

Typification of names published by the Finnish botanist Justus Montell

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The new names (33) of plants published by Justus Montell (1869–1954) are typified. The type specimens of most of his new taxa derive from the Finnish provinces *Alandia*, *Lapponia kittilensis* or *Lapponia enontekiensis*. The most noteworthy names are *Orchis maculatus* var. *kolaënsis* Montell (= *Dactylorhiza maculata* subsp. *montellii*) and *Carex × microstachyoides* Montell (= *C. dioica* × *heleonastes*).

Key words: lectotypification, Montell, nomenclature

Introduction

Forester, Ph.D. h.c. Justus Elias Montell (16 Aug. 1869–6 Aug. 1954) was born at Geta (Åland, Finland), where his grave is also located. He passed his matriculation in 1890 and first studied natural sciences at Helsinki University 1890–1893 and then the art of painting 1894–1897 in Sweden, German and Italy. However, after a while he switched to study forestry and obtained his forester degree at Evo Forestry School, Finland, in 1902. The next year he was appointed as a forest supervisor in Muonio, Lapland. In 1907 he became a forester in a neighbouring parish of Enontekiö, and in 1913 in Muonio parish. He worked there until his retirement in 1930 (Anon. 1946). Thereafter, from 1930 to 1954 he served as curator of the Biological Collections of Åbo Akademi (Valle 1954, Nordman 1955). That herbarium [acronym TURA, University in Turku (Åbo)] was discontinued in 2000, and included in the Turku university herbarium (TUR). Now

the international designation for the former Åbo Academi herbarium is TUR-A. Acronyms of the herbaria follow otherwise Holmgren *et al.* (1990).

Montell was keen on nature study since his youth and he collected biological specimens throughout his life, especially plants and insects (mainly butterflies). Most of his specimens are from three Finnish biogeographical provinces. In the Lapland provinces *Lapponia kittilensis* (earlier western part of *Lapponia kemensis*) and *Lapponia enontekiensis* he made collections of vascular plants for nearly 50 years (1903–1952), and in *Alandia*, SW Finland in 1880–1890 and 1940–1951. He was especially interested in the mountain flora at Kilpisjärvi area, where he particularly studied the felds Jehkats, Malla and Saana. In total he described 33 new taxa, one subspecies, otherwise varieties, forms and hybrids. He also reported 16 new non-hybrid taxa as new to Finland, viz. *Antennaria carpatica* [*villifera*], *Chamorchis alpina*, *Orchis lapponi-*

cus [*Dactylorhiza lapponica*], *Draba dovrensis* [*daurica* var. *hebecarpa*], *Erigeron borealis*, *E. unalaschkensis* [*humilis*], *Erigeron eriocephalus* [*uniflorus* subsp. *eriocephalus*], *Euphrasia frigida* var. *palustris*, *E. lapponica* [*salisburgensis*], *Poa arctica*, *Rhinanthus groenlandicus* [*minor* subsp. *groenlandicus*], *Sedum villosum*, *Taraxacum boreum*, *T. croceum* subsp. *ceratolobum*, *T. purpuridens* and *T. retroflexiforme* (Montell 1912a, 1912b, 1917, 1921a, 1921c, 1925, 1935, 1941a, 1942d, 1944b, 1945h, 1945k, 1950a) and 22 hybrids (excluding *Salix* hybrids, Montell 1914c), in addition to those that he described as new hybrids, viz. *Agrimonia odorata* var. *sepium* [*eupatoria* × *odorata*], *Calamagrostis epigejos* × *lanceolata* [*canescens*], *C. epigejos* × *purpurea*, *Carex aquatilis* var. *stans* [*aquatilis*] × *rigida* [*bigelowii* subsp. *rigida*], *C. bigelowii* × *juncella* [*nigra* subsp. *juncella*], *C. brunnescens* × *lagopida* [*lachenalii*], *C. macilenta* [*canescens* × *loliacea*], *C. brunnescens* × *tenuiflora*, *C. rhynchophyza* × *rostrata*, *C. rostrata* × *rotundata*, *C. rotundata* × *saxatilis*, *Cerastium alpinum* × *arcticum* [*nigrescens* var. *laxum*], *Agropyron caninum* × *latiglume* [*Elymus alaskanus* × *caninus*], *A. caninum* var. *glaucescens* × *mutable*, [*Elymus caninus* × *mutable*], *Epilobium angustifolium* × *palustre*, *E. collinum* × *montanum*, *Festuca arundinacea* × *pratense*, *Festuca pratensis* × *Lolium perenne*, *Lolium multiflorum* × *perenne*, *Luzula pallescens* × *sudetica*, *Stellaria graminea* × *longifolia*, *Woodsia alpina* × *ilvensis* (Montell 1916, 1918, 1924c, 1936, 1938, 1941b, 1942a, 1942c, 1943a, 1945a, 1945d, 1945f, 1945j, 1945l, 1946b, 1946c, 1946d, 1947c, 1947d, 1950b, 1950c, 1951a, 1951b).

