standardised following Turland *et al.* (2018).

### *Alchemilla obtusa* Buser var. *comosa* Brenner

Meddeland. Soc. Fauna Fl. Fennica 23: 42. 1898. — LECTOTYPE (designated here): Russia. Lt, prope Nuotjok, Rahkujoki, 24 July 1891, J. Lindén s.n. (H375746!).

*A. vulgaris* var. *comosa* (Brenner) Fernald & Wiegand, Rhodora 14(168): 233. 1912.

*A. vulgaris* subsp. *comosa* (Brenner) Gams, Ill. Fl. Mitt-Eur. 4(2): 966. 1923.

PROTOLOGUE LOCALITY in Brenner (1898b): Russia. 1. Lapponia Tulomensis, Rahkujoki, coll. John Lindén. This is *Alchemilla glomerulans* Buser, det. Robert Buser 26 December 1898, conf. Mikko Piirainen September 2020.

### *Alnus glutinosa* (L.) Gaertn. f. *glabra* Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 178. 1892. — LECTOTYPE (designated here): Russia. Ka, Tytärsaari, 25 July 1869 M. Brenner s.n. (H782592!). — ORIGINAL MATERIAL: Finland. 1. Kb, Eno, 1 July 1865, F. V. Woldstedt s.n. (H060317!); 2. Kb, Kides [Kitee], 9 July 1863, A. Brander s.n. (H060316!); Russia. 3. Ka, St. Andraea [Antrea], Hatula, 9 May 1888, J. Lindén s.n. (H782587!); 4. Ka, St. Andraea [Antrea], Hatula, 23 August 1888, J. Lindén s.n. (H782587!); 5. Kpoc, Rapolala, Lieksa, 17 July 1875, E. Wainio s.n. (H060315!).

PROTOLOGUE LOCALITIES in Brenner (1892c): 1. Åland [Ahvenanmaa]; 2. Helsingfors [Helsinki]; 3. Lieksa sjö, Rapolala. f. *pilosa* by Brenner on the labels; 4. Eno; 5. Kides; Russia. 6. Tytärsaari; 7. St. Andraea. This is *Alnus glutinosa* (L.) Gaertn. var. *glutinosa*.

### *Alnus glutinosa* (L.) Gaertn. f. *pilosa* Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 178. 1892. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Stömsby, Heikkovik, 1 August 1889, M. Brenner s.n. (H782567!); isolectotype (H470207!). — ORIGINAL MATERIAL: Finland. 1. N, Helsingfors [Helsinki], Brunnsparken

[Kaivopuisto], 18 September 1886, M. Brenner s.n. (H782553!); 2. N, Kyrkslätt [Kirkkonummi], Weikkola, Lammi, 31 July 1886, M. Brenner s.n. (H782547!).

PROTOLOGUE LOCALITIES in Brenner (1892c): No localities given, but var. *pilosa* by Brenner on the labels. This is *Alnus glutinosa* (L.) Gaertn var. *glutinosa*.

### *Alnus glutinosa* (L.) Gaertn. f. *subpilosa* Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 178. 1892. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Brunnsparken [Kaivopuisto], 18 September 1886, M. Brenner s.n. (H470205!); isolectotype (H470206!). — ORIGINAL MATERIAL: Finland. 1. N, Helsingfors [Helsinki], Lappviksudden [Lapinlahti], 23 September 1888, M. Brenner s.n. (H470208!, H470209!); 2. N, Helsingfors [Helsinki], Brunnsparken [Kaivopuisto], 6 September 1886, M. Brenner s.n. (H470210!); 3. N, Kyrkslätt [Kirkkonummi], Stömsby, 18 August 1888, M. Brenner s.n. (H470203!, H470207!); 4. N, Helsingfors [Helsinki], Alkärr [Leppävaara], 15 September 1886, M. Brenner s.n. (H782557!); 5. Helsingfors [Helsinki], Brunnsparken [Kaivopuisto], 17 September 1886, M. Brenner s.n. (H782501!); 6. N, Kyrkslätt [Kirkkonummi], Stömsby, Heikkovik, 21 June 1889, M. Brenner s.n. (H556974!); 7. N, Kyrkslätt [Kirkkonummi], Stömsby, Heikkovik, 27 July 1889, M. Brenner s.n. (H782589!); 8. N, Kyrkslätt [Kirkkonummi], Stömsby, Heikkovik, 23 July 1889, M. Brenner s.n. (H782551!); 9. N, Kyrkslätt [Kirkkonummi], Weikkola, Lammi, 31 July 1886, M. Brenner s.n. (H782579!); 10. N, Kyrkslätt [Kirkkonummi], Weikkola, Lammi, 10 August 1886, M. Brenner s.n. (H782558!, H782559!); 11. N, Kyrkslätt [Kirkkonummi], Naval, 2 August 1886, M. Brenner s.n. (H782555!); 12. N, Kyrkslätt [Kirkkonummi], Koskis, 6 August 1886, M. Brenner s.n. (H782556!).

PROTOLOGUE LOCALITIES in Brenner (1892c): No localities given, but on the labels var. *subpilosa* by Brenner. This is *Alnus glutinosa* (L.) Gaertn var. *glutinosa*.

### *Alnus incana* (L.) Moench var. *bipinnatifida* Brenner

Floristik Handbok: 170. 1886. — LECTOTYPE (designated here): Finland. Kl, Pelkjärvi, Jänisjärvi, 5 September 1861, N. A. Arppe s.n. (H086196!). — *Alnus incana* (L.) Moench f. *bipinnatifida* (Brenner) Cajander, Suomen Kasvio: 206. 1906.

PROTOLOGUE LOCALITIES in Brenner (1886h): 1. Östra Finland. This is *Alnus incana* var. *incana* f. *bipinnatifida* (Brenner) Cajander. *Alnus incana* var. *incana* f. *angustissima* Holmb. ex Hyl. (*Nordisk Kärlväxtflora* II: 306. 1966) is synonymous to f. *bipinnatifida*.

### *Alnus incana* (L.) Moench var. *nana* Brenner

Acta Soc. Fauna Fl. Fennica 34(4): 12. 1911. — LECTOTYPE (designated here): Finland. Ok, Sotkamo, Kukkoharju, 21

August 1900, *N. J. Juselius s.n.* (H086284!); isolectotype (H008804!).

PROTOLOGUE LOCALITY in Brenner (1911a): 1. Finland. Sotkamo. On the label var. *nana* by Brenner. — Det. A. Callier *A. incana* var. *parvifolia* Regel. This is *Alnus incana* var. *incana*.

### ***Alnus incana* (L.) Moench var. *borealis*** Norrl. f. *glabrata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 184. 1892. — LECTOTYPE (designated here): Finland. Ok, Sotkamo, Naapurivaara, 29 June 1869, *M. Brenner s.n.* (H854399!).

PROTOLOGUE LOCALITIES in Brenner (1892c): No locality given, but on the labels f. *subglabra* by Brenner. Det. Czerepanov March 1955 *A. glutinosa* × *incana*, det *A. incana* ssp. *incana* var. *incana* Henry Väre 19 March 2020.

### ***Alnus incana* (L.) Moench var. *confusa*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 182. 1892. — LECTOTYPE (designated here): Finland. Sa, Lappee [Lappeenranta], 13 July 1886, *T. Saelan s.n.* (H782659!). — ORIGINAL MATERIAL: Finland. 1. Obo, Kuuminki, 21 June 1864, *B. A. Nyberg s.n.* (H060313!); 2. Obo, Kuuminki, Ukkola, 20 July 1870, *M. Brenner s.n.* (H782737!); 3. Obo, Uleåborg [Oulu], Toppila, 12 August 1869, *M. Brenner s.n.* (H782731!).

PROTOLOGUE LOCALITIES in Brenner (1892c): No localities given, but on the labels f. *confusa* by Brenner. This is *Alnus incana* var. *incana*.

### ***Alnus incana* (L.) Moench var. *confusa*** Brenner f. *glabrescens* Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 182. 1892. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Wiikkala, 3 August 1886, *M. Brenner s.n.* (H481061!). — ORIGINAL MATERIAL: Finland. Ob, Simo, Ruikka, 1 August 1870, *M. Brenner s.n.* (H782738!).

PROTOLOGUE LOCALITIES in Brenner (1892c): No localities given, but on the labels f. *glabrescens* by Brenner. This is *Alnus incana* var. *incana*.

### ***Alnus incana* (L.) Moench var. *intermedia*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 181. 1892. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Strömsby, 13 August 1888, *M. Brenner s.n.* (H481059!). — ORIGINAL MATERIAL: Finland. 1. N, Kyrkslätt [Kirkkonummi], Navalaa, 2 August 1886, *M. Brenner s.n.* (H481195!); 2. N, Kyrkslätt [Kirkkonummi], Weikkola, 27 July 1886, *M. Brenner s.n.* (H481057!); 3. N, Kyrkslätt [Kirkkonummi], Weikkola, 10 August 1886, *M. Brenner s.n.* (H481051!).

PROTOLOGUE LOCALITIES in Brenner (1892c): No locality given, but on the labels var. *intermedia* by Brenner. This is *Alnus incana* var. *incana*.

### ***Alnus incana* (L.) Moench var. *intermedia*** Brenner f. *sublaevis* Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 181. 1892. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Kolsarby, 21 August 1888, *M. Brenner s.n.* (H481060!); isolectotype (H481056!, H481063!, H481207!). — ORIGINAL MATERIAL: Finland. 1. N, Kyrkslätt [Kirkkonummi], Navalaa, 2 August 1886, *M. Brenner s.n.* (H481197!); 2. N, Kyrkslätt [Kirkkonummi], Weikkola, 31 July 1886, *M. Brenner s.n.* (H481196!).

PROTOLOGUE LOCALITIES in Brenner (1892c): No localities given, but on the labels f. *sublaevis* by Brenner. This is *Alnus incana* var. *incana*.

### ***Alnus incana* (L.) Moench var. *vulgaris*** Spach f. *laevior* Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 181. 1892. — LECTOTYPE (designated here): Finland. Ok, Paltamo, 5 July 1869, *M. Brenner s.n.* (H0088061!). — ORIGINAL MATERIAL: Finland. 1. Ok, Sotkamo, Wuokatti, 24 June 1869, *M. Brenner s.n.* (H008801!).

PROTOLOGUE LOCALITIES in Brenner (1892c): No localities given, but on the labels f. *laevior* by Brenner. This is *Alnus incana* var. *incana*.

### ***Antennaria dioica* (L.) Gaertn. f. *ramosa*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 13: 243. 1886.

PROTOLOGUE LOCALITIES in Brenner (1886b): Finland. 1. Södra Österbotten; 2. Toholampi. No corresponding specimens found. The diagnosis “one stem branched to three” indicate a growth modification, often induced by mechanical damage. This is *Antennaria dioica* f. *dioica*.

### ***Batrachium heterophyllum* (Weber) Gray** f. *dissectum* Brenner

Not. Sällsk. Fauna Fl. Fennica 11 (ny serie 8): 457. 1874. — LECTOTYPE (designated here): Finland. Ab, Vihtis [Vihti], 20 July 1870, R. C. von Rehausen s.n. (H189858!).

*Ranunculus peltatus* f. *dissectus* (Brenner) Hjelt, Acta Soc. Sci. Fauna Fl. Fennica 30(1): 235. 1906.

PROTOLOGUE LOCALITY in Brenner (1874): Finland. 1 Vichtis. On the label f. *dissecta*. This collection has received a lot of attention, identified as *R. aquatilis* f. *fissifolius* by an anonymous person, *B. paucistamineum* × *peltatum* by Otto Gelert, *R. peltatus* by Pertti Uotila in 1983, *R. aquatilis* var. *diffusus* by Bengt Jonsell in 1983 and *R. aquatilis* by Bengt Jonsell in 1998. This is *Ranunculus aquatilis* L. var. *diffusus*

With. There is in the lectotype sheet another collection of the same taxon (H189859!).

***Batrachium heterophyllum* (Weber) Gray  
f. *subdissectum* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 13: 243. 1886. — LECTOTYPE (designated here): Finland. Al. ?Sund, 18[51], C. E. Bergstrand s.n. (H281969!, lefthand specimen). — *Ranunculus peltatus* f. *subdissecta* (Brenner) Hjelt, Acta Soc. Sci. Fauna Fl. Fennica 30(1): 235. 1906.

PROTOLOGUE LOCALITY in Brenner (1886b): Finland. 1. Sund. Bergstrand collected at Åland [Ahvenanmaa] in 1851 (Carl Erik Bergstrand, <https://sok.riksarkivet.se/sbl/artikel/18666>). The sheet bears no determinations by Brenner. This sheet is the only collection at H prior to 1886 from Åland. The taxon name is based on semi-dissected leaves. This is *Ranunculus aquatilis* var *aquatilis*. There is in the lectotype sheet another collection of the same taxon, collected also by Bergstrand, and identified by him as *R. aquatilis* var. *heterophyllum* f. *trisepta*/var. *triphyllus*?, while he identified the lectotype as *R. aquatilis* var. *floribundus*.

***Batrachium marinum* Fr. f. *terrestre*  
Brenner**

Meddeland. Soc. Fauna Fl. Fennica 32: 70. 1906. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, 28 June 1905, M. Brenner s.n. (H799878!).

PROTOLOGUE LOCALITY in Brenner (1906b): Finland. 1. Ingå, Svarträsk. There is mf. on the label by Brenner. This is terrestrial form of *Ranunculus baudotii* Godr. f. *baudotii*.

***Batrachium peltatum* Bercht. & J. Presl f.  
*terrestre* Brenner**

Acta Soc. Fauna Fl. Fennica 34(4): 15. 1911. — LECTOTYPE (designated here): Finland. Obo, Oulunsalo, Limingo äng [Liminganniity], 20 July 1908, Viljo Tolvanen s.n. (H352429!).

PROTOLOGUE LOCALITY in Brenner (1911a): Finland. 1. Oulunsalo, Limingo äng. There are no determinations on the sheet by Brenner, but the specimens were collected in the mentioned locality. This is *Ranunculus convervooides* (Fr.) Fr. × *schmalhausenii* Luferov (Bobrov et al. 2015).

***Betula verrucosa* Ehrh. var. *incisa*  
Brenner**

Floristic Handbok: 168. 1886.

PROTOLOGUE LOCALITY in Brenner (1886d): no locality given, no specimens seen. The diagnosis “leaves dissected, broadly lobed, entire or sparsely large-toothed, blunt-tipped” is morphologically consistent with *B. pendula* Roth f. *bircalensis* (Mela) Hämet-Ahti [basionym *B. verrucosa* (rankless) *bircalensis* Mela, Lyhykäinen kasvioppi ja kasvio kou-

luja varten: 117. 1877] Most likely Brenner named this taxon based on the work of Mela (1877). This is *Betula pendula* Roth f. *bircalensis* (Mela) Hämet-Ahti.

***Callitrichie polymorpha* Lönnr. f. *ambigua*  
Brenner**

Meddeland. Soc. Fauna Fl. Fennica 18: 154. 1892. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Rödbergen [Punavuori], 21 October 1888, M. Brenner s.n. (H386713!).

PROTOLOGUE LOCALITY in Brenner (1892a): Finland. 1. Helsingfors, Rödbergen. On the label f. *ambigua* by Brenner. This is *Callitrichie cophocarpa* Sendtn.

***Campanula persicifolia* L. var.  
*angustiflora* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 34: 131. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, 22 July 1907, M. Brenner s.n. (H349820!).

PROTOLOGUE LOCALITY in Brenner (1908d): Finland. 1. Ingå, Svarträsk. On the label f. *eriocarpa angustiflora* by Brenner. This is *Campanula persicifolia* var. *persicifolia*.

***Campanula persicifolia* L. var. *cupularis*  
Brenner**

Meddeland. Soc. Fauna Fl. Fennica 22: 6. 1895. — LECTOTYPE (designated here): Finland. N, Lojo [Lohja], Mongolia, 19 July 1894, M. Brenner s.n. (H517972!).

PROTOLOGUE LOCALITY in Brenner (1895a): Finland. 1. Lojo. On the label var. *cupularis* by Brenner. This is *Campanula persicifolia* var. *persicifolia*.

***Campanula rotundifolia* L. f. *monstrosa*  
Brenner**

Meddeland. Soc. Fauna Fl. Fennica 37: 38. 1911. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Majby, 31 July 1910, R. Gripenberg s.n. (H348501!).

PROTOLOGUE LOCALITY in Brenner (1911b): Finland. 1. Kyrkslätt. On the label f. *monstrosa* by Brenner. With double flowers. This is *Campanula rotundifolia* subsp. *rotundifolia*.