Montell was also an eager nature conservationist. During his many visits to the Kilpisjärvi area in NW Enontekiö, he became convinced of its unique nature in Finland, and he proposed that the Malla area should be protected and he also outlined the boundaries for it (Montell 1914a, 1914b, 1921b). The proposal was realised in 1916 (Linkola 1926). In 1938 Malla was among the first nature reserves established in Finland. He also made a proposal how nature conservation should be organized in Finland (Montell 1920). In 1919 he tried to buy the type locality of *Trisetum subalpestre* in Maunu village for conservation

purposes (Montell 1921d), but without success.

During his years at the Muonio church village he maintained a private, valuable garden, which was unfortunately destroyed by his successor. *Epilobium* × *bonsdorffii* was described from the material collected in the garden (Montell 1924b). Some species originating from Montell's garden, e.g. *Aster sibiricus*, *Cacalia hastata* and *Thalictrum minus* subsp. *minus* are still growing in private gardens and occasionally also escaped into Muonio. While working at the Åbo University, he was also the keeper of the Botanical Garden, and discovered *Epilobium* × *aboënsse* there (Montell 1946a). After his retirement from the forester's post he still visited NW Lapland, then living at a small farm called Onnela, in the village of Ylimuonio, north of the Muonio centre. *Calamagrostis* × *onnelensis* and *Eriophorum russeolum* var. *fallax* were described from material collected there (Montell 1945g, 1947a). In 1899 he visited Lapponia Ponoensis, and in 1935 and 1939 Lapponia Petsamoensis (both in Murmansk Region, Kola Peninsula, Russia). In total he published about 100 botanical notes (most listed in Collander *et al.* 1973), including a few summaries on the flora of the study areas (Montell 1910, 1914c, 1945c, 1946h, 1951c). Montell left behind a manuscript on the flora of Muonio parish, which was edited and published by F. W. Klingstedt (Montell 1962).

Montell distributed specimens through exchange to many herbaria, which increased general knowledge of the Finnish flora. When Montell was appointed as curator of Biological Collections of the Åbo Academi, he donated his herbarium (25 000 sheets) to it (Anon. 1946). Some plants have been named to honour him: *Dactylorhiza maculata* subsp. *montellii* Verm., *Diphasium complanatum* subsp. *montellii* Kukkonen, *Hieracium montellii* Norrl., *Juncus* × *montellii* Vierh. [*J. arcticus* × *filiformis*], *Ranunculus auricomus* subsp. *montellii* Markl. ex Valta and *Taraxacum montellii* H. Lindb. ex Sonck. A wilderness cabin named after him, where he kept his summer camp, is located north of Mt. Pallastunturi, and a locality named after him, *Montellinkuusikko*, a beautiful forest area where Montell liked to paint, is located some 10 km south of Muonio church village.

New plant taxa published by Justus ["Ivstvs"] Montell

Achillea millefolium L. var. *lapponica* Montell

Memoranda Soc. Fauna Flora Fennica 20: 94. 1945. — LECTOTYPE (designated here): Finland. Lapponia kemensis [kittilensis], pagum Muonio kyrkoby [church village], in prato sicco, 21.VII.1922 J. Montell (TUR-A 371935!).