***Campanula rotundifolia* L. var. *latifolia*  
Brenner**

Not. Sällsk. Fauna Fl. Fennica 11 (ny serie 8): 24. 1871. — HOLOTYPE (H349346) indicated by Piirainen and Nurmi (2018: 102): Ka/RS. Russia. Hogland, Kappelkallio, 3 August 1868, M. Brenner s.n. (H349346).

PROTOLOGUE LOCALITY in Brenner (1871a): 1. Russia. Hogland. This is *Campanula rotundifolia* subsp. *fennica* Piirainen & Nurmi.

***Cardamine amara* L. var. *trisepta* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 31: 54. 1906. — LECTOTYPE (designated here): Finland. N, Sibbo [Sipoo], 1 July 1902, G. Andersin s.n. (H361320!).

PROTOLOGUE LOCALITY in Brenner (1906a): Finland. 1. Sibbo, Kitö. On the label var. *trisepta*. Later Brenner (1908e) reported var. *trisepta* to be of temporary nature. This is *Cardamine amara* var. *amara*.

***Carex ampullacea* Gooden. var. *acutangula* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 25: 18. 1900. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Överby, Stormossan, 9 August 1898, M. Brenner s.n. (H751653!).

PROTOLOGUE LOCALITY in Brenner (1900a): Finland. 1. Ingå. On the label f. *acutangula* by Brenner. Stem trigonous all the way up. This is *Carex rostrata* Stokes var. *rostrata*.

***Carex halophila* F. Nyl. f. *humilis* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 5: 78. 1879. — LECTOTYPE (designated here): Finland. Obo, Limingo [Liminka], 21 August 1869, M. Brenner s.n. (H200671!). — *C. halophila* var. *humilis* (Brenner) Brenner (Brenner 1886d: 202).

PROTOLOGUE LOCALITES in Brenner (1879): Finland. 1. Kempele; 2. Limingo. On the original label *C. halophila* f. *reducta apii sessilibus* by Brenner, in a later one *C. salina* β [var.] *kattegatensis*. Low-growing, female spike with no peduncle. This is *Carex recta* Boott.

***Carex salina* Wahlenb. f. *humilis* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 5: 78. 1879. — LECTOTYPE (designated here): Finland. Obo, Limingo [Liminka], 21 August 1869, M. Brenner s.n. (H200672!). — *C. salina* var. *humilis* (Brenner) Brenner (Brenner 1886d: 202).

PROTOLOGUE LOCALITES in Brenner (1879): Finland. 1. Kempele; 2. Limingo. On the label f. *humilis* by Brenner. Low-growing, female spike with no peduncle. This is *Carex recta* Boott.

***Carex vulgaris* Fr. f. *repens* Brenner**

Not. Sällsk. Fauna Fl. Fennica 11 (ny serie 8): 19. 1871. — LECTOTYPE (designated here): Russia. Ka, Tytärsaari, 24 July 1868, M. Brenner s.n. (H767421!). — ORIGINAL MATERIAL: Russia. 1. Ka, Tytärsaari, 25 July 1868, M. Brenner s.n. (H767419!, H767429!).

PROTOLOGUE LOCALITY in Brenner (1871a): Russia. 1. Tytärsaari. With long stolons. This is *Carex nigra* (L.) Reichard s. *lato*.

***Carex vulgaris* Fr. var. *caespitiformis* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 32: 70. 1906. — LECTO-

TYPE (designated here): Finland. N, Ingå [Inkoo], Joddböle, 5 July 1905, M. Brenner s.n. (H763768!). — ORIGINAL MATERIAL: Finland. 1. Ab, [Parainen], Inio, Norrby, 2 July 1891, I. O. Bergroth s.n. (H767364!); 2. Ab, [Parainen], Inio, Jurmo, 2 July 1891, I. O. Bergroth s.n. (H185535!).

PROTOLOGUE LOCALITIES in Brenner (1906b): Finland. 1. Åbo skärgård [Turku archipelago]; 2. Ingå, Joddböle. Neither in the lectotype of var. *caespitiformis* by Brenner nor in the original material are there any determinations by Brenner, but morphology and protocol localities are congruent with Brenner (1906b). Densely tufting, leaves broader and flatter compared to *Carex vulgaris* Fr. var. *vulgaris* [*C. nigra* var. *nigra*]. This is *Carex nigra* (L.) Reichard s. *lato*.

***Cerefolium sylvestre* Besser f. *furcatum* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 13: 243. 1886.

PROTOLOGUE LOCALITY in Brenner (1886b): Finland. 1. Helsinge. Specimen not found. The diagnosis “stems branching” indicates a growth modification, perhaps induced by mechanical damage. This is *Anthriscus sylvestris* (L.) Hoffm. f. *sylvestris*.

***Cerastium semidecandrum* L. var. *viscidum* (Link) Brenner f. *majus* Brenner**

Not. Sällsk. Fauna Fl. Fennica 11 (ny serie 8): 447. 1871. — LECTOTYPE (designated here): [Russia]. Ka, Hogland [Suurasaari], Suurkylä, 8 June 1870, M. Brenner s.n. (H792513!).

PROTOLOGUE LOCALITY in Brenner (1871b): Finland. 1. Hogland, Suurkylä. On the label f. *major* by Brenner. Leaves big. This is *Cerastium semidecandrum* L.

***Cerastium vulgatum* L. f. *glandulosum* Brenner**

Not. Sällsk. Fauna Fl. Fennica 11 (ny serie 8): 447. 1871. — LECTOTYPE (designated here): Russia. Ka, Hogland [Suurasaari], Suurkylä, 8 June 1870, M. Brenner s.n. (H792091!).

PROTOLOGUE LOCALITY in Brenner (1871b): Finland. 1. Hogland, Suurkylä. On the label *C. vulgatum* L. subsp. *alpestre* (Hartm.) Brenner [rankless] *glandulosum* by Brenner. This is *Cerastium fontanum* subsp. *scandicum* Gartner.

***Chenopodium polyspermum* L. var. *controversans* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 48: 138. 1925. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarthåbäck, 27 August 1921, A. Brenner s.n. (H070154!). — ORIGINAL MATERIAL: Finland. 1. Ka, Kakkis [Johannes, recte Viipuri], [Björkö sund, recte Tyväsaari], 26 August 1866, A. J. Malmberg s.n. (H070170!).

PROTOLOGUE LOCALITIES in Brenner (1925b): Finland. 1. Ingå; 2. Viborg, Björkö sund, Tyväsaari. On the labels var. *controversans* by Brenner. Egg-shaped leaves. This is

*Lipandra polysperma* (L.) S. Fuentes, Uotila & Borsch var. *polysperma*.

***Crepis paludosa* (L.) Moench f. *pallida***  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 21: 7. 1895. — LECTOTYPE (designated here): Finland. V, Lojo [Lohja], Mongola, Linnais, 9 July 1894, *M. Brenner s.n.* (H318456!).

PROTOLOGUE LOCALITY in Brenner (1895a): Finland. 1. Lojo. On the label f. *pallida* by Brenner. Flowers pale, as glandular hairs of involucral bracts. This is *Crepis paludosa*.

***Epilobium angustifolium* L. f.  
*subverticillatum*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 13: 243. 1886. — LECTOTYPE (designated here): Finland. N, Helsinge [Vantaa], Nissas, 29 April 1880, *V. Theslöf s.n.* (H407936!).

PROTOLOGUE LOCALITY in Brenner (1886b): Finland. 1. Helsinge. On the label f. *subverticillata* by Brenner. Stem leaves partially verticillate. This is *Chamaenerion angustifolium* (L.) Scop.

***Erophila acrocarpa* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 131. 1904. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Sandviken [Hietalahti], 11 May 1893, *M. Brenner s.n.* (H361174!). — ORIGINAL MATERIAL: Finland. N, Helsingfors [Helsinki] (1–3). 1. Ulrikasborgberget [Ullanlinnannmäki], 9 May 1897, *M. Brenner s.n.* (H361173!); 2. Töölöpark [Töölönpuisto], 11 May 1898, *M. Brenner s.n.* (H361175!); 3. Lappvikken [Lapinlahti], 30 May 1898, *M. Brenner s.n.* (H361170!); 4. N, Borgå [Porvoo], Borgbacken [Linnamäki], 27 May 1859, *M. Brenner s.n.* (H361171!).

PROTOLOGUE LOCALITIES in Brenner (1904b): Finland. 1. Helsingfors; 2. Borgå. On the labels *E. acrocarpa* by Brenner. This is *Draba verna* L.

***Erophila angustata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 131. 1904. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborgberget [Ullanlinnannmäki], 28 May 1897, *M. Brenner s.n.* (H361181!). — ORIGINAL MATERIAL: Finland. N, Helsingfors [Helsinki] (1–14), Sandviken [Hietalahti] (1–6), 1. 24 May 1889, *M. Brenner s.n.* (H361176!); 2. 11 May 1893, *M. Brenner s.n.* (H361155!); 3. 23 May 1889, *M. Brenner s.n.* (H361180!); 4. 3 June 1893, *M. Brenner s.n.* (H361156!); 5. 9 May 1897, *M. Brenner s.n.* (H361170!); 6. 15 May 1896, *M. Brenner s.n.* (H361154!); Ulrikasborgberget [Ullanlinnannmäki] (7–9), 7. 25 May 1899, *M. Brenner s.n.* (H361178!); Rödbergen [Punavuori], 8. 5 May 1890, *M. Brenner s.n.* (H361177!); 9. 19 May 1889, *M. Brenner s.n.* (H361184!); 10. Gräsvenken [Ruoholahti], 16 May 1897, *M. Brenner s.n.* (H361183!); 11. Fölisön [Seurasari], 27 May 1900, *M. Bren-*

*ner s.n.* (H361182!); 12. Helsinge [Helsingin pitäjä, today Helsinki], Hoplax [Huopalahti], Grejus [Reijola], 8 June 1902, *M. Brenner s.n.* (H361185!); N, Ingå [Inkoo], Svartbäck (13–14), 13. 18 June 1902, *M. Brenner s.n.* (H361169!); 14. 22 June 1902, *M. Brenner s.n.* (H361165!).

PROTOLOGUE LOCALITIES in Brenner (1904b): Finland. 1. Helsingfors; 2. Ingå, Svartbäck. On the labels *E. angustata* by Brenner. This is *Draba verna* L.

***Erophila ovalis* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 129. 1904. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborgberget [Ullanlinnannmäki], 13 May 1897, *M. Brenner s.n.* (H804819!). — ORIGINAL MATERIAL: Finland. N, Helsingfors (1–25), Rödbergen [Punavuori] (1–3), 1. 23 May 1889, *M. Brenner s.n.* (H804832!, H804998!); 2. 5 May 1890, *M. Brenner s.n.* (H804818!); 3. 15 May 1896, *M. Brenner s.n.* (H804825!); Skatudden [Katajanokka] (4–5), 4. 28 May 1893, *M. Brenner s.n.* (H804997!); 5. 12 May 1894, *M. Brenner s.n.* (H804828!); Ulrikasborgberget [Ullanlinnannmäki] (6–21), 6. 11 May 1896, *M. Brenner s.n.* (H361152!); 7. 11 May 1896, *M. Brenner s.n.* (H804833!); 8. 24 May 1896, *M. Brenner s.n.* (H804827!, H804826!); 9. 9 May 1897, *M. Brenner s.n.* (H804823!); 10. 12 May 1897, *M. Brenner s.n.* (H804834!); 11. 1 May 1898, *M. Brenner s.n.* (H804994!); 12. 20 May 1898, *M. Brenner s.n.* (H804822!, H804820!); 13. 31 May 1900, *M. Brenner s.n.* (H804991!); 14. 23 May 1902, *M. Brenner s.n.* (H804831!); 15. 25 May 1902, *M. Brenner s.n.* (H804821!, H804999!); 16. 27 May 1902, *M. Brenner s.n.* (H804830!, H804995!); 17. 29 May 1902, *M. Brenner s.n.* (H804993!); 18. 31 May 1902, *M. Brenner s.n.* (H361153!); 1. 91 June 1902, *M. Brenner s.n.* (H804817!, H804824!); 20. 3 June 1902, *M. Brenner s.n.* (H804829!); 21. 5 June 1902, *M. Brenner s.n.* (H805800!); Lappvikken [Lapinlahti] (22–24), 22. 11 May 1896, *M. Brenner s.n.* (H804992!); 23. 9 May 1897, *M. Brenner s.n.* (H804996!); 24. 9 May 1898, *M. Brenner s.n.* (H804835!); 25. Gräsvenken [Ruoholahti], 9 May 1898, *M. Brenner s.n.* (H361151!).

PROTOLOGUE LOCALITY in Brenner (1904b): Finland. 1. Helsingfors. On the labels *E. ovalis* by Brenner. This is *Draba verna* L.

***Erophila radiosua* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 128. 1904. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnannmäki, Kaivopuisto], 12 May 1897, *M. Brenner s.n.* (H804861!). — ORIGINAL MATERIAL: Finland. N, Helsingfors (1–37). Ulrikasborgberget, Brunnsparken [Ullanlinnannmäki, Kaivopuisto] (1–24), 1. 1 June 1887, *M. Brenner s.n.* (H361264!); 2. 10 May 1895, *M. Brenner s.n.* (H804845!); 3. 12 May 1895, *M. Brenner s.n.* (H361269!); 4. 17 May 1895, *M. Brenner s.n.* (H804843!); 5. 20 May 1895, *M. Brenner s.n.* (H804847!); 6. 11 May 1896, *M. Brenner s.n.* (H804840!); 7. 9 May 1897, *M. Brenner s.n.* (H804854!); 8. 11 May 1897, *M. Brenner s.n.* (H804859!); 9. 12 May 1897, *M. Brenner s.n.* (H804862!); 10. 13 May 1897, *M. Brenner s.n.* (H804869!); 11. 15 May 1897, *M. Brenner s.n.*

(H804852!); 12. 1 May 1898, *M. Brenner s.n.* (H804863!); 13. 11 May 1898, *M. Brenner s.n.* (H361266!); 14. 16 May 1898, *M. Brenner s.n.* (H361268!); 15. 20 May 1898, *M. Brenner s.n.* (H804848!); 16. 22 May 1898, *M. Brenner s.n.* (H804836!); 17. 30 May 1900, *M. Brenner s.n.* (H804839!); 18. 15 May 1902, *M. Brenner s.n.* (H361270!); 19. 22 May 1902, *M. Brenner s.n.* (H361274!); 20. 23 May 1902, *M. Brenner s.n.* (H804838!); 21. 25 May 1902, *M. Brenner s.n.* (H804837!); 22. 29 May 1902, *M. Brenner s.n.* (H804855!); 23. 29 May 1902, *M. Brenner s.n.* (H804864!); 24. 1 June 1902, *M. Brenner s.n.* (H361273!); Rödbergen [Punavuori] (25–27), 25. 3 May 1890, *M. Brenner s.n.* (H361263!); 26. 15 May 1896, *M. Brenner s.n.* (H361262!); 27. 26 May 1898, *M. Brenner s.n.* (H361251!); 28. Hafshamnen [Merisatama], 22 May 1893, *M. Brenner s.n.* (H361261!); 29. Skatudden [Katajanokka], 12 May 1895, *M. Brenner s.n.* (H804842!); Gräsviken [Ruoholahti] (30–31); 30. 16 May 1897, *M. Brenner s.n.* (H361260!); 31. 9 May 1898, *M. Brenner s.n.* (H361252!); Lappviken [Lapinlahti] (32–35); 32. 1 May 1898, *M. Brenner s.n.* (H361255!); 33. 9 May 1898, *M. Brenner s.n.* (H261254!); 34. 30 May 1898, *M. Brenner s.n.* (H804841!); 35. 5 June 1902, *M. Brenner s.n.* (H804846!); 36. Töölö parken [Töölön-tori], 27 May 1902, *M. Brenner s.n.* (H361253!); 37. Alkärr [Leppäsuo], 30 May 1902, *M. Brenner s.n.* (H361267!).

PROTOLOGUE LOCALITY in Brenner (1904b): Finland. 1. Helsingfors. On the labels *E. radiosua* by Brenner. This is *Draba verna* L.