Montell (1945e) did not cite any specimens, but stated that the variety is common in Lapland, extending to the Arctic Ocean. The lectotype is the only sheet in TUR-A annotated by Montell himself as *Achillea millefolium* var. *lapponica* m[hi]i., and it fits the characters given in diagnosis.

Montell (1945e) considered that the populations from northern Finland differed from those in the Sudetic Mountains. This may be the case, and the relationship between central and northern European populations needs clarification. The margins of the bracts in the lectotype as well as in other material collected by Montell are not especially dark, as they should be in subsp. *sudetica*, but darker than in the specimens from southern Finland, where the populations represent subsp. *millefolium* with pale margins in the bracts. It is possible that the specimens with dark margins represents one end of a cline in northern Fennoscandia. Today the situation is further complicated, as southern populations with pale margins have spread along the roads to the north. It is most likely that there are no reproduction barriers between the subspecies, and recognition of subspecies or varieties is perhaps not supported. Orlova (1966) described the northern race as *A. apiculata*.

Achillea millefolium L. var. *lapponica* Montell f. *neumanii* Montell ("Neumanii")

Memoranda Soc. Fauna Flora Fennica 20: 94. 1945. — LECTOTYPE (designated here): [Russia (formerly Finland). Murmansk Region, Pechenga District]. Lapponia petsamoënsis, Fiskarhalvön [Rybachi Peninsula], Pummanki, torr äng [dry meadow], 11.VIII.1935 J. Montell (TUR-A 371936!).

Montell (1945e) did not cite any specimens,

but the lectotype is the only sheet determined by Montell himself as *Achillea millefolium* var. *lapponica* f. *neumanii*. This is a form with rather strongly pink flowers, which is a common feature in northern Fennoscandian plants. There is a clinal shift from pink to white flowers.

Agropyrum caninum (L.) P.B. f. *coloratum* Montell

Memoranda Soc. Fauna Flora Fennica 26: 111. 1951. — LECTOTYPE (designated here): Finland. Alandia, Finström, Bergö, liten holme ö[ster] om Husö [a small island east of Husö], 31.VII.1946 J. Montell (TUR-A 371876!); isolectotype TUR-A 371831!.

There is one collection (two sheets) in TUR-A determined by Montell as *Agropyrum caninum* (L.) P.B. f. *coloratum* Montell, taken from the type locality (Montell 1951c). The inflorescence has a violet colouration, perhaps induced by strong sunshine at an open small island. The currently used name is *Elymus caninus* (L.) L.

Agrostis × lapponica Montell

Memoranda Soc. Fauna Flora Fennica 18: 95. 1943, nom. inval. — Montell (1943c) found the hybrid on an small island in the Muonionjoki near Ylimuonio village in Muonio parish, Lapponia kittilensis, and Widén (1971) also cited this sheet. However, the sheet was not found at TUR-A or TUR, nor at H, where Widén worked. Widén (1971) determined the collection as *A. cf. mertensii* Trin. × *stolonifera* L.

There is one collection (two sheets) in TUR-A determined by Montell as *Agrostis × lapponica* Montell (*A. capillaris* × *mertensii*), taken 19.VIII.1931 further north of the "type locality", by the Muonionjoki near the opening of Lassinoja brook, *Lapponia enontekiensis*. It was determined by Widén as *A. cf. mertensii* × *stolonifera*, an opinion shared by the present author. However, since there is no Latin description, *A. × lapponica* is nom. inval. (Greuter et al. 2000: art. 36.1.), as pointed out by Widén (1971) also.

This hybrid is very rare in Finland, being collected mainly in the NW part of the country (Widén 1971), outside the range of *A. stolonifera*.

***Alsine biflora* (L.) Wahlenb. f. *rosea* Montell**

Memoranda Soc. Fauna Flora Fennica 21: 167. 1945. — LECTOTYPE (designated here): Finland. Lapponia enontekiensis, [Enontekiö, Kilpisjärvi], in fissuris rupium montis Malla, 29.VII.1944 J. Montell (TUR-A 371944!).