### ***Erophila rhomboidea* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 130. 1904. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Sandviken [Hietalahti], 4 June 1893, *M. Brenner s.n.* (H804902!). — ORIGINAL MATERIAL: Finland. N, Helsingfors (1–33), Ulrikasborgberget [Ullanlinnanmäki] (1–19), 1. 1 June 1887, *M. Brenner s.n.* (H361243!); 2. 19 May 1889, *M. Brenner s.n.* (H361275!); 3. 10 June 1892, *M. Brenner s.n.* (H361242!); 4. 20 May 1895, *M. Brenner s.n.* (H361221!); 5. 20 May 1895, *M. Brenner s.n.* (H361241!); 6. 11 May 1896, *M. Brenner s.n.* (H361237!); 7. 9 May 1897, *M. Brenner s.n.* (H361239!); 8. 11 May 1897, *M. Brenner s.n.* (H361248!); 9. 13 May 1897, *M. Brenner s.n.* (H361235!, H361238!); 10. 15 May 1897, *M. Brenner s.n.* (H361234!, H361236!); 11. 16 May 1898, *M. Brenner s.n.* (H361230!, H361246!); 12. 18 May 1898, *M. Brenner s.n.* (H361228!, H361229!); 13. 22 May 1898, *M. Brenner s.n.* (H361231!, H361232!); 14. 28 May 1898, *M. Brenner s.n.* (H361233!); 15. 22 May 1902, *M. Brenner s.n.* (H361220!, H361223!); 16. 25 May 1902, *M. Brenner s.n.* (H361225!); 17. 29 May 1902, *M. Brenner s.n.* (H361224!, H361227!); 18. 31 May 1902, *M. Brenner s.n.* (H361212!); 19. 1 June 1902, *M. Brenner s.n.* (H361216!); Rödbergen [Punavuori] (20–26), 20. 3 May 1890, *M. Brenner s.n.* (H361249!); 21. 4 May 1890, *M. Brenner s.n.* (H361247!); 22. 22 May 1893, *M. Brenner s.n.* (H361250!); 23. 15 May 1896, *M. Brenner s.n.* (H361245!); 24. 24 May 1896, *M. Brenner s.n.* (H361240!); 25. 26 May 1898, *M. Brenner s.n.* (H361244!); Lappvikuden [Lapinlahti] (26–29), 26. 13 May 1894, *M. Brenner s.n.* (H361213!); 27. 9 May 1897, *M. Brenner s.n.* (H361219!); 28. 9 May 1898, *M. Brenner s.n.* (H361222!); 29. 25 June 1902, *M. Brenner s.n.* (H804899!); Töölö [Töölö] (30–31),

30. 25 May 1896, *M. Brenner s.n.* (H361218!); 31. 27 May 1902, *M. Brenner s.n.* (H361226!); Gräsviken [Ruoholahti] (32–33), 32. 16 May 1897, *M. Brenner s.n.* (H804901!); 33. 21 May 1898, *M. Brenner s.n.* (H804900!).

PROTOLOGUE LOCALITY in Brenner (1904b): Finland. 1. Helsingfors. On the labels *E. rhomboidea* by Brenner. This is *Draba verna* L.

### ***Erophila rhomboidea* Brenner f. *abbreviata***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 29: 130. 1904. — LECTOTYPE (designated here): Finland. N, Ulrikasborgberget [Ullanlinnanmäki], 31 May 1902, *M. Brenner s.n.* (H361217!).

PROTOLOGUE LOCALITY in Brenner (1904b): Finland. 1. Helsingfors, Ulrikasborgberget, Brunnsparken. On the labels *E. rhomboidea* f. *abbreviata* by Brenner. This is *Draba verna* L.

### ***Ervum hirsutum* L. f. *pauciflorum*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 13: 186. 1886. — LECTOTYPE (designated here): Finland. Obo, Uleå [Oulu], [1869, Väre & Ulvinen 2005], *K. H. Eberhardt s.n.* (H392087!).

PROTOLOGUE LOCALITY in Brenner (1886a): Finland. 1. Uleå. On the label f. *pauciflora* Brenn. Flowers and leaves sparse. This is *Ervilia hirsuta* (L.) Opiz.

### ***Euphrasia breviphila* Burnat & Gremli f. *congesta*** Wetst. ex Brenner

Meddeland. Soc. Fauna Fl. Fennica 26: 46. 1900. — LECTOTYPE designated by Jalas and Kukkonen (1973).

### ***Euphrasia breviphila* Burnat & Gremli f. *eglundulosa*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 26: 45. 1900. — LECTOTYPE designated by Jalas and Kukkonen (1973).

### ***Euphrasia breviphila* Burnat & Gremli var. *glaberrima*** Brenner

Acta Soc. Fauna Fl. Fennica 29: 136. 1904. — LECTOTYPE designated by Jalas and Kukkonen (1973).

### ***Euphrasia hebecalyx* Brenner**

Bot. Not. 1898: 181, *nom. illeg. superfl.* (Jalas & Kukkonen 1973).

This is *Euphrasia bottnica* Kihlm.

### ***Euphrasia latifolia* Pursh var. *botniensium***

Brenner

Acta Soc. Fauna Fl. Fennica 16(4): 234. 1899. — LECTOTYPE designated by Jalas and Kukkonen (1973).

This is *Euphrasia wettsteinii* G.L. Gusarova var. *botniensium* (Brenner) Piirainen (Piirainen 2020).

***Euphrasia latifolia* Pursh f. *lapponum***  
Brenner

Acta Soc. Fauna Fl. Fennica 16(4): 234. 1899. — LECTOTYPE designated by Jalas and Kukkonen (1973).

***Euphrasia latifolia* Pursh. var. *rigida***  
Brenner

Acta Soc. Fauna Fl. Fennica 16(4): 234. 1899. — LECTOTYPE designated by Jalas and Kukkonen (1973).

***Euphrasia micrantha* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 5: 77. 1879. — LECTOTYPE designated by Jalas and Kukkonen (1973).

*Euphrasia micrantha* Brenner is a later homonym of *E. micrantha* Rehb., *Flora Germanica Excursioria*: 358. 1830. This is *E. bottnica* Kihlm.

***Euphrasia officinalis* L. var. *tenuis***  
Brenner

*Floristic Handbok*: 145. 1886. — LECTOTYPE designated by Jalas and Kukkonen (1973). — *E. tenuis* (Brenner) Wettst., *Nat. Pflanzenfam.* 4(3b): 101. 1893. — *E. arctica* Lange subsp. *tenuis* (Brenner) Yeo, *Bot. J. Linn. Soc.* 64(4): 357. 1971. — *E. stricta* J.P. Wolff ex J.F. Lehmann var. *tenuis* (Brenner) Jalas, *Ann. Bot. Fennici* 14(4): 192. 1977.

This is *Euphrasia stricta* J.P. Wolff ex J.F. Lehmann var. *tenuis* (Brenner) Jalas.

***Euphrasia reuteri* Wettst. var. *subcurta***  
Brenner

Acta Soc. Fauna Fl. Fennica 29(5): 136. 1904. — LECTOTYPE designated by Jalas and Kukkonen (1973).

***Euphrasia reuteri* Wettst. var. *substricta***  
Brenner

Acta Soc. Fauna Fl. Fennica 29(5): 136. 1904. — LECTOTYPE designated by Jalas and Kukkonen (1973).

***Euphrasia tenuis* (Brenner) Wettst. var. *vestita***  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 24: 97. 1900. — LECTOTYPE designated by Jalas and Kukkonen (1973).

***Festuca ovina* L. var. *duriuscula* (L.)**  
Hack. subvar. *litoralis* Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 141. 1887. — LEC-

TOTYPE (designated here): Russia. Ka, Lavansaari, 26 July 1868, *M. Brenner s.n.* (H257315!). — ORIGINAL MATERIAL: Finland. 1. N, Hangö [Hanko], Stora Kola viken, 4 August 1872, *E. Hisinger s.n.* (H131990!, H131986!); Russia. 2. Kl, Ladoga, Walamo, 1878, *J. V. Johansson s.n.* (H257288!); 3. Kl, Ladoga, Walamo, 1881, *J. V. Johansson s.n.* (H257299!, H257297!); 4. Kl, Kronoborg [Kurkijoki], Lwäasaari, 8 July 1875, *E. Julin s.n.* (H257295!); 5. Kl, Konevitz [Konevitsa], July 1880, *J. V. Johansson s.n.* (H257308!); 7. Kl, Ladoga, Vernitsa, 6. September 1878, *M. & J. Sahlberg s.n.* (H257301!).

PROTOLOGUE LOCALITIES in Brenner (1887): Finland. 1. Hangö; Russia. 2. Lavansaari; 3. Ladoga; 4. Kronoborg; 5. Konevitz; 6. Valamo; 7. Vernitsa. On the lectotype label subvar. *litoralis* by Brenner. This is *Festuca polonica* Zapal.

***Festuca pratensis* Huds. var. *subtilis***  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 152. 1925. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svartbäck, 24 June 1921, *M. Brenner s.n.* (H257364!). — ORIGINAL MATERIAL: Finland. N, Ingå [Inkoo], Svartbäck, 3 July 1922, *M. Brenner s.n.* (H470505!).

PROTOLOGUE LOCALITY in Brenner (1925c): Finland. 1. Ingå, Svartbäck. On the label var. *subtilis* by Brenner. This is *Festuca pratensis* Huds.

***Geranium sylvaticum* L. f. *minoriflorum***  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 130. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Nötö, 29 June 1907, *M. Brenner s.n.* (H394719!); isolectotype (H394720!).

PROTOLOGUE LOCALITY in Brenner (1908d): Finland. 1. Ingå, Nötö. On the labels f. *minoriflorum* by Brenner. With small flowers. This is *Geranium sylvaticum*.

***Geranium sylvaticum* L. var. *parviflorum***  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 29: 24. 1904. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svartbäck, 17 June 1901, *M. Brenner s.n.* (H394721!).

PROTOLOGUE LOCALITIES in Brenner (1904a): Finland. 1. Ingå, Svartbäck; 2. Ingå, Fagervik. On the labels var. *parviflorum* by Brenner. With small flowers. This is *Geranium sylvaticum* var. *sylvaticum*.

***Hierochloë australis* (Schrad.) Roem. & Schult. var. *galba*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 46: 135. 1921. — LECTOTYPE (designated here): Finland. N, [Inkoo], Fagervik, Stor Bomås, 25 June 1852, *E. Hisinger s.n.* (H075730!); isolectotypes: (H075854; H817410). — ORIGINAL MATERIAL: Finland.

1. N, Lovisa [Loviisa], Artsjö [Artjärvi], 29 May [1850's], *E. Niklander s.n.* (H638149!).

PROTOLOGUE LOCALITIES in Brenner (1921c): 1. Ingå; 2. Other southern localities in Finland. This is *Hierochloë australis*, det. Gunnar Weimarch 1970.

### ***Juncus fusco-ater* Schreb. subsp. *arthrophyllus* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 16: 56. 1888. — LECTOTYPE designated by Hämet-Ahti in Kirchner *et al.* (2002). — *J. alpinus* Vill. subsp. *arthrophyllus* (Brenner) Hjelt, Acta Soc. Fauna Fl. Fennica 5(II): 142. 1892. — *J. geniculatus* subsp. *arthrophyllus* (Brenner) Soó, Acta Bot. Acad. Sci. Hungarica 23(3): 388. 1978.

OTHER ORIGINAL MATERIAL: Finland. N, Kyrkslätt [Kirkkonummi], Kukkola, 14 August 1886, *M. Brenner s.n.* (H220664!); 2. Ta, Sysmä, Wärilä, 8 August 1871, *K. W. Unonius s.n.* (H472842!); 3. Ta, Luhanka, Tammijärvi, 19 July 1873, *E. A. Lang s.n.* (H086052!); Russia. 4. Kol, Mandnoga, 12 July 1875, *F. Elfving s.n.* (H0860036!); 5. Kon, Suopohja, 16 August 1863, *T. Simming s.n.* (H085771!).

PROTOLOGUE LOCALITIES in Brenner (1888b): Finland. 1. Kyrkslätt; 2. Sysmä; 3. Luhanka; Russia, 4. Olonets; 5. Onega. On the labels \*[subsp.]. *arthrophyllus* by Brenner. This is *Juncus alpinoarticulatus* Chaix subsp. *alpinoarticulatus*, as are 1, 2 and 4 of the original material. The others are subsp. *fischerianus* (Turcz. ex V. Krecz.) Hämet-Ahti. Original material was not indicated by Kirchner *et al.* (2002).

### ***Juncus fusco-ater* Schreb. subsp. *arthrophyllus* Brenner var. *microcarpus* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 16: 55. 1888. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Weikkola, 14 August 1886, *M. Brenner s.n.* (H083006!). — *J. alpinus* Vill. var. *microcarpus* (Brenner) Hjelt, Acta Soc. Fauna Fl. Fennica 5(II): 141. 1892.

PROTOLOGUE LOCALITY in Brenner (1888b): Finland. 1. Kyrkslätt. On the sheet there are no determinations by Brenner. There are at H four sheets collected by him at Kirkkonummi prior to 1888, all in 1886. Three (H085883!, H085783!, H220665!) are determined as var. *alpinus* (Vill.), while one (lectotype) as *J. fusco-ater* Schreb. subsp. *arthrophyllus* Brenner and this is consistent with the description ("inflorescence quite branching and rich in flowers, flowers and fruits small, almost black"). Sheet H220885 is identified as *J. alpinoarticulatus* Chaix. subsp. *alpinoarticulatus* × subsp. *nodulosus* (Wahlenb.) Hämet-Ahti by Leena Hämet-Ahti in 1980. All four Kirkkonummi sheets are morphologically identical.

### ***Juncus fusco-ater* Schreb. subsp. *fusco-ater* f. *congestus* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 16: 56. 1888. — LECTOTYPE (designated here): Finland. N, Mäntsälä, Andersberg, 30

August 1961, *T. Saelan s.n.* (H085898!). — *J. alpinus* Vill. f. *congestus* (Brenner) Hjelt, Acta Soc. Fauna Fl. Fennica 5(II): 142. 1892.

PROTOLOGUE LOCALITY in Brenner (1888b): Finland. 1. Nyland. On the label var. *congesta* by Saelan, f. *congesta* by Brenner (det. slip). The pedicels and peduncles are short, causing a dense inflorescence. This is a taxonomically meaningless growth modification of *Juncus alpinoarticulatus* Chaix. Due to growth modification, it is not possible to identify the subspecies.

### ***Juncus lampocarpus* Ehrh. var. *cuspidatus* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 16: 57. 1888. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Kalliojärvi, 9 August 1886, *M. Brenner s.n.* (H223270!). — ORIGINAL MATERIAL: Finland. 1. N, Kyrkslätt [Kirkkonummi], Veikkola, 11 August 1886, *M. Brenner s.n.* (H223269!); 2. Sa, Karkku, August 1874, *H. Hjelt s.n.* (H223278!); 3. Ta, [Hämeenlinna] Evois [Evo], 26 July 1865, *J. W. Furuhjelm s.n.* (H223273!); 4. Sa, Willmanstrand [Lappeenranta], 14 June 1883, *T. Saelan s.n.* (H223131!); 5. Sb, Kuopio, 20 August 1856, *L. M. Runeberg s.n.* (H085744!); Russia. 6. Kl, Kirjavalaiks [Kirjavalahti], August 1856, *J. J. Chydenius* (H2231121!).

PROTOLOGUE LOCALITIES in Brenner (1888b): Finland. 1. Kyrkslätt; 2. Karkku; 3. Evois; 4. Willmanstrand; 5. Kuopio; Russia. 6. Kirjavalaiks. On lectotype label var. *cuspidatus* by Brenner. This is *Juncus articulatus* L. var. *articulatus*.

### ***Juncus fusco-ater* Schreb. subsp. *fusco-ater* f. *viviparus* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 16: 56. 1888. — LECTOTYPE (designated here): Finland. N, Lojo [Lohja], Karjalohja, Saarenpää, 27 July 1872, *E. Juslin s.n.* (H220985!, upper right hand specimen). — *J. lamprocarpus* Ehrh. f. *viviparus* (Brenner) Hjelt, Acta Soc. Fauna Fl. Fennica 5(II): 139. 1892.

PROTOLOGUE LOCALITY in Brenner (1888b): Finland. 1. Nyland. On the sheet there are no determinations by Brenner, but this is the only specimen (H) which is consistent with the description ("viviparous form caused by foreign influence") and collected prior to 1888. Viviparity is probably induced by a phyllid, *Livia juncorum*. This is *Juncus alpinoarticulatus* Chaix. subsp. *rariiflorus* (Hartm.) Holub, det. Leena Hämet-Ahti in 1980 as subsp. *nodulosus*.

### ***Juniperus* by Brenner**

Brenner (1921a) gave no localities, and no specimens were found at H. *Juniperus communis* is morphologically highly variable, with a continuous continuum as far as growth form and needle characters go. All six taxa are synonymous to *J. communis* L. f. *communis*.

*Juniperus communis* f. *adpressa* Brenner, Meddeland. Soc. Fauna Fl. Fennica 47: 13. 1921.

*Juniperus communis* f. *brevifolia* Brenner, Meddeland. Soc. Fauna Fl. Fennica 47: 13. 1921.

*Juniperus communis* f. *densa* Brenner, Meddeland. Soc. Fauna Fl. Fennica 47: 12. 1921.

*Juniperus communis* f. *intermedia* Brenner, Meddeland. Soc. Fauna Fl. Fennica 47: 13. 1921.

*Juniperus communis* f. *laxa* Brenner, Meddeland. Soc. Fauna Fl. Fennica 47: 12. 1921.

*Juniperus communis* f. *longifolia* Brenner, Meddeland. Soc. Fauna Fl. Fennica 47: 13. 1921.

### ***Leontodon autumnalis* L. var. *villosus***

Brenner

Not. Sällsk. Fauna Fl. Fennica 11 (ny serie 8): 23. 1871. — LECTOTYPE (designated here): Russia. Ka, Tytärsaari, 23 July 1868, *M. Br[enner] s.n.* (H755934!).

PROTOLOGUE LOCALITY in Brenner (1871a): Russia. 1. Tytärsaari. On the label var. *villosus* by Brenner. The phyllaries are hairy. This is *Scorzoneroidea autumnalis* (L.) Moench var. *pratensis* (Hornem.) P.D. Sell.

### ***Linnaea* by Brenner**

Brenner (1908b, 1909, 1910c, 1911b, 1912) stated unequivocally that his new *Linnea* taxa are formae, although in the diagnoses these are given as species or varieties. The “varieties” described under *L. borealis* f. *amoenula* Wittr. must be interpreted at the rank of subforma, as Brenner indicated on the labels. *Linnaea borealis* is a highly polymorphic species concerning the flower coloration, with a continuous variation, consequently all forms cited below are considered to be synonyms of *L. borealis* f. *borealis*.

### ***Linnaea borealis* L. f. *albiloba***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 36: 12. 1910. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, 20 July 1909, *M. Brenner s.n.* (H798508!).

PROTOLOGUE LOCALITY in Brenner (1910c): Finland. 1. Ingå, Haga. On the label f. *albiloba* by Brenner.

### ***Linnaea borealis* L. f. *foveolata***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 94. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarbäck, 22 July 1907, *M. Brenner s.n.* (H798483!); isolectotype: (H798482!).

PROTOLOGUE LOCALITY in Brenner (1908b): Finland. 1. Ingå, Svarbäck. On the label f. *foveolata* by Brenner.

### ***Linnaea borealis* L. f. *heterophylla***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 35: 118. 1909. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Westerkulla, 31 August 1908, *M. Brenner s.n.* (H531927!).

PROTOLOGUE LOCALITIES in Brenner (1909b): Finland. 1. Ingå, Westerkulla; 2. Skamö [not seen]. On the label f. *heterophylla* by Brenner.

### ***Linnaea borealis* L. f. *jugosa***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 91. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarbäck, 3 July 1907, *M. Brenner s.n.* (H531923!).

PROTOLOGUE LOCALITY in Brenner (1908b): Finland. 1. Ingå, Svarbäck. On the label f. *jugosa* by Brenner.

### ***Linnaea borealis* L. f. *leucoloba***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 37: 36. 1911. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, 18 June 1910, *M. Brenner s.n.* (H798484!).

PROTOLOGUE LOCALITY in Brenner (1911b): Finland. 1. Ingå, Haga. On the label f. *leucoloba* by Brenner.

### ***Linnaea borealis* L. f. *parvisignata***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 36: 12. 1910. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, 2 July 1909, *M. Brenner s.n.* (H798514!).

PROTOLOGUE LOCALITY in Brenner (1910c): Finland. 1. Ingå, Haga. On the label f. *parvisignata* by Brenner.

### ***Linnaea borealis* L. f. *pyrrosema***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 36: 3. 1910. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, 3 July 1909, *M. Brenner s.n.* (H798513!).

PROTOLOGUE LOCALITY in Brenner (1910c): Finland. 1. Ingå, Haga. On the label f. *pyrrosema* by Brenner.

### ***Linnaea borealis* L. f. *retinervis***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 38: 43. 1912. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Westerkulla, 1 July 1911, *M. Brenner s.n.* (H798472!).

PROTOLOGUE LOCALITY in Brenner (1912): Finland. 1. Ingå, Westerkulla. On the label f. *retinervis* by Brenner.

### ***Linnaea borealis* L. f. *roseoalba***

Meddeland. Soc. Fauna Fl. Fennica 36: 9. 1910. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Fagerö, 26 July 1909, *M. Brenner s.n.* (H531929!).

PROTOLOGUE LOCALITY in Brenner (1910c): Finland. 1. Ingå, Fagerö. On the label f. *roseoalba* by Brenner.

### ***Linnaea borealis* L. f. *rotundata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 36: 11. 1910. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, 3 July 1909, *M. Brenner s.n.* (H798511!).

PROTOLOGUE LOCALITY in Brenner (1910c): Finland. 1. Ingå, Haga. On the label f. *rotundata* by Brenner.

### ***Linnaea borealis* L. f. *subamoena***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 35: 118. 1909. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, 23 June 1908, *M. Brenner s.n.* (H531928!).

PROTOLOGUE LOCALITY in Brenner (1909b): Finland. 1. Ingå, Haga. On the label f. *subamoena* by Brenner.

### ***Linnaea borealis* L. f. *subconfluens***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 96. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Bollstad, 8 July 1907, *M. Brenner s.n.* (H531926!).

PROTOLOGUE LOCALITY in Brenner (1908b): Finland. 1. Ingå, Bollstad. On the label f. *subconfluens* by Brenner.

### ***Linnaea borealis* L. f. *subjugosa* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 34: 91. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, 6 July 1907, *M. Brenner s.n.* (H798471!).

PROTOLOGUE LOCALITY in Brenner (1908b): Finland. 1. Ingå, Svarträsk. On the label f. *subjugosa* by Brenner.

### ***Linnaea borealis* L. f. *subsulcata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 34: 93. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, 13 July 1907, *M. Brenner s.n.* (H798476!). — ORIGINAL MATERIAL: Finland. 1. N, Ingå [Inkoo], Villa Fridhem, 19 July 1907, *M. Brenner s.n.* (H798478!); 2. N, Ingå [Inkoo], Svarträsk, 15 July 1907, *M. Brenner s.n.* (H798477!); 3. N, Ingå [Inkoo], Svarträsk, 14 June 1910, *M. Brenner s.n.* (H798475!); 4. N, Ingå [Inkoo], 18 June 1910, *M. Brenner s.n.* (H798486!).

PROTOLOGUE LOCALITIES in Brenner (1908b): Finland. 1. Ingå, Svarträsk; 2. Ingå, Haga. On the labels f. *subsulcata* by Brenner.

### ***Linnaea borealis* L. f. *subviolascens***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 36: 10. 1910. — LECTO-

TYPE (designated here): Finland. N, Ingå [Inkoo], Fagerö, 26 July 1909, *M. Brenner s.n.* (H531930!).

PROTOLOGUE LOCALITIES in Brenner (1910c): Finland. 1. Ingå, Fagerö. On the label f. *subviolascens* by Brenner.

### ***Linnaea borealis* L. f. *sulcata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 34: 96. 1908. — LECTOTYPE (designated here): Finland. Ingå [Inkoo], Svarträsk, 4 July 1907, *T. Brenner s.n.* (H531922!). — ORIGINAL MATERIAL: Finland. 1. N, Ingå [Inkoo], Haga, 8 July 1907, *E. Brenner s.n.* (H531920!); 2. N, Ingå [Inkoo], Haga, 8 July 1907, *W. Brenner s.n.* (H531921!).

PROTOLOGUE LOCALITIES in Brenner (1909h): Finland. 1. Ingå, Svarträsk; 2. Ingå, Haga. On the labels f. *sulcata* by Brenner.

### ***Linnaea borealis* L. f. *tenuiflora* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 36: 10. 1910. — LECTOTYPE (designated here): Finland. 1. N, Ingå [Inkoo], Fagerö, 26 July 1909, *M. Brenner s.n.* (H531930!); isolectotype (H798510!).

PROTOLOGUE LOCALITY in Brenner (1910c): Finland. 1. Ingå, Fagerö. On the label f. *tenuiflora* by Brenner.

### ***Linnaea borealis* L. f. *tenuisulcata***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 92. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, 6 July 1907, *M. Brenner s.n.* (H798470!).

PROTOLOGUE LOCALITY in Brenner (1908b): Finland. 1. Ingå, Svarträsk. On the label f. *tenuisulcata* by Brenner.

### ***Linnaea borealis* L. f. *amoenula* Wittr.**

subf. ["var."] *pallida* Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 95. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, 22 July 1907, *M. Brenner s.n.* (H531924!). — ORIGINAL MATERIAL: Finland. 1. N, Ingå [Inkoo], Svarträsk, 13 July 1907, *M. Brenner s.n.* (H798509!); 2. N, Ingå [Inkoo], Haga, 2 July 1909, *M. Brenner s.n.* (H798515!).

PROTOLOGUE LOCALITY in Brenner (1908b): Finland. 1. Ingå. On the sheets there are no notes by Brenner, but f. *amoenula* Wittr. on the labels and the protologue are congruent with cited localities and morphology.

### ***Linnaea borealis* L. f. *amoenula* Wittr. subf.**

["var."] *rubra* Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 95. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Villa Fridhem, 8 July 1907, *M. Brenner s.n.* (H531925!).

PROTOLOGUE LOCALITY in Brenner (1908b): Finland. 1. Ingå, Villa Fridhem. On the sheets there are no notes by

Brenner, but localities, f. *amoenula* Wittr. and protologue are congruent with cited localities and morphology.

### ***Linnaea borealis* L. subf. *nana* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 34: 93. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, Villa Fridhem, 19 June 1907, M. Brenner s.n. (H79840!). — ORIGINAL MATERIAL: Finland. 1. N, Ingå [Inkoo], Villa Fridhem, 8 June 1907, M. Brenner s.n. (H798481!); 2. N, Ingå [Inkoo], Svarträsk, 13 August 1907, M. Brenner s.n. (H798479!).

PROTOLOGUE LOCALITIES in Brenner (1908b): Finland. 1. Ingå, Svarträsk; 2. Ingå, Villa Fridhem. On the labels *L. borealis* L. f. *vicina* Wittr. subf. *nana* by Brenner.

### ***Lithospermum arvense* L. subsp. *coeruleescens* DC. f. *subcoeruleescens* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 13: 243. 1886b.

PROTOLOGUE LOCALITIES in Brenner (1886b): Finland. 1. [Helsinki], Gammalstan [Vanhakaupunki]; 2. [Helsinki or Vantaa], Vanda å [by river Vantaan]. No collection was found at H matching the name and protologue locality and diagnosis. f. *subcoeruleescens* refers to flower coloration. This is *Buglossoides arvensis* (L.) I.M. Johnst. var. *coeruleescens* (DC.) A. Hansen & Sunding.

### ***Lythrum salicaria* L. f. *depauperatum* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 13: 243. 1886. — LECTOTYPE (designated here): Finland. N, Helsinge [Helsinki rural municipality, today Helsinki or Vantaa], 16 July 1873, L. Florin s.n. (H183795!).

PROTOLOGUE LOCALITIES in Brenner (1886b): Finland. 1. Helsinge. No determination by Brenner, but the morphology and protologue locality is congruent with Brenner (1886b). Flowers are present only at upper part of stem. This is *Lythrum salicaria*.

### ***Lythrum salicaria* L. f. *rariflorum* Brenner**

Not. Sällsk. Fauna Fl. Fennica 11 (ny serie 8): 457. 1874.

PROTOLOGUE LOCALITIES in Brenner (1886b): Finland. 1. [Helsinki], Thölö-viken [Töölönlahti]. No collection was found at H matching the name, protologue locality and diagnosis. Few flowers present. This is *Lythrum salicaria*.

### ***Odontites litoralis* (Fr.) Fr. f. *decumbens* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 25: 18. 1900. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Rönnskär [Pihlajasaari], 19 August 1861, M. Brenner s.n. (H538053!).

PROTOLOGUE LOCALITY in Brenner (1900a): Finland. 1. Helsingfors, Rönnskär. On the label there are no determination notes by Brenner, but the locality is congruent with the cited locality. A branching expression with a basally bent stem. This is *Odontites litoralis*, det. Britt Snogerup 1979.

### ***Orchis incarnata* L. var. *pallida* Brenner**

Floristic Handbok: 185. 1886d. — LECTOTYPE (designated here): Russia. Kon, Tiudie [Tivdiya], 10 July 1863, Th. Simming s.n. (H768546!).

No protologue locality in Brenner (1886d): no locality given. On the label var. *pallida* by Brenner, var. *rigida* f. *pallida* by J. Klinge (1895), var. *brachyphylla* Verm. by P. Vermeulen (1948). The flowers are pale. This is *Dactylorhiza incarnata* (L.) Soó subsp. *incarnata*.

### ***Orchis maculata* L. f. *recurvifolia* Brenner**

Acta Soc. Fauna Fl. Fennica 34(4): 10. 1911. — LECTOTYPE (designated here): Finland. Ok, Suomussalmi, Ruhtinansalmekylä, 1906, O. Kyyhkynen s.n. (H006512!). — ORIGINAL MATERIAL: Finland. 1. Kn, Suomussalmi, Pappila, 1908, O. Kyyhkynen s.n. (H006509!); 2. Kn, Suomussalmi, Pappila [vicarage], Palovaara tienvarsi [roadside], 1908, O. Kyyhkynen s.n. (H006510!).

PROTOLOGUE LOCALITIES in Brenner (1911a): Finland. 1. Kianto, prästgårdstrakten [vicarage area]; 2. Kianto, Ruhtinansalmekylä. On the labels f. *recurvifolia* by Brenner. The leaves are curved. This is *Dactylorhiza maculata* (L.) Soó.

### ***Oxalis acetosella* L. f. *lilacina* Brenner**

Not. Sällsk. Fauna Fl. Fennica 11 (ny serie 8): 447. 1871.

No collection was found at H matching the name, diagnosis and protologue locality.

### ***Pepis portula* L. f. *aquatica* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 32: 71. 1906. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, 27 August 1905, W. Brenner s.n. (H405083!).

PROTOLOGUE LOCALITY in Brenner (1906b): Finland. 1. Ingå, Svarträsk. There is no f. *aquatica* on the label, but locality data and morphology are congruent with diagnosis. Submerged individuals. This is *Lythrum portula* (L.) D.A. Webb f. *portula*.

### ***Peucedanum palustre* (L.) Moench var. *filifolium* Brenner**

Acta Soc. Fauna Fl. Fennica 16(4): 211. 1899. — LECTOTYPE (designated here): Finland. Ok, Puolanka, emellan [between] Kivari och [and] Housuvaara, 19 July 1869, M. Brenner s.n. (H010772!).

PROTOLOGUE LOCALITY in Brenner (1899): Finland. 1. Puolanka emellan [between] Kivari och [and] Housuvaara.

On the label var. *filifolium* by Brenner. The leaves have narrow leaflets. This is *Peucedanum palustre*.

### ***Peucedanum palustre* var. *selinifolium***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 15: 191. 1888. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkoomui], 11 August 1886, M. Brenner s.n. (H411567!).

PROTOLOGUE LOCALITY in Brenner (1888a): Finland. 1. Kyrkslätt, Weikkola. On the label var. *selinifolium* by Brenner. The leaves have short leaflets as in *Selinum carvifolia*. This is *Peucedanum palustre*.

### ***Platanthera bifolia* (L.) Rich. f. *tricornis***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 26: 4. 1900. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarbäck, 10 July 1899, M. Brenner s.n. (H754007!).

PROTOLOGUE LOCALITY in Brenner (1900b): Finland. 1. Ingå, Svarbäck. On the label f. *tricornis* by Brenner. He considered the morphology of this form as temporary. Ther flowers have three spurs. This is *Platanthera bifolia* f. *bifolia*.

### ***Phleum pratense* L. f. *monstrosa***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 37: 38. 1911. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Brennebo, 3. August 1910, M. Brenner s.n. (H506917!).

PROTOLOGUE LOCALITY in Brenner (1911b): Finland. 1. Ingå, Brennebo. The forma name is not given on the label, but the protologue is congruent with cited localities and morphology. The inflorescence is atypical. This is *Phleum pratense* f. *pratense*.