There is one collection in TUR-A determined by Montell as *Alsine biflora* f. *rosea* Montell, taken from the fjeld Malla. The lectotype sheet is marked as the type by Montell himself. The currently used name is *Minuartia biflora* (L.) Schinz & Thell. This is a pinkish flowering form (Montell 1945i), which is a very atypical feature for *M. biflora* in *Lapponia enontekiensis*. In general the flowers are white, and only rarely pinkish.

***Alsine rubella* Wahlenb. var. *hirta* (Wormskj.) Gürcke f. *glaberrima* Montell**

Memoranda Soc. Fauna Flora Fennica 10: 381. 1935. — LECTOTYPE (designated here): Finland. Lapponia enontekiensis, [Enontekiö], Kilpisjäure, in declivibus petrosis montis Saana, 5.VIII.1932 J. Montell (TUR-A 371945!).

In addition to the lectotype, determined as f. *glaberrima* by Montell, there is one sheet at TUR-A, determined by Montell as “*Alsine hirta* (Wormskj.) Hn. var. *foliosa* Hn. f. *glabra* Montell”, also representing *Minuartia rubella*, collected by Montell at the fjeld Saana on 11 Aug. 1932. The specimens on both sheets have a glabrous stem, which is a typical feature for *M. stricta*. However, in *M. rubella* there are three veins. In f. *glaberrima* Montell there are three veins, as pointed out by Montell (1935). The currently used name is *Minuartia rubella* (Wahlenb.) Hiern.

***Calamagrostis × onnelensis* Montell**

Memoranda Soc. Fauna Flora Fennica 21: 80. 1945, nom. inval. — Finland. Lapponia kemensis [kittilensis], Muonio, in palude ad villam Onnela, 1.VIII.1944 J. Montell (H 747580!, TUR-A 371906!, 371907!).

There is one collection (three sheets) in H and TUR-A determined by Montell as *Calama-*

grostis × onnelensis Montell, taken from the Onnela village. A hybrid between *C. lapponica* (Wahlenb.) Hartm. × *purpurea* (Trin.) Trin. subsp. *phragmitoides* (Hartm.) Tzvelev, as proposed by Montell (1945g), is most doubtful, as both taxa are of hybrid origin with unfertile pollen (Nygren 1946). Type specimens represent a somewhat rigid, low-growing form of *C. purpurea* (Trin.) Trin. However, since there is no latin description, *C. × onnelensis* is *nom. inval.* (Greuter et al. 2000: art. 36.1.).

***Carex × enontekiensis* Montell**

Memoranda Soc. Fauna Flora Fennica 18: 94. 1943, nom. inval. — Finland. Lapponia enontekiensis, [Enontekiö], in palude prope pagum Karesuando [Kaaresuvanto], 9.VIII.1923 J. Montell (H 127662, TUR-A 371887!, 371888!, 371889!, 371890!, 371891!, 371892!, OULU 191168!).

The single collection (many sheets) in H, OULU and TUR-A is determined by Montell as *Carex × enontekiensis* Montell (= *C. lasiocarpa* Ehrh. × *rotundata* Wahlenb.), taken from the Karesuando area (Montell 1943b). Since there is no Latin description, *C. × enontekiensis* is *nom. inval.* (Greuter et al. 2000: art. 36.1.). A very rare hybrid in Finland, known also from Norway (Elven 1994) and Sweden (Karlsson 1997).

***Carex fusca* All. var. *pseudadelostoma* Montell**

Memoranda Soc. Fauna Flora Fennica 22: 189. 1946. — LECTOTYPE (designated here): Finland. Lapponia enontekiensis, [Enontekiö], in campo subalpino humido inter Maunu et Kelottijärvi, 24.VII.1919 J. Montell (TUR-A 371953!).

The single collection in TUR-A is determined by Montell as *Carex fusca* var. *pseudadelostoma* Montell, taken from the type locality (Montell 1946g). It represents a hybrid *Carex bigelowii* Torr. ex Schwein. × *nigra* (L.) Richard subsp. *juncella* (Fr.) Lemke, which is relatively common in *Lapponia enontekiensis* wherever the parental taxa meet. The specimens Montell described were fertile (Montell 1946g), which is quite a common feature for *C. bigelowii* × *nigra* subsp. *juncella*.