## ***Picea* by Brenner**

Many conifer taxa described by Brenner lack type material at H. Many of them were described based on the cone morphology and branching pattern of branches. There are three subspecies of *Picea abies* in Finland; *P. abies* subsp. *abies*, *P. abies* subsp. *x fennica* (Regel) Parfenov (*P. abies* subsp. *abies* × subsp. *obovata*) and *P. abies* subsp. *obovata* (Ledeb.) Domin, of which subsp. *x fennica* is the most abundant. Var. *acuminata* Beck refers to subsp. *abies*, var. *fennica* (Regel) Beck and var. *rhombica* Wittr. to subsp. *x fennica*.

### ***Picea excelsa* (Lam.) Link f. *constricta***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 43: 20. 1917.

PROTOLOGUE LOCALITY in Brenner (1917a): Finland. 1. Ingå, Haga. Original material was not found at H. The epithet refers to the cone morphology. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *corrugata***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 43: 16. 1917.

PROTOLOGUE LOCALITY in Brenner (1917a): Finland. 1. Ingå, Brennebo, Haga. Original material was not found at H. The epithet refers to the cone morphology. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *deversa***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 49: 8. 1925. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Brennebo, summer 1922, drawing (Brenner 1925e: 9!).

PROTOLOGUE LOCALITY in Brenner (1925e): Finland. 1. Ingå, Brennebo. Original material was not found at H. According to the diagnosis, this is a mechanically induced temporary dichotomous growth form of *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *fastigiata***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 50: 8. 1925.

PROTOLOGUE LOCALITY in Brenner (1925g): Finland. 1. Ingå, Brennebo. Original material was not found at H. According to the diagnosis, this is a seed born growth form of *Picea abies* (L.) H. Karst. with unbranched erect branches

### ***Picea excelsa* (Lam.) Link f. *furcata***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 171. 1908.

PROTOLOGUE LOCALITY (Brenner (1908e)): Finland. 1. Saarijärvi, Pyhäjärvi. Original material was not found at H. A small tree without branches, considered by Brenner to be of temporary nature. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *hemichlocarpa***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 45: 29. 1920.

PROTOLOGUE LOCALITY in Brenner (1920): Finland. 1. Ingå, Brennebo. Original material was not found at H. The epithet refers to coloration and morphology of the cone scales, considered by Brenner to be of temporary nature. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *leptalea***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 44: 26. 1918.

PROTOLOGUE LOCALITY in Brenner (1918a): Finland. 1. Ingå, Brennebo. Original material was not found at H. According to Brenner, the form was temporary, caused by drought and insects. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *mesochlorocarpa* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 45: 29. 1920.

PROTOLOGUE LOCALITY in Brenner (1920): Finland. 1. Ingå, Brennebo. Original material was not found at H. The epithet refers to coloration and morphology of the cone scales, considered by Brenner to be of temporary nature. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *nodosa* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 34: 37. 1908. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svartbäck, summer 1908, drawing! (Brenner 1908a).

PROTOLOGUE LOCALITY Brenner (1908a): Finland. 1. Ingå, Svartbäck. Original material was not found at H. The epithet refers to nodular branches, being according to Brenner of temporary nature. The same tree included three forms; f. *nodosa*, f. *oligoclada*, and f. *virgata* (Jacques) Rehder. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *oligoclada* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 21: 7. 1895.

PROTOLOGUE LOCALITY in Brenner (1895b): Finland. 1. Ab, Lojo, Mongolia [today Hiidensalmi], near SOLhem, one tree. Original material was not found at H. Like f. *virgata* Jacq., but the secondary branches are very short. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *recurvata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 21. 1917. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, fig. 7! (photograph).

PROTOLOGUE LOCALITY in Brenner (1917a): Finland. 1. Ingå, Haga. Original material was not found at H. The epithet refers to the morphology of the cone scales (backward-curved), considered as a temporary form by Brenner. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *sigmoidea* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 21. 1917.

PROTOLOGUE LOCALITY in Brenner (1917a): Finland. 1. Ingå, Haga. Original material was not found at H. The epithet refers to the morphology of the cone scales (S-shaped), con-

sidered as a temporary form by Brenner. This is *Picea abies* (L.) H. Karst.

### ***Picea excelsa* (Lam.) Link f. *umbelliformis* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 36: 7. 1910.

PROTOLOGUE LOCALITY in Brenner (1910b): Finland. 1. Ingå, Haga. Original material was not found at H. The diagnosis resembles that of *P. abies* (L.) H. Karst. ‘Tabulaeformis’.

### ***Picea excelsa* (Lam.) Link f. *virgulata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 44: 38. 1918. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Bergstad, Pepparviken, August 1915, photograph!

PROTOLOGUE LOCALITY in Brenner (1918b): Finland. 1. Kyrkslätt, Bergstad, Pepparviken. Original material was not found at H. The photograph resembles *P. abies* (L.) H. Karst. f. *virgata* (Jacques) Rehder.

### ***Picea excelsa* (Lam.) Link var. *acuminata* Beck f. *bifida* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 71. 1917.

PROTOLOGUE LOCALITY in Brenner (1917b): Finland. 1. Ingå, Stor-Löfö. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* (L.) H. Karst. subsp. *abies* f. *abies*.

### ***Picea excelsa* (Lam.) Link var. *acuminata* Beck f. *praemorsa* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 71. 1917.

PROTOLOGUE LOCALITY in Brenner (1917b): Finland. 1. Ingå, Brennebo. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* (L.) H. Karst. subsp. *abies* f. *abies*.

### ***Picea excelsa* (Lam.) Link var. *fennica* (Regel) Beck f. *elliptica* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 73. 1917.

PROTOLOGUE LOCALITY in Brenner (1917b): Finland. 1. Ingå, Brennebo. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp. *× fennica* (Regel) Parfenov f. *fennica*.

### ***Picea excelsa* (Lam.) Link var. *fennica* (Regel) Beck f. *obovoidea* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 73. 1917.

PROTOLOGUE LOCALITY in Brenner (1917b): Finland. 1. Ingå, Bastö. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *fennica*  
(Regel) Beck f. *subcuneata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 73. 1917.

PROTOLOGUE LOCALITY in Brenner (1917b): Finland. 1. Ingå, Brennebo. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica*  
(Wittr.) Brenner f. *bicornis* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 69. 1917. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, Brennebo, 1916, M. Brenner s.n. (H083775, box 301!). — ORIGINAL MATERIAL: Finland. N, Ingå [Inkoo], Svarträsk, Brennebo, 1916, M. Brenner s.n. (H083776, box 302!).

PROTOLOGUE LOCALITY in Brenner (1917b): Finland. 1. Ingå, Brennebo. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica*  
Wittr. f. *bidentata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, Brennebo, 1916, M. Brenner s.n. (H083785, box 311!).

PROTOLOGUE LOCALITIES in Brenner (1917b): Finland. 1. Ingå, Brennebo; 2. Ingå, Bastö. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica*  
Wittr. f. *decapitata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 69. 1917. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, Brennebo, 1916, M. Brenner s.n. (H083782, box 308!).

PROTOLOGUE LOCALITY in Brenner (1917b): Finland. 1. Ingå, Brennebo. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica*  
Wittr. f. *erosa* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917. — LECTO-

TYPE (designated here): Finland. N, Ingå [Inkoo], Svarträsk, Brennebo, 1916, M. Brenner s.n. (H083786, box 312!). — ORIGINAL MATERIAL: Finland. N, Ingå [Inkoo], Svarträsk, Brennebo, 1916, M. Brenner s.n. (H083780, box 306!); N, Ingå [Inkoo], Svarträsk, Brennebo, 1916, M. Brenner s.n. (H083773, box 299!).

PROTOLOGUE LOCALITIES in Brenner (1917b): Finland. 1. Ingå, Brennebo; 2. Ingå, Svarträsk, Bastubacka; 3. Helsingfors, Ulrikasborgberget, Brunnsparken [Ullanlinnanmäki, Kaivopuisto]; 4. Helsingfors, Fölisön [Seurasaari]. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica*  
Wittr. f. *mixta* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917.

PROTOLOGUE LOCALITIES in Brenner (1917b): Finland. 1. Ingå, Brennebo; 2. Ingå, Bastö; 3. Helsingfors, Ulrikasborgberget, Brunnsparken [Ullanlinnanmäki, Kaivopuisto]. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica*  
Wittr. f. *obtusata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Bastö, 1916, E. Granroth s.n. (H083713, box 239!).

PROTOLOGUE LOCALITIES in Brenner (1917b): Finland. 1. Ingå, Brennebo; 2. Ingå, Bastö. There is no determination by Brenner on the labels, but the locality and protologue are congruent with the cited localities and morphology. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica*  
Wittr. f. *semibidentata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917.

PROTOLOGUE LOCALITIES in Brenner (1917b): Finland. 1. Ingå, Brennebo; 2. Ingå, Bastö. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp.  $\times$  *fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica*  
Wittr. f. *semierosa* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917.

PROTOLOGUE LOCALITIES in Brenner (1917b): Finland. 1. Ingå, Brennebo; 2. Helsingfors [Helsinki], Gamla Kyrkogår-

den [Vanha hautausmaa]. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp. *×fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica***

Wittr. f. *subobliqua* Brenner

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917.

PROTOLOGUE LOCALITY in Brenner (1917b): no locality given. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp. *×fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica***

Wittr. f. *subacuta* Brenner

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917.

PROTOLOGUE LOCALITY in Brenner (1917b): Finland. 1. Ingå, Brennebo. Original material was not found at H. The epithet refers to the morphology of the cone scales, considered as a temporary form by Brenner. This is *Picea abies* subsp. *×fennica* (Regel) Parfenov f. *fennica*.

***Picea excelsa* (Lam.) Link var. *rhombica***

Wittr. f. *typica* Brenner, *nom. illeg.*

Meddeland. Soc. Fauna Fl. Fennica 43: 68. 1917.

***Pimpinella* by Brenner**

Traditionally *Pimpinella saxifraga* L. was treated as divisible into two varieties, var. *dissecta* and var. *saxifraga*. Due to intermediates, Brenner accepted a third taxon, *integrifolia* Wallr., and considered them all subspecies; the last one correctly *P. saxifraga* subsp. *integrifolia* (Willd. ex Wallr.) Brenner. Wallroth's (1822) diagnosis: "foliolosum radicalium ovatis obtusis inciso-serratis, summis abortientibus cauleque proceriore tenuissime pubescentibus". Due to intermediates, Brenner described several new formae. However, *P. saxifraga* is a highly polymorphic species with continuous variation; Brenner himself considered this species as heterogenic. All formae by Brenner are synonyms of *P. saxifraga* f. *saxifraga*.

***Pimpinella saxifraga* L. subsp. *dissecta***

(Retz.) Gaudin f. *falcata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 156. 1925. — LEC-

TOTYPE (designated here): Finland. Ta, Hollola, piha [yard], 17 July 1912, V. H. Anttila s.n. (H130466!). — ORIGINAL MATERIAL: 1. [Finland] Ta, Lampis [Lammi], 13 July 1872, I. T. Lagerblad s.n. (H226922!); 2. [Finland] Ta, Södra Tavasteland, Tavastehustrakten [Hämeenlinna], Stor-Luolais, 8 August 1881, O. Collin s.n. (H226927!).

PROTOLOGUE LOCALITIES in Brenner (1925d): Finland. 1. Hollola; 2. Lampis; 3. Tavastehus, Stor-Luolais. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

***Pimpinella saxifraga* L. subsp. *integrifolia***

Wallr. f. *cordata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 156. 1925.

PROTOLOGUE LOCALITY in Brenner (1925d): Finland. 1. Ingå [Inkoo]. Original material was not found at H.

***Pimpinella saxifraga* L. subsp. *integrifolia***

Wallr. f. *cordato-triangularis* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 155. 1925. — LECTOTYPE (designated here): Finland. Ab, Vihti, montis Laukkamäki prope pagum Vanhala, 20 August 1902, J. A. Wecksell s.n. (H303405!); isolectotypes: (H303400!, H303410!). — ORIGINAL MATERIAL: 1. Finland. 1. [N], [Inkoo], Fagervik, 23 July 1851, E. Hisinger s.n. (H410384!); 2. Oa, Jurwa, 24 August 1859, A. J. Malmgren s.n. (H122966!); 3. Kb, Kides [Kitee], 14 July 1863, A. Brander s.n. (H410483!); Russia. 4. Kol, Petrosawodsk, 1 August 1863, T. Simming s.n. (H410467!); 5. Kol, Nimpelta, J. I. Lindroth s.n. & A. K. Cajander s.n., 24 July 1898 (H410463!); 6. Kol, Mandroga, 21 July 1875, F. Elfving s.n. (H410466!); 7. Karelia rossica, [Kpoc], Repola, Tuulijärvi, 24 July 1877, E. Wainio s.n. (H410502!).

PROTOLOGUE LOCALITIES in Brenner (1925d): Finland. 1. Vichtis; 2. Fagervik; 3. Jurva; 4. Kides; Russia. 5. Petrosawodsk; 6. Nimpelta; 7. Mandroga; 8. Repola. Except for the lectotype, there are on the sheets no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

***Pimpinella saxifraga* L. subsp. *integrifolia***

Wallr. f. *cordato-trigona* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 156. 1925. — LECTOTYPE (designated here): Finland. Kb, Koli, Rantala, 27 July 1904, J. Pekkarinen s.n. (H410480!); isolectotypes (H214245!, H410481!).

PROTOLOGUE LOCALITY in Brenner (1925d): Finland. 1. Koli. On the sheet there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology. Det. *P. saxifraga* by Harald Lindberg 1940, by Lars Fröberg (LD) in 2005.

***Pimpinella saxifraga* L. subsp. *integrifolia***

Wallr. f. *cuneato-ovata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 156. 1925. — LECTO-

TYPE (designated here): Finland. Kb, Libelits [Liperi], Niinikosaari, 2 August 1872, *M. A. Europaeus & K. A. Hällström s.n.* (H410487!). — ORIGINAL MATERIAL: Finland, Ta, [Tammela], Mustiala, 8 August 1874, *G. Zitting s.n.* (H226921!).

PROTOLOGUE LOCALITIES in Brenner (1925d): Finland. 1. Mustiala; 2. Libelits; 3. Eno; Russia. 4. Kevätmenjärvi. On the sheet there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

***Pimpinella saxifraga* L. subsp. *integrifolia***  
Wallr. f. *oblonga* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 155. 1925. — LECTOTYPE (designated here): [Russia]. Lapponia rossica, Lim, Umba, 22 August 1892, *A. O. Kihlman s.n.* (H410517!).

PROTOLOGUE LOCALITY in Brenner (1925d): Russia. 1. Umba. On the label there are no notes by Brenner, but the locality is congruent with the cited locality. f. *ovata* was also collected at Umba.

***Pimpinella saxifraga* L. subsp. *integrifolia***  
Wallr. f. *ovata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 155. 1925. — LECTOTYPE (designated here): [Russia]. Lapponia rossica, Lim, Mare album [White Sea], Umba, 6 August 1861, *G. Selin s.n.* (H410516!).

PROTOLOGUE LOCALITY in Brenner (1925d): Russia. 1. Umba. On the sheet there are no notes by Brenner, but the locality is congruent with the cited locality. f. *oblonga* was also collected at Umba.

***Pimpinella saxifraga* L. subsp. *integrifolia***  
Wallr. f. *subcordata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 155. 1925. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Brennebo, 12 August 1923, *M. Brenner s.n.* (H470536!). — ORIGINAL MATERIAL: Finland. 1. N, Ingå [Inkoo], Brennebo, 27 July 1923, *M. Brenner s.n.* (H470540!, H470541!); 2. N, Ingå [Inkoo], Brennebo, 7 August 1923, *M. Brenner s.n.* (H470534!); 3. V, Uskela, 8 July 1853, *K. E. Bonsdorff s.n.* (H303402!); 4. N, Askola, 4 August 1877, *T. Saelan s.n.* (H410359!); 5. St, Karkku, 23 August 1878, *H. Hjelt s.n.* (H212638!); 6. Ta, Sysmä, 24 June 1870, *E. Renqvist s.n.* (H400481!); 7. Ta, Jämsä, 24 July 1859, *A. T. Saelan s.n.* (H226890!); 8. Ta, Sysmä, Nya Askola, 22 July 1871, *K. J. W. Unionius s.n.* (H226891!); 9. Russia. Ka, Hogland [Suursaari], 5 July 1868, *M. Brenner s.n.* (H410398!); 10. Ik, Sakkola, 6 July 1866, *A. J. Malmberg s.n.* (H410413!); 11. Kon, Kiischi, 23 August 1898, *J. I. Lindroth s.n. & A. K. Cajander s.n.* (H410490!); 12. Kpoc, Kem, 31 July 1861, *G. Selin s.n.* (H410501!); 13. Kk, Oulanka, Laitasalmi, 5 August 1877, *E. Wainio s.n.* (H410515!).