***Carex × microstachyoides* Montell**

Meddelanden af Societas pro Fauna et Flora Fennica 48: 112. 1924. — LECTOTYPE (designated here): Finland. Lapponia kemensis [kittilensis], [Muonio], in palude Lompolovuoma prope pag. Muonio kyrkoby [church village], 7.VII.1921 J. Montell (TUR-A 371946!; isolectotypes H 329995!; TUR-A 371947!, 371948!, 371951!, 371952; OULU 191167!).

The single collection (many sheets) in H, OULU and TUR-A is determined by Montell as *Carex × microstachyoides* Montell (Fig. 1), taken from the type locality (Montell 1924a). *Carex × microstachyoides* represents oldest binary name for the hybrid *Carex dioica* L. × *heleonastes* Ehrh.

In Finland this is a rarely collected hybrid. It has also been reported from Norway (Elven 1994), Russia (Egorova 1999) and Sweden (Karlsson 1997).

***Epilobium × aboënsse* Montell**

Memoranda Soc. Fauna Flora Fennica 22: 10. 1946, nom. inval. — Finland. Regio aboënsis, Aboa, in horto botanico Academiae spontanea, 14.VI.1939 J. Montell (H 172895!, TUR-A 371884!, 371885!).

The single collection (three sheets) in H and TUR-A is determined by Montell as *E. montanum* × *rubescens* Rydb. [*ciliatum*], taken from the Academy garden. This rare hybrid *E. ciliatum* Raf. × *montanum* L. differs from *E. ciliatum* e.g. by having broader leaves and by being more densely hairy and having more acute teeth in leaves, from *E. montanum* by having e.g. narrower and less hairy leaves (Montell 1946a). However, since there is no Latin description, *E. × aboënsse* is nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Epilobium × bonsdorffii* Montell**

Meddelanden af Societas pro Fauna et Flora Fennica 48: 113. 1924. — LECTOTYPE (designated here): Finland. Lapponia kemensis [kittilensis], Muonio kyrkoby [church village], in horto meo spont., 26.VIII.1921 J. Montell (TUR-A 371886!).

Montell (1924b) proposed the parent species to be *E. hypericifolium* Tausch and *E. montanum*



Fig. 1. Lectotype of *Carex × microstachyoides*.

L. The former is today generally treated under the latter, or not given any rank. There is only one specimen in TUR-A determined by Montell as *E. × bonsdorffii* Montell, collected from Montell's private garden at Muonio. Named after Dr. A. von Bonsdorff, who cultivated many wild plants in his garden at Nummela, Vihti (S Finland), and sent *Epilobium* seeds to Montell.

***Erigeron politus* Fr. var. vel subsp. *saanae* Montell**

Memoranda Soc. Fauna Flora Fennica 21: 182. 1946. — LECTOTYPE (designated here): Finland. Lapponia enontekiensis, [Enontekiö], Kilpisjäure, in declivibus montis Saana, 26.VII.1944 J. Montell (TUR-A 373248!; isolectotypes TUR-A 373249!, 373247!).

There are two collections in TUR-A pre-dating the publication (Montell 1946f), determined by Montell as *E. politus* Fr. subsp. *saanae*

Montell: 12.8.1911 one sheet; 26.VII.1944 three sheets. All were collected on Mt. Saana. The types are pale specimens of *E. acer* subsp. *politus*, probably lacking anthocyanin. Therefore, both subsp. or var. *saanae* represent too high a rank for the taxon in question. The currently used name is *E. acer* L. subsp. *politus* (Fr.) H. Lindb.

Eriophorum russeolum* Fr. var. *fallax

Montell

Memoranda Soc. Fauna Flora Fennica 23: 166. 1947. — LECTOTYPE (designated here): Finland. Lapponia kemensis [kittilensis], Muonio, [Ylimuonio], in palude ad villam Onnela, 11.VII.1941 J. Montell (TUR-A 371899!); isolectotypes H 1728957!, TUR-A 371900!, 371901!.