PROTOLOGUE LOCALITIES in Brenner (1925d): Finland. 1. Ingå; 2. Nagu; 3. Uskela; 4. Vichtis; 5. Karkku; 6. Jämsä; 7.

Sysmä; Russia. 8. Sakkola; 9. Hogland; 10. Kiischi; 11. Kem. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

***Pimpinella saxifraga* L. subsp. *integrifolia***  
Wallr. f. *subovata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 155. 1925. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Brennebo, 12 August 1923, *M. Brenner s.n.* (H470535!). — ORIGINAL MATERIAL: Finland. 1. N, Strömfors [Ruotsinpyhtää, Ahvenkoski], 5 August 1856, *J. E. Strömborg s.n. & Th. Saelan s.n.* (H410353!); 2. Ta, Jokioinen, *S. Salmenlinna s.n.* (H226909!); 3. Tb, Saarijärvi, *V. F. Brotherus s.n.* (H410477!); Russia. 4. Kon, Sennoguba, *J. I. Lindroth s.n. & A. K. Cajander s.n.*, 30 August 1898 (H410492!).

PROTOLOGUE LOCALITIES in Brenner (1925d): Finland. 1. Ingå; 2. Strömfors; 3. Jokioinen; 4. Saarijärvi; Russia. 5. Sennoguba. Except for the lectotype, on the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

***Pimpinella saxifraga* L. subsp. *integrifolia***  
Wallr. f. *subrhombica* Wittr. Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 155. 1925. — LECTOTYPE (designated here): Finland. Ka, Sirola, 1 August 1888, *J. Lindén s.n.* (H410402!). — ORIGINAL MATERIAL: [Russia], Kon, Sennoguba, 1 September 1898, *J. I. Liro & A. K. Cajander s.n.* (H410489!, H700177!).

PROTOLOGUE LOCALITIES in Brenner (1925d): Finland. 1. Kirvus; Russia. 2. Sennoguba. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

***Pimpinella saxifraga* L. subsp. *integrifolia***  
Wallr. f. *subrotunda* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 155. 1925. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Brennebo, 7 August 1923, *M. Brenner s.n.* (H470538!). — ORIGINAL MATERIAL: Finland. N, Ingå [Inkoo], Svarbäck, Handelskog, 26 August 1921, *M. Brenner s.n.* (H410354!).

PROTOLOGUE LOCALITIES in Brenner (1925d): Finland. 1. Ingå. On the labels f. *subrotunda* by Brenner.

***Pimpinella saxifraga* L. subsp. *integrifolia***  
Wallr. f. *subtriangularis* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 155. 1925. — LECTOTYPE (designated here): Finland, N, Ingå [Inkoo], Brennebo, 1 August 1923, *M. Brenner s.n.* (H470539!). — ORIGINAL MATERIAL: Finland. 1. Sa, Ruokolaks [Ruoholahti], 27 July 1876, *R. Hult s.n.* (H410415!); 2. Sb, Kuopio, August 1900, *O. Lönnbohm s.n.* (H386396!); 3. Om, Salo, 17 August

1893, *C. Fornander s.n.* (H410494!); 4. Ob, Kemi, Laurila, 1 August 1864, *M. Brenner s.n.* (H410509!); 5. Ob, Kemi, Kurtakkokangas, 24 July 1896, *A. Rantaniemi s.n.* (H410512!); Russia. 6. Kl, Uguniemi [Uukuniemi], 10 July 1852, *E. Niklander s.n.* (H410430!); 7. Kon, Sennoguba, 1 September 1898, *J. I. Lindroth & A. K. Cajander s.n.* (H410491!); 8. Kon, Suojärvi, Piponsaari, 13 July 1903, *A. K. Cajander & A. L. Backman s.n.* (H410478!); 9. Kon, Suojärvi, Varpakylä, no year, *A. K. Cajander & A. L. Backman s.n.* (H410478!); 10. Kpoc, Torovaara, 27 July 1897, *I. O. Bergroth & K. W. Fontell s.n.* (H410503!).

PROTOLOGUE LOCALITIES in Brenner (1925d): Finland. 1. Al, Sund; 2. Ab, Nagu; 3. Tvärminne; 4. Ingå; 5. Borgå; 6. Kuopio; 7. Ruokolaks; 8. Kb, Libelits; 9. Salo; 10. Kemi; Russia 11. Kker, Oulanka; 12. Uguniemi; 13. Suojärvi; 14. Sennoguba, 15. Torovaara. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology. There are some other specimens at H, collected at Borgå, Libelits, Nagu and Tvärminne, but types are not designated here due to uncertainty.

### **Pimpinella saxifraga** L. subsp. *integrifolia* Wallr. f. *triangularis-ovata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 156. 1925. — LECTOTYPE (designated here): Finland. Ab, Nagu [Nauvo], in prato nemoroso, 19 July 1905, *A. Dahl s.n.* (H303404!).

PROTOLOGUE LOCALITY in Brenner (1925d): Finland. 1. Nagu. On the sheet there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

### **Pimpinella saxifraga** L. subsp. *integrifolia* Wallr. Peters. f. *triangularis* Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 156. 1925. — LECTOTYPE (designated here): Finland. Ab, Nagu [Nauvo], 16 July 1900, *A. Dahl s.n.* (H303401!).

PROTOLOGUE LOCALITY in Brenner (1925d): Finland. 1. Ab, Nagu. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

### **Pinus sylvestris** L. f. *contortifolia* Brenner

Meddeland. Soc. Fauna Fl. Fennica 21: 7. 1895.

PROTOLOGUE LOCALITY in Brenner (1895a): Finland. 1., Ojamo. One tree, with short, curved needles. Original material was not found at H. This is *Pinus sylvestris*.

### **Pinus sylvestris** L. f. *cornigera* Brenner

Meddeland. Soc. Fauna Fl. Fennica 23: 6. 1898. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Ingels, 3 August 1896, *M. Brenner s.n.* (H083737, box 263!). — ORIGINAL MATERIAL: Finland. N, Kyrkslätt

[Kirkkonummi], Sigurs, 14 August 1896, *M. Brenner s.n.* (H083740, box 266!).

PROTOLOGUE LOCALITY in Brenner (1898a): Finland. 1. Kyrkslätt. On the labels *Pinus sylvestris* f. *cornigera* by Brenner. There are several specimens at H, which were named f. *subcornigera* by Brenner, but such was not described.

### **Polygonatum officinale** All. f. *latifolium* Brenner

Meddeland. Soc. Fauna Fl. Fennica 32: 70. 1906. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Joddböle, 5 July 1905, *M. Brenner s.n.* (H229098!). — ORIGINAL MATERIAL: Finland. 1. A, Jomala, 11 June 1886, *W. Laurén s.n.* (H229164!).

PROTOLOGUE LOCALITIES in Brenner (1906b): Finland. 1. Ingå, Joddböle; 2. A, Jomala. On lectotype label f. *latifolium* by Brenner. The leaves are broad egg-shaped. This is *Polygonatum odoratum* (Mill.) Druce.

### **Primula** by Brenner

Brenner's way of presenting variation in *Primula officinalis* [veris] is obscure. Fortunately, Brenner (1886c) included a table of taxa that he accepted.

### **Primula officinalis** (L.) Jacq. f. *apiculata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 47. 1886. — LECTOTYPE (designated here): Finland. Ta, [Sääksmäki], Rapola, 11 June 1877, *A. O. Kihlman s.n.* (H220504!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Sääksmäki, Valkiakoski; 2. Rapola. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

### **Primula officinalis** (L.) Jacq. f. *attenuata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 45. 1886. — LECTOTYPE (designated here): Finland: Oa, Wasa [Vaasa], 1859, *V. Brander & A. Jellgren s.n.* (H652615!). — ORIGINAL MATERIAL: Finland: 1. N, Helsingfors [Helsinki], Sumparn [Somppasaari], 27 May 1883, *H. Tallqvist s.n.* (H417588!); 2. Obo, Kempele, Limingoäng [Liminganniitty], Pääskylä, 16 July 1870, *M. Brenner s.n.* (H417718!); 3. Russia. Kl, Sortavala, June 18[44], *W. Nylander s.n.* (H417680!); 4. Kl, Sordavala, Ruskeala, July 1877, *H. Neiglick s.n.* (H417693!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Helsingfors, Sumparn; 2. Vasa; 3. Limingo; Russia. 4. Sordavala. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

**Primula officinalis** (L.) Jacq. subf. **cordata**  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 44. 1886. — LECTOTYPE (designated here): Finland: St, Raumo [Rauma], 1871, *W. Wallenius s.n.* (H212767!). — ORIGINAL MATERIAL: Finland. Ab, Åbo [Turku], 27 May 1885, *Arrhenius s.n.* (H262995!); N, [Helsinki, Sörnäinen], Osbergs et Badens mekaniska verkstad, June 1875, Anonymous (H417608!); N, Lovisa [Lovisa], 8 June 1849, *G. R. Björksten s.n.* (H417597!); Russia. Kl, Pelgjärvi, 5 June 1868, *H. Zilliacus s.n.* (H417703!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Åbo; 2. Raumo; 3. Sörnäs; 4. Lovisa; 5. Russia. Pelgjärvi. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

**Primula officinalis** (L.) Jacq. subf. **elliptica**  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 44. 1886. — LECTOTYPE (designated here): Finland. Ab, Kjulo [Köyliö], 1872, *E. Cedercreutz s.n.* (H212771!). — ORIGINAL MATERIAL: Finland. 1. Ab, Halikko, Vaisakko, 9 June 1852, *K. E. v. Bonsdorff s.n.* (H304544!); Ab, Halikko, Waisakko, 6 June 1855, *E. W. Niklander s.n.* (H304544!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Halikko; 2. Kjulo. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

**Primula officinalis** (L.) Jacq. subf. **firma**  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 43. 1886. — LECTOTYPE (designated here): Finland. St, Raumo [Rauma], June 1863, *K. K. Paqvalin s.n.* (H212772!). — ORIGINAL MATERIAL: Russia. 1. Kol, Mjatusova, 16 June 1875, *F. Elfving s.n.* (H417704!); 2. Ka, Kakkis [Johannes], May 1864, *G. A. Tommila s.n.* (H417689!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Raumo; Russia, 2. Kakkis; 3. Mjatusovo. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

**Primula officinalis** (L.) Jacq. f. **intermedia**  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 45. 1886. — LECTOTYPE (designated here): Finland. Ta, Laukko, Wesilaks [Vesilahti], July 1869, *H. Törngren s.n.* (H220497!). — ORIGINAL MATERIAL: Finland. A, Wårdö, Ängö, 20 June 1862, *M. Brenner s.n.* (H313852!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Vårdö; 2. Vesilaks. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

**Primula officinalis** (L.) Jacq. f. **longicalyx**  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 49. 1886. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Strömsby, 23 June 1888, *M. Brenner s.n.* (H417654!).

PROTOLOGUE LOCALITIES in Brenner (1886c): 1. Kyrkslätt; 2. Wien, Montpellier in Herb. Steven. H. Hjelt 1919: 387.

**Primula officinalis** (L.) Jacq. subf. **maxima**  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 43. 1886. — LECTOTYPE (designated here): Finland. Ta, Birkkala [Pirkkala], 9 June 1870, *J. A. Norrmén s.n.* (H347066!).

PROTOLOGUE LOCALITY in Brenner (1886c): Finland. 1. Birkkala. On the sheet there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

**Primula officinalis** (L.) Jacq. subf. **media**  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 43. 1886. — LECTOTYPE (designated here): Finland. Ab, Åbo [Turku], Runsala [Ruissalo], 25 May 1884, *H. Rettig* (H304520!). — ORIGINAL MATERIAL: Finland. A, Föglö, 17 May 1841, *J. M. af Tengström s.n.* (H313878!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Föglö; 2. Åbo. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

**Primula officinalis** (L.) Jacq. subf.  
**tenuissima** Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 44. 1886. — LECTOTYPE (designated here): Finland. N, Pernå [Pernaja], Forsby, 20 June 1861, *E. Öhman s.n.* (H417604!). — ORIGINAL MATERIAL: Russia. Kl, Kexholm [Käkisalmi], 21 June 1875, *L. J. Hallonblad s.n.* (H346760!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Pernå; Russia. 2. Kexholm. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

**Primula officinalis** (L.) Jacq. subf. **varia**  
Brenner

Meddeland. Soc. Fauna Fl. Fennica 14: 44. 1886. — LECTOTYPE (designated here): Finland. Sb, Kuopio, 8 June 1880, *A. H. Petander s.n.* (H347023!). — ORIGINAL MATERIAL: Finland. 1. A, Finström, 7 June 1878, *A. O. Kihlman s.n.* (H347023!); 2. N, [Ingå], Fagervik, 16 June 1851, *E. Hisinger s.n.* (H417630!); 3. N, Ingå [Inkoo], Jacob Ramsjö, 7 June 1852 *E. Hisinger s.n.* (H417631!, H417596!); 4. N,

Helsinge [Helsingin pitäjä, today Helsinki or Vantaa], 5 June 1874, *A. H. Liundqvist s.n.* (H346757!); 5. N, Helsinge [Helsingin pitäjä, today Helsinki or Vantaa], 8 June 1874, *A. W. Nykopp s.n.* (H346772!); 6. Ta, Kärkölä, 3 June 1870, *A. F. Krantz s.n.* (H347067!); 7. Ta, Birkkala [Pirkkala], 10 June 1871, *H. Hjelt s.n.* (H220498!); 8. Ta, Hämeenlinna, 7 Juni 1880, *W. Salminen s.n.* (H220448!); Russia. 9. Kl, Kaukola, 21 June 1876, *A. Lagus s.n.* (H4176690!).

PROTOLOGUE LOCALITIES in Brenner (1886c): Finland. 1. Finström; 2. Nousis; 3. Birkkala; 4. Ingå; 5. Helsinge; 6. Kotka; 7. Tavastehus; 8. Kärkölä; 9. Kuopio; 10. Russia. Kaukola. On the sheets there are no notes by Brenner, but the localities and protologue are congruent with the cited localities and morphology.

### **Rosa lepidina** Mattss. subsp. **stenobasis** Brenner

Meddeland. Soc. Fauna Fl. Fennica 50: 67. 1925. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, 15 July 1922, *M. Brenner s.n.* (H470495!).

PROTOLOGUE LOCALITY in Brenner (1925h): Finland. 1. Ingå, Haga [1922]. On label “*Rosa stenobasis* n. sp.” by Brenner. The leaf bases are narrow and semi-cuneate. This is *Rosa vosagiaca* (N.H.F. Desp.) Déségli.

### **Rosa mollि-*albida*** Almqv. subsp. **conocarpa** Brenner

Meddeland. Soc. Fauna Fl. Fennica 46: 81. 1921. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Barö, 13 July 1911, *W. Brenner s.n.* (H382306!). — ORIGINAL MATERIAL: Finland. N, Ingå [Inkoo], Barö, 14 July 1911, *W. Brenner s.n.* (H382306!).

PROTOLOGUE LOCALITY in Brenner (1921b): Finland. 1. Ingå, Barö. There are no identifications by Brenner in the types, but the label information and protologue locality are congruent. This is *Rosa caesia* Sm.

### **Rosa mollis** Sm. var. **glabrata** (Fr.) Brenner f. **glandulosior** Brenner

Meddeland. Soc. Fauna Fl. Fennica 32: 41–42. 1906.

PROTOLOGUE LOCALITY in Brenner (1906c): Finland. 1. Ingå, Svarbäck, as *R. glauca* × *mollis*. The leaves are abaxially completely covered with glandular hairs. Original material not found at H. This is probably *R. mollis*.

### **Rosa sphaerocarpa** Brenner

Meddeland. Soc. Fauna Fl. Fennica 48: 10. 1925. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarbäck, 25 August 1921, *M. Brenner s.n.* (H381956!).

PROTOLOGUE LOCALITY in Brenner (1925a): Finland. 1. Ingå, Svarbäck. On the label “*Rosa* 17. *Cinnivems* 5 *villosa* *sphaerocarpa* *Brenn.*” by Brenner. This is *R. × molletorum* Hesl.-Harr. (*R. canina* × *mollis*).