There is one collection (four sheets) in H and TUR-A, determined by Montell as *Eriophorum russeolum* Fr. var. *fallax* Montell, taken from the type locality (Montell 1947a). The lectotype and isolectotypes represent well developed specimens with mature seeds. Montell (1947a) did not consider this taxon to represent either hybrid *E. russeolum* Fr. × *medium* Andersson, due to mature seeds and features resembling mainly *E. russeolum*, or *E. russeolum* f. *rufescens*, without explanation. Their currently used name is *E. russeolum* Fr. subsp. *rufescens* (Andersson) Hyl.

Euphrasia frigida* Pugsl. var. vel f. *purpurea

Montell

Memoranda Soc. Fauna Flora Fennica 19: 114. 1944. — LECTOTYPE (designated by Jalas & Kukkonen 1973): Finland. Lapponia enontekiensis, [Enontekiö], Kilpisjäure, strand nedanför fjället Saana [a shore by Mt. Saana], 27.VII.1912 J. Montell [TUR-A 368836!]; isolectotypes TUR-A 369105!; 369340!].

A rare form with purple flowers (Montell 1944a), which may be treated as a forma (Jalas & Kukkonen 1973).

Juncus lamprocarpus* Ehrh. f. *gracilis

Montell

Memoranda Soc. Fauna Flora Fennica 22: 192. 1946.

— LECTOTYPE (designated here): Finland. Alandia, Jomala, Lövdal, fuktig land [moist ground], 1.VIII.1945 J. Montell (TUR-A 371954!); isolectotypes H 1728956!, TUR-A 371955!).

Montell (1946h) cited the type location in the description. Hämet-Ahti (1966) considered that f. *gracilis* is a shade modification of *J. articulatus* L. var. *articulatus*, a notion with which I agree.

***Lycopus europaeus* L. f. *pusillus* Montell**

Memoranda Soc. Fauna Flora Fennica 22: 192. 1946. — Lectotype (designated here): Finland. Alandia, Jomala, Ytternäs, strandäng [sea shore meadow], 11.VIII.1945 J. Montell (TUR-A 371893!; isolectotype TUR-A 371894!).

There is one collection (two sheets) in TUR-A collected from the type-locality (Montell 1946h) and determined by Montell as f. *pumila*. He obviously changed the herbarium name f. *pumila* into f. *pusillus* Montell when the description was published. The type most likely represents a small-sized habitat modification, perhaps collected on a dry site.

***Melampyrum sylvaticum* L. subsp. *aestivale* Ronniger f. *pseudonemorosum* Montell**

Memoranda Soc. Fauna Flora Fennica 21: 180. 1946. — LECTOTYPE (designated here): Finland. Lapponia enontekiensis, [Enontekiö], Kilpisjäure, fjället Saanas västslutning [W lower slope of Mt. Saana], 28.VII.1944 J. Montell (TUR-A 373341!; isolectotype TUR-A 373252!).

There is one collection (two sheets) in TUR-A determined by Montell as *M. sylvaticum* L. f. *pseudonemorosum* m[ihi]. In the description Montell (1946e) cited the date of collection. A rare form with purple bracts (Montell 1946e), which may be treated as a forma of *M. sylvaticum*.

Orchis maculatus* L. var. *kolaënsis

Montell

Memoranda Soc. Fauna Flora Fennica 23: 167. 1947. —

LECTOTYPE (designated here): [Russia (formerly Finland). Murmansk Region, Pechenga District], Lapponia petsamoënsis, Peninsula Piscatorum [Rybachiya Peninsula], in palude ad rivulum prope pag. Pummanni, 3.VIII.1935 J. Montell (TUR-A 371909!); isolectotype TUR-A 371910!. — SYNTYPE: [Russia (formerly Finland). Murmansk Region, Pechenga District] Lapponia petsamoënsis, [Rybachiya Peninsula], Pummanni, Nikkarijännkä, 18.VII.1935 J. Montell (TUR-A 371908!).

Dactylorhiza maculata (L.) Verm. subsp. *montellii* Verm., *Contr. Bot. Inst. Univ. Amsterdam* 2(7): 141. 1947.