### **Rosa venosa** Sw. f. **microphylla** Brenner

Meddeland. Soc. Fauna Fl. Fennica 50: 67. 1925.

PROTOLOGUE LOCALITY in Brenner (1925h): Finland. 1. Ingå, Haga, barrskog vid väg, 1923. (Chavini-typ). With small leaves. No collection matching the name and locality was found at H.

### **Rubus arcticus** L. var. **subquinque-trilobus** Brenner

Meddeland. Soc. Fauna Flora Fennica 18: 210. 1892.

PROTOLOGUE LOCALITY in Brenner (1892d): No collection matching the name and locality was found at H. In the diagnosis it is stated that this is the main form, *Rubus arcticus* f. *arcticus*.

### **Rubus idaeus** L. f. **simplicior** Brenner

Meddeland. Soc. Fauna Flora Fennica 18: 209. 1892. — LECTOTYPE (designated here): Finland. N, Helsinge [Helsinki], Wik [Viikkilä], 7 July 1899, *A. Blomqvist s.n.* (H370807!).

PROTOLOGUE LOCALITY in Brenner (1892d): Finland. 1. Helsinge, Wik. On the label f. *simplicior* by Brenner. Most leaves are without leaflets, or a few with two or three.

### **Salix caprea** L. f. **digyna** Brenner

Meddeland. Soc. Fauna Fl. Fennica 35: 6. 1909. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborg [Ullanlinna]; 1 June 1908, *M. Brenner s.n.* (H313860!).

— ORIGINAL MATERIAL: Finland. 1. N, Helsingfors [Helsinki], Ulrikasborg [Ullanlinna], 22 May 1908, *M. Brenner s.n.* (H313661!); 2. N, Helsingfors [Helsinki], Ulrikasborg [Ullanlinna]; 2 September 1908, *M. Brenner s.n.* (H313631!).

PROTOLOGUE LOCALITY in Brenner (1909a): Finland. 1. Helsingfors, Ulrikasborg. On the labels f. *digyna* by Brenner. In det. slip Axel Arrhenius (12 March 1925) considered that the catkins resemble those of *Salix cinerea*, being pathological.

### **Sorbus** by Brenner

Brenner (1907) considered his f. *homomorpha* and f. *subheteromorpha* the most common forms in Finland. Serration of leaflets is most constant in flowering branches, while leaflet serration of non-flowering branches between the different forms are relatively consistent. However, most of the material Brenner collected (H) represent f. *subheteromorpha*. In his diagnosis, Brenner used the ending -morph, but on the labels always -phylla. The localities of the collections are usually not given. Many types are infected by *Gymnosporangium cornutum*.

***Sorbus aucuparia* L. f. *heteromorpha***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. [Finland]. 1. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto], 21 September 1906, *M. Brenner s.n.* (H381238!); isolectotype (H380289!).

On the label f. *heterophylla* subf. *stenoglossa* by Brenner. Brenner gave a brief description of f. *heteromorpha*, but all specimens at H were determined by him as either f. *heterophylla* subf. *platyglossa* or f. *heterophylla* subf. *stenoglossa*, none unequivocally as subf. *heterophylla*. One of the many sheets is selected here as the lectotype. This is *Sorbus aucuparia* f. *aucuparia*.

***Sorbus aucuparia* L. f. *heteromorpha***Brenner subf. *platyglossa* Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträck, 18 August 1906, *M. Brenner s.n.* (H381196!); isolectotype (H381195!). — ORIGINAL MATERIAL: Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto] (1–2). 1. 21 September 1906, *M. Brenner s.n.* (H381252!, H381272!); 2. 25 September 1906, *M. Brenner s.n.* (H381276!).

On the labels subf. *platyglossa* by Brenner. This is *Sorbus aucuparia* f. *aucuparia*.

***Sorbus aucuparia* L. f. *heteromorpha***Brenner subf. *stenoglossa* Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto], 24 September 1906, *M. Brenner s.n.* (H381233!); isolectotypes: (H380290!, H380291!, H381274!). — ORIGINAL MATERIAL: Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto] (1–2). 1. 25 September 1906, *M. Brenner s.n.* (H381237!); 2. 29 September 1906, *M. Brenner s.n.* (H381185!, H381186!, H381275!).

On the labels subf. *stenoglossa* by Brenner. This is *Sorbus aucuparia* f. *aucuparia*.

***Sorbus aucuparia* L. f. *homomorpha***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto], 29 September 1906, *M. Brenner s.n.* (H381256!); isolectotype: (H381183!). — ORIGINAL MATERIAL: Finland. 1. N, Helsingfors [Helsinki], Töölö [Töölö], 23 September 1906, *M. Brenner s.n.* (H381234!).

On the labels f. *homophylla* by Brenner. This is *Sorbus aucuparia* f. *aucuparia*.

***Sorbus aucuparia* L. f. *homomorpha***Brenner subf. *didyma* Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto], 24 September 1906, *M. Brenner s.n.* (H381257!). — ORIGINAL MATERIAL: Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto] (1–4). 1. 25 September 1906, *M. Brenner s.n.* (H380288!); 2. 28 September 1906, *M. Brenner s.n.* (H381288!); 3. 29 September 1906, *M. Brenner s.n.* (H381184!, H381284!, H381289!); 4. 2 October 1906, *M. Brenner s.n.* (H380287!).

On the labels f. *didyma* by Brenner. This is *Sorbus aucuparia* f. *aucuparia*.

***Sorbus aucuparia* L. f. *subheteromorpha***

Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. 1. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto], 21 September 1906, *M. Brenner s.n.* (H381238!); isolectotype (H380289!).

On the label f. *subheterophylla* subf. *stenophylla* by Brenner. Brenner gave a brief description of f. *subheteromorpha*, but he determined all specimens (H) as either f. *subheterophylla* subf. *platyphylla* or f. *subheterophylla* subf. *stenophylla*. One of the many sheets is selected here as the lectotype. This is *Sorbus aucuparia* f. *aucuparia*.

***Sorbus aucuparia* L. f. *subheteromorpha***Brenner subf. *calvata* Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. Lkk, Enontekis [Enontekiö], Ounastunturi, 23 July 1904, *J. Montell s.n.* (H270324!).

PROTOLOGUE LOCALITY in Brenner (1907): 1. Ounastunturi. In the lectotype there is no determination by Brenner, but the morphology and protologue localities are congruent with Brenner. This is the only specimen at H collected on Ounastunturi prior to description.

***Sorbus aucuparia* L. f. *subheteromorpha***Brenner subf. *platyphylla* Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto], 21 September 1906, *M. Brenner s.n.* (H381181!); isolectotypes: (H381182!, H381239!, H381240!). — ORIGINAL MATERIAL: Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnamäki, Kaivopuisto] (1–4). 1. 24 September 1906, *M. Brenner s.n.* (H381273!); 2. 25 September 1906, *M. Brenner s.n.* (H381172!); 3. 26 September 1906, *M. Brenner s.n.* (H381173!, H381243!); 4. N, Helsingfors [Helsinki], Berghäll [Kallio], 23 September

1906, *M. Brenner s.n.* (H381280!); 5. N, Helsingfors [Helsinki], Töölö [Töölö], 23 September 1906, *M. Brenner s.n.* (H380283!, H380284!, H381277!, H381279!).

On the labels subf. *platyphylla* by Brenner. This is *Sorbus aucuparia* f. *aucuparia*.

### ***Sorbus aucuparia* L. f. *subheteromorpha*** Brenner subf. ***stenophylla*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 33: 5. 1907. — LECTOTYPE (designated here): Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnannmäki, Kaivopuisto], 24 September 1906, *M. Brenner s.n.* (H381187!); isolectotypes: (H381285!, H381286!). — ORIGINAL MATERIAL: Finland. N, Helsingfors [Helsinki], Ulrikasborgberget, Brunnsparken [Ullanlinnannmäki, Kaivopuisto] (1–8). 1. 18 September 1906, *M. Brenner s.n.* (H380281!, H381231!); 2. 21 September 1906, *M. Brenner s.n.* (H81241!); 3. 23 September 1906, *M. Brenner s.n.* (H381174!, H381175!, H381176!); 4. 25 September 1906, *M. Brenner s.n.* (H381177!, H381290!, H381291!); 5. 28 September 1906, *M. Brenner s.n.* (H381273!); 6. 26 September 1906, *M. Brenner s.n.* (H381179!, H381242!, H381280!); 7. 28 September 1906, *M. Brenner s.n.* (H381287!); 8. 29 September 1906, *M. Brenner s.n.* (H380287!); 9. N, Helsingfors [Helsinki], Töölöpark [Töölöpuisto], 23 September, *M. Brenner s.n.* (H381173!); 10. N, Ingå [Inkoo], Svartbäck, 25 August 1906, *M. Brenner s.n.* (H381188!, H381194!).

On the labels subf. *stenophylla* by Brenner. This is *Sorbus aucuparia* f. *aucuparia*.

### ***Spiraea filipendula* L. f. *apetala*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 34: 117. 1908. — LECTOTYPE (designated here): Finland. A, Föglö, Nötö, 4 July 1907, *Widar Brenner s.n.* (H286490!).

PROTOLOGUE LOCALITY in Brenner (1908c): Finland. 1. Föglö. On the label f. *apetala* by Brenner. Petals are lacking. This is *Filipendula vulgaris* Moench.

### ***Stellaria media* (L.) Vill. f. *pachyphylla*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 32: 70. 1906. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svartbäck, 28 June 1905, *M. Brenner s.n.* (H790911!).

PROTOLOGUE LOCALITY in Brenner (1906b): Finland. 1. Ingå, Svartbäck, Brenner. On the label f. *pachyphylla* by Brenner. The leaves are crassulaceous. This is *Stellaria media*.

### ***Trifolium hybridum* L. f. *coloratum*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 37: 37. 1911. — LECTOTYPE (designated here): Finland. N, Sibbo [Sipoo], Hofgård, 1910, *G. Pehrman s.n.* (H389655!).

PROTOLOGUE LOCALITY in Brenner (1911b): Finland. 1. Sibbo, Hofgård. On the label f. *coloratum* by Brenner. The flowers are dark red. This is *Trifolium hybridum*.

### ***Trifolium repens* L. f. *monstrosum*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 37: 37. 1911. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Brennebo, 26 August 1910, *M. Brenner s.n.* (H390312!). — ORIGINAL MATERIAL: Finland. N, Ingå [Inkoo], Brennebo, 28 August 1910, *M. Brenner s.n.* (H390313!).

PROTOLOGUE LOCALITY in Brenner (1911b): Finland. 1. Ingå, Brennebo. On the labels f. *monstrosa* by Brenner. Proliferous specimens of *Trifolium repens*.

### ***Typha latifolia* L. f. *didyma*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 37: 37. 1911. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Westerkulla, 9 August 1910, *M. Brenner s.n.* (H096009!). — ORIGINAL MATERIAL: Finland. St, Tyrvis [Tyrvää], Wangimusjärvi, 4 August 1870, *H. Hjelt s.n.* (H096050!).

PROTOLOGUE LOCALITIES in Brenner (1911b): Finland. 1. Ingå, Westerkulla; 2. Tyrvis. On the lectotype label f. *didyma* by Brenner. This is *Typha latifolia*.

### ***Veronica serpyllifolia* L. f. *caerulea*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 25: 18. 1900. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Haga, 23 June 1898, *M. Brenner s.n.* (H431780!).

PROTOLOGUE LOCALITY in Brenner (1900a): Finland. 1. Ingå. On the label f. *caerulea* by Brenner. The flowers are blue violet. This is *Veronica serpyllifolia*.

### ***Viola canina* L. var. *montana* (L.) Fr. [f.] *hamata*** Brenner

Meddeland. Soc. Fauna Fl. Fennica 18: 162. 1892. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Strömsby, 6 July 1888, *M. Brenner s.n.* (H401768!).

PROTOLOGUE LOCALITY in Brenner (1892b): Finland. 1. Kyrkslätt. On the label f. *hamata* by Brenner.

### ***Viola tricolor* L. by Brenner**

Brenner's concept of *Viola tricolor* taxonomy was based on Jordan (1846, 1852), who used species rank in his descriptions of new taxa. Brenner considered that *V. agrestis* Jord., Observ. Pl. Crit., 2: 15 (1846), *V. gracilescens* Jord., Observ. Pl. Crit., 2: 20 (1846) and *V. segetalis* Jord., Observ. Pl. Crit., 2: 12 (1846) also occur in Finland, but

treated them at the rank of forma or variety, and made three new combinations; 1. *V. tricolor* var. *agrestis* (Jord.) Brenner, Meddeland. Soc. Fauna Fl. Fennica 19: 81 (1893); 2. *V. tricolor* var. *trivialis* Brenner [var. *tricolor*] f. *gracilescens* (Jord.) Brenner, Meddeland. Soc. Fauna Fl. Fennica 19: 79 (1893); 3. *V. tricolor* var. *polygonata* Brenner f. *segetalis* (Jord.) Brenner, Meddeland. Soc. Fauna Fl. Fennica 19: 79 (1893).

Specimens of *Viola tricolor* var. *polygonata* f. *ruderale*, *V. tricolor* var. *trivialis* f. *gracilescens* and f. *segetalis* (H) collected or determined by Brenner are all *Viola arvensis* Murray var. *arvensis*.

So, Brenner accepted five varieties of *V. tricolor* at Finland: var. *agrestis* [*V. arvensis* pr. p.], var. *trivialis* [var. *tricolor*], and those he described himself (Brenner 1893b): var. *aequalis*, var. *gracilenta* and var. *polygonata*. Other taxa he accepted were described by him as forma or subforma.

#### ***Viola tricolor* L. var. *aequalis* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 79. 1893. — LECTOTYPE (designated here): Finland. Sa, Lappee, Lauritsala, June 1870, A. H. Brotherus s.n. (H805255!). — ORIGINAL MATERIAL: Finland. 1. St, Kulla, 27 May 1859, A. J. Malmberg s.n. (H212110!); 2. Tb, Saarijärvi, V. F. Brotherus s.n. (H404053!); Russia. 3. Ik, Muolaa, 11 June 1866, A. J. Malmberg s.n. (H403981!); 4. Kl, Uguniemi [Uukuniemi], 23 August 1853, E. Niklander s.n. (H404027!).

PROTOLOGUE LOCALITIES in Brenner (1893): Finland. 1. Kulla; 2. Saarijärvi; 3. Lauritsala; 4. Kb, Kides; Russia. 5. Mohla [Muolaa]; 6. Uguniemi. In det. slips f. *aequalis* by Brenner. This is *Viola tricolor* var. *tricolor*.

#### ***Viola tricolor* L. var. *aequalis* Brenner f. *galbanata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 46: 135. 1921. — LECTOTYPE (designated here): Finland.

PROTOLOGUE LOCALITY in Brenner (1921c): Finland. 1. Ingå, Kolnäset. No collection matching the name and locality was found at H.

#### ***Viola tricolor* L. var. *gracilenta* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 79. 1893. — LECTOTYPE (designated here): Finland. N, Borgå [Porvoo], Lill Kroknäs, lund, 28 June 1892, M. Brenner s.n. (H403939!). — ORIGINAL MATERIAL: Finland. 1. N, Kyrkslätt [Kirkkonummi], 2 August 1890, M. Brenner s.n. (H399770!); 2. N, Borgå [Porvoo], Lill Kroknäs, rågåker, 28 June 1892, M. Brenner s.n. (H403938!); 3. N, Borgå [Porvoo], Lill

Kroknäs, lund, 30 June 1892, M. Brenner s.n. (H399771!). 4. N, Borgå [Porvoo], Kråkö, Westeröäng, 25 June 1892, M. Brenner s.n. (H399908!); 5. N, Helsingfors [Helsinki], 3 July 1893, M. Brenner s.n. (H399907!); 6. Ka, Rautu, Anonymous (H399934!); 7. Sb, Hankasalmi, 18 July 1856, L. M. Runeberg s.n. (H385574!); 8. Obo, Pudasjärvi, 8 August 1870, E. Brander s.n. (H400003!); Russia. 9. Kon, Nikola reg. Swir, 28 June 1875, F. Elfving s.n. (H399967!).

PROTOLOGUE LOCALITIES in Brenner (1893): Finland. Fagervik; 2. Kyrkslätt; 3. Helsingfors; 4. Borgå; Rautus; 7. Hankasalmi, 8. Pudasjärvi; Russia. 9. Nikola vid Svirloden. On the labels var. *gracilenta* by Brenner. This is *Viola arvensis* Murray var. *arvensis*.