Dactylorhiza kolaënsis (Montell) Aver., *Bot. Zhurn.* 69: 875. 1984.

D. maculata subsp. *elodes* (Griseb.) Soó var. *kolaënsis* (Montell) Soó, *Ann. Univ. Scient. Budapestensis, Sect. Biol.* 3: 349. 1960.

There is one collection (two sheets) in TUR-A determined by Montell as *Orchis maculatus* L. var. *kolaënsis* Montell, taken from the type locality (Fig. 2). The lectotype and isolectotype were annotated on the sheets by Averyanov (1984), but he did not formally write this designation into his publication. Landwehr (1977) made a new combination without designating the types. Montell (1947b) mentions two sites in his description, the lectotype near the Pummanni village along a small spring fed rivulum and from a moist meadow on the edge of the fen Nikkarijännkä. *Dactylorhiza maculata* subsp. *montellii* was recently further characterized by Breiner and Breiner (2001).

The currently used name is *Dactylorhiza maculata* (L.) Soó subsp. *montellii* (Verm.) Landwehr. Subsp. *montellii* Verm. predates var. *kolaënsis* Montell, having thus priority. According to Vermeulen (1947) the type specimen (sub no. Rev. Dact. 0606) is in his private herbarium, a specimen that Montell sent to him. Orchidaceae types by Vermeulen are said to be at WAG today (Stafleu & Cowan 1986), but there was no response to my inquiry sent to that herbarium.

Rhinanthus minor L. var. *lapponicus* Montell

Memoranda Soc. Fauna Flora Fennica 20: 16. 1945. — LECTOTYPE (designated here): Finland. Lapponia kemensis [kittilensis], Muonio, mager äng vid ån Kangosjokis utlopp [a dry meadow near the mouth of river Kangosjoki], 15.VII.1922 J. Montell (TUR-A 362385!); isolectotype TUR-A 362403!.



Fig. 2. Lectotype of *Orchis maculatus* var. *kolaënsis*.

There is one collection (two sheets) in TUR-A determined by Montell as *R. minor* L. var. *lapponicus* m[ihi]. In his description Montell (1945b) mentioned that he had seen or collected the taxon at several sites. It represents *R. minor* L. subsp. *groenlandicus* (Chabert) Neuman × subsp. *minor*. The intermediates between the two subspecies grow throughout Finland (Väre 2001).

Stellaria graminea L. var. *ciliata* Montell

Memoranda Soc. Fauna Flora Fennica 17: 74. 1942, nom. inval. — Finland. [Alandia] Finström, Västanträsk, vägkant [road side], 10.VIII.1909 J. Montell (TUR-A 371895!).

This is the only sheet determined as var. *ciliata* by Montell, and it is collected in the locality reported by him (Montell 1942b). The specimens fit within the variation of *S. graminea* (A. Kurtto, pers. comm.). However, since there is no Latin description, var. *ciliata* is nom. inval. (Greuter et al. 2000: art. 36.1.).

Names published by Montell in 1962

F. W. Klingstedt edited a manuscript Montell left behind (Montell 1962). It includes 12 names, which can be connected to Montell as the author. Klingstedt followed Hylander's (1955) nomenclature, and the new unauthorized names do not appear there. However, some of these names may have been published before, like *Carex magellanica* f. *acrogyna* and f. *gynobasa*. All the new names in Montell (1962) are invalid, as they lack a Latin description (Greuter *et al.* 2000: art. 36.1.).

***Achillea millefolium* L. f. *colorata* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 128. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Calamagrostis lapponica* (Wahleb.) Hartm. f. *rubicunda* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 111. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Carex rotundata* Wahleb. f. *pallida* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 115. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Carex magellanica* Lam. f. *acrogyna* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 114. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Carex magellanica* Lam. f. *gynobasa* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 114. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Carex limosa* L. f. *mascula* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 114. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Leontodon autumnalis* L. f. *aureolanatus* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 128. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Leontodon autumnalis* L. f. *nigrolanatus* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 128. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Lychnis alpina