#### ***Viola tricolor* L. var. *gracilenta* Brenner f. *sublutescens* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 45. 1904. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarthäck, 29 June 1902, M. Brenner s.n. (H403890!). — ORIGINAL MATERIAL: Finland. N. Kyrkslätt [Kirkkonummi], Lundsbeg, 6 June 1891, M. Brenner s.n. (H403940!).

PROTOLOGUE LOCALITIES in Brenner (1904c): Finland. No localities given. On the label f. *sublutescens* by Brenner. This is *Viola tricolor* var. *tricolor*.

#### ***Viola tricolor* L. var. *polygonata* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 80. 1893. — LECTOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], 24 July 1890, M. Brenner s.n. (H403714!).

PROTOLOGUE LOCALITIES in Brenner (1893): Finland. No localities given. Brenner did not point out any locality, nor determined any specimens as f. *polygonata*. Lectotype is thus chosen here amongst the four formae Brenner described in the same article, viz. ‘Original material’ of f. *petrophila*. This is *Viola tricolor* L. var. *tricolor*.

#### ***Viola tricolor* L. var. *polygonata* Brenner f. *excelsa* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 80. 1893. — LECTOTYPE (designated here): Russia. Lim, Mare Album [White Sea], Umba, 6 August 1861, G. Selin s.n. (H401119!). — ORIGINAL MATERIAL: Finland. N, Borgå [Porvoo], 30 June 1892, M. Brenner s.n. (H404124!).

PROTOLOGUE LOCALITIES in Brenner (1893): Finland. Helsinge; 2. Borgå; 3. Kotka; 4. Brahestad [Raahen]; Russia. 5. Umba; 6. Solovetsk. In det slip f. *excelsa* by Brenner. This is *Viola tricolor* var. *tricolor*.

#### ***Viola tricolor* L. var. *polygonata* Brenner f. *flavescens* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 44. 1904. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Barösund, Stångholm, 22 July 1902, M. Brenner s.n. (H403817!).

PROTOLOGUE LOCALITIES in Brenner (1904c): Finland. No localities given. On the label f. *flavescens* by Brenner. This is *Viola tricolor* var. *tricolor*.

### ***Viola tricolor* L. var. *polygonata* Brenner f. *petrophila* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 80. 1893. — LECTOTYPE (designated here): Finland. N, Borgå [Porvoo], Haikå [Haiko], 25 August 1892, M. Brenner s.n. (H403922!). — ORIGINAL MATERIAL: Finland. N, Kyrkslätt [Kirkkonummi], 24 July 1890, M. Brenner s.n. (H403714!).

PROTOLOGUE LOCALITIES in Brenner (1893): Finland. Pargas; 2. Kyrkslätt; 3. Borgå. On the labels f. *petrophila* by Brenner. This is *Viola tricolor* var. *tricolor*. The original material is designated as the lectotype of var. *polygonata* Brenner.

### ***Viola tricolor* L. var. *polygonata* f. *petrophila* Brenner subf. *albescens* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 44. 1904. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Svarträck, 2 August 1902, M. Brenner s.n. (H403815!).

PROTOLOGUE LOCALITIES in Brenner (1904c): Finland. No localities given. On the label f. *albescens* by Brenner. This is *Viola tricolor* var. *tricolor*.

### ***Viola tricolor* L. var. *polygonata* Brenner f. *petrophila* subf. *subflavescens* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 29: 44. 1904. — LECTOTYPE (designated here): Finland. N, Ingå [Inkoo], Barösund, Stångholm, 22 July 1902, M. Brenner s.n. (H403825!).

PROTOLOGUE LOCALITIES in Brenner (1904c): Finland. No localities given. On the label f. *subflavescens* by Brenner. This is *Viola tricolor* var. *tricolor*.

### ***Viola tricolor* L. var. *polygonata* Brenner f. *ruderalis* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 81. 1893. — LECTOTYPE (designated here): Finland. St, Karkku 12 July 1871, H. Hjelt s.n. (H211953!). — ORIGINAL MATERIAL: Finland. N, Borgå [Porvoo], 22 July 1892, M. Brenner s.n. (H399898!); N, Borgå [Porvoo], Lill Kroknäs, 23 June 1892, M. Brenner s.n. (H399899!).

PROTOLOGUE LOCALITIES in Brenner (1893): Finland. 1. Borgå; 2. Karelen? [Karkku]. Karelen is corrected to Karkku in reprints. On the labels and det slips f. *ruderalis* by Brenner. This is *Viola arvensis* L. var. *arvensis*.

### ***Viola tricolor* L. f. *rupicola* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 78. 1893. — LEC-

TOTYPE (designated here): Finland. N, Kyrkslätt [Kirkkonummi], Storms, 24 August 1893, M. Brenner s.n. (H403713!). — ORIGINAL MATERIAL: Finland. 1. Ab, Åbo [Turku], Anonymous (H504066!); 2. Russia. Kon, Koselma, 11 June 1863, Th. Simming s.n. (H844749!).

PROTOLOGUE LOCALITIES in Brenner (1893): Finland. Åland; 2. Åbo; 3. Kyrkslätt; 4. Helsingfors; Russia. 5. “Kasjolma”. This is *Viola tricolor* var. *tricolor*.

### ***Viola tricolor* L. f. *turgescens* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 78. 1893. — LECTOTYPE (designated here): Finland. Sa, Karkku 5 June 1871, H. Hjelt s.n. (H212111!). — ORIGINAL MATERIAL: Finland. 1. N, Helsingfors [Helsinki], 21 May 1890, M. Brenner s.n. (H404123!); 2. N, Helsingfors [Helsinki], Brunnsparken [Kaivopuisto], 7 July 1893, M. Brenner s.n. (H403936!); 3. N, Borgå [Porvoo], Kroknäs, 24 June 1892, M. Brenner s.n. (H403937!); 4. N, Borgå [Porvoo], Kroknäs, 4 June 1892, M. Brenner s.n. (H403935!); 5. Ta, Sysmä, 29 June 1871, K. J. W. Unonius s.n. (H223482!); 6. Kb, Libelits [Liperi], Mutkanvaara, 18 June 1872, M. A. Europaeus & K. A. Hällström s.n. (H404073!); Russia. 7. Ka, Hogland [Suursaari], Pohjoisniemi, 9 July 1870, M. Brenner s.n. (H399921!); 8. Kon, Gorgi, 13 June 1875, F. Elfving s.n. (H404041!); 9. Kon, Koselma, 11 June 1863, Th. Simming s.n. (H404088!).

PROTOLOGUE LOCALITIES in Brenner (1893), only northernmost ones are mentioned: Finland. 1. Karkku; 2. Sysmä; 3. Libelits; Russia. 4. Kasjolma. On the labels or det slips. f. *turgescens* by Brenner. This is *Viola tricolor* var. *tricolor*.

### ***Viola tricolor* L. f. *turgida* Brenner**

Meddeland. Soc. Fauna Fl. Fennica 19: 78. 1893. — LECTOTYPE (designated here): Finland. Lkk, Kolari, 11 July 1877, H. Hjelt & R. Hult s.n. (H037632!). — ORIGINAL MATERIAL: Finland. 1. N, Kyrkslätt [Kirkkonummi], Sundsberg, 6 June 1891, M. Brenner s.n. (H399906!); 2. N, Kyrkslätt [Kirkkonummi], Sundsberg, 8 June 1891, M. Brenner s.n. (H399905!); 3. N, Helsingfors [Helsinki], Rödbergen [Punavuori], 18 May 1890, M. Brenner s.n. (H399890!); 4. N, Helsingfors [Helsinki], Brunnsparken [Kaivopuisto], 29 April 1890, M. Brenner s.n. (H399777!); 5. N, Helsingfors [Helsinki], Fölisön [Seurasaari], 18 May 1890, M. Brenner s.n. (H399780!); 6. N, Helsingfors [Helsinki], Fabriksparken [Tehtaanpuisto], 14 May 1890, M. Brenner s.n. (H399778!); 7. N, Helsingfors [Helsinki], N, Helsingfors [Helsinki], Brunnsparken [Kaivopuisto], 5 May 1891, M. Brenner s.n. (H399904!); 8. N, Helsingfors [Helsinki], Observatorieberget [Tähtitorinmäki], 5 June 1892, M. Brenner s.n. (H399776!); 9. N, Helsingfors [Helsinki], Djurgårdsvilla [Eläintarha], 7 June 1892, M. Brenner s.n. (H399862!); 10. N, Helsingfors [Helsinki], Observatorieberget [Tähtitorinmäki], 10 June 1892, M. Brenner s.n. (H399889!); 11. N, Borgå [Porvoo], Lill Kroknäs, 23 June 1892, M. Brenner s.n. (H399903!); 12. N, Borgå [Porvoo], Lill Kroknäs, 28 June 1892, M. Brenner s.n. (H399774!); 13. N, Borgå [Porvoo], Lill Kroknäs, 30 June 1892, M. Brenner s.n. (H399779!); 14. Ta, Hollola, 14 June 1849, E. Nylander s.n. (H220097!); 15. Kb, Enon-

taipale, 29 June 1865, *F. V. Woldstedt s.n.* (H399981!); 16. Sb, Libelits [Liperi], 4 June 1872, *M. A. Europaeus & K. A. Hällström s.n.* (H399980!); 17. Om, Gkby [Gamlakarleby, Kokkola], no year, *F. Hällström s.n.* (H399997!); Russia: 18. Ka, Hogland [Suursaari], Pohjoisniemi, 9 July 1870, *M. Brenner s.n.* (H399922!); 19. Ka, Kirvus, 9 June 1888, *J. Lindén s.n.* (H399928!); 20. Ik, Muola, 5 June 1866, *A. J. Malmberg* (H399933!); 21. Kol, Petrosawodsk [Petroskoi], no year, *A. Kullhem s.n.* (H399968!).

PROTOLOGUE LOCALITIES in Brenner (1893): Finland. Common north to Lkk, Kolari. On the labels or det slips f. *turgida* by Brenner. This is *Viola arvensis* L. var. *arvensis*.

### **Nomina nuda and nomina invalida**

Brenner often used scientific names (set in boldface) without an author, but neither did he describe them. These 56 names are *nomina invalida* or *nomina nuda* (Turland *et al.* 2017: art. 38.1). ASFFF = Acta Soc. Fauna Fl. Fennica, NSFFF = Not. Sällsk. Fauna Fl. Fennica, MSFFF = Meddeland. Soc. Fauna Fl. Fennica.

*Agrostis alba* L. × *vulgaris* With. f. *aristata*

ASFFF 16(4): 166. 1899, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

*Alnus glutinosa* (L.) Gaertn. × *incana* (L.) Moench f. *media*  
ASFFF 34(4): 13. 1911, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

*Alnus glutinosa* (L.) Gaertn. f. *tobulata* [Larss.]  
MSFFF 18: 180. 1892.

*Aspidium spinulosum* (Retz.) Sw. f. *glandulosum*  
NSFFF 11 (ny serie 8): 36. 1871.

*Atriplex hastata* L. f. *minima*  
NSFFF 11 (ny serie 8): 34. 1871.  
*Atriplex nitens* Schkuhr f. *sanguinea*  
MSFFF 31: 126. 1906.

*Bromus mollis* L. var. *glabratus*  
MSFFF 31: 131. 1906.  
*Calamagrostis lanceolata* Roth f. *canescens*  
ASFFF 16(4): 169. 1899.

*Calamagrostis lanceolata* Roth f. *virescens*  
ASFFF 16(4): 169. 1899.

*Calamagrostis phragmitoides* Hartm. f. *virescens*  
ASFFF 16(4): 168. 1899.

*Calluna vulgaris* (L.) Hull f. *albiflora*  
MSFFF 11: 40. 1884; ASFFF 16(4): 225. 1899.

*Campanula rotundifolia* L. var. *foliosa*  
ASFFF 16(4): 241. 1899.

*Carex stricta* Gooden. f. *elatior*  
ASFFF 16(4): 168. 1899.

*Carex stricta* Gooden. f. *pallida*  
ASFFF 16(4): 168. 1899.

*Cerastium triviale* Link f. *glandulosum*  
MSFFF 31: 132. 1906.

*Cerastium vulgatum* L. × *alpestre* (Hartm.) f. *glandulosa*  
NSFFF 11 (ny serie 8): 447. 1871, nom. inval. (Greuter

et al. 2000: art. 36.1.).

*Chenopodium album* L. var. *bicolor*

MSFFF 31: 132. 1906.

*Chenopodium album* L. var. *paganum*

MSFFF 31: 132. 1906.

*Chenopodium bonus-henricus* L. f. *petitpierrei*

MSFFF 31: 131. 1906.

*Cirsium arvense* (L.) Scop. f. *albiflorum*

ASFFF 34(4): 22. 1911a.

*Drosera longifolia* L. f. *subobovata*

ASFFF 16(4): 208. 1899.

*Epilobium angustifolium* L. f. *albiflorum*

ASFFF 16(4): 215. 1899.

*Erigeron acris* L. f. *glabrescens*

ASFFF 16(4): 242. 1899; ASFFF 34(4): 22. 1911.

*Euphrasia curta* (Fr.) Wettt. var. *glabrescens*

MSFFF 29: 137. 1904.

*Festuca elatior* L. var. *pseudololiacea*

MSFFF 31: 132. 1906.

*Galeopsis pubescens* Besser f. *hispida*

MSFFF 31: 131. 1906.

*Galium palustre* L. var. *asperum*

MSFFF 11: 36. 1884.

*Gentianella campestris* (L.) Börner f. *minor*

ASFFF 16(4): 238. 1899.

*Geranium sylvaticum* L. f. *albineum*

ASFFF 16(4): 209. 1899.

*Glaux maritima* L. f. *minima*

NSFFF 11 (ny serie 8): 26. 1871.

*Heracleum sibiricum* L. f. *angustifolium*

ASFFF 16(4): 211. 1899.

*Juncus bufonius* L. f. *minimus*

NSFFF 11 (ny serie 8): 20. 1871.

*Lycopodium annotinum* L. var. *squarrosum*

ASFFF 16(4): 142. 1899.

*Lysimachia vulgaris* L. f. *oppositifolia*

ASFFF 16(4): 227. 1899.

*Melandrium rubrum* Garcke f. *albiflorum*

ASFFF 16(4): 193. 1899.

*Mentha gentilis* L. f. *agardhiana*

MSFFF 31: 126. 1906.

*Nuphar lutea* (L.) Sm. f. *minor*

ASFFF 16(4): 202. 1899.

*Nymphaea alba* L. f. *minor*

ASFFF 16(4): 202. 1899.

*Nymphaea tetragona* Georgi f. *colorata*

ASFFF 34(4): 16. 1911.

*Orchis incarnata* L. var. *flexuosa* Klinge f. *stenophylla*

ASFFF 16(4): 177. 1899.

*Orchis maculata* L. f. *albiflora*

ASFFF 16(4): 178. 1899.

*Oxalis acetosella* f. *lilacina*

MSFFF 11: 38. 1884.

*Picea excelsa* (Lam.) Link var. *rhombica* Wittr. f. *latinasuta*

MSFFF 43: 69. 1917.

*Pimpinella saxifraga* L. \*subsp. *dissecta* (Retz.) Gaudin f. *subfalcata*

MSFFF 48: 156. 1925.

*Pinguicula vulgaris* L. f. *ecalcarata*

ASFFF 16(4): 235. 1899.

- Poa serotina* Ehrh. f. *gracilis*  
NSFFF 11 (ny serie 8): 18. 1871.
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ASFFF 16(4): 228. 1899.
- Primula officinalis* (L.) Hill var. *unicolor*  
MSFFF 14: 49. 1888c.
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NSFFF 11 (ny serie 8): 30. 1871.
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ASFFF 16(4): 199. 1899.
- Trientalis europaea* L. f. *minor* Rantaniemi ex  
NSFFF 11 (ny serie 8): 26. 1871; ASFFF 16(4): 227.  
1899.
- Trientalis europaea* L. f. *rosea*  
NSFFF 11 (ny serie 8): 446. 1871; MSFFF 11: 38. 1884.
- Trifolium pratense* L. f. *albiflorum*  
ASFFF 34(4): 19. 1911a.
- Utricularia vulgaris* L. f. *tenuis*  
ASFFF 16(4): 235. 1899.
- Vicia hirsuta* (L.) Gray var. *pauciflora*  
ASFFF 16(4): 222. 1899.
- Viola canina* L. var. *montana* (L.) Fr. f. *albiflora*  
ASFFF 34(4): 16. 1911.

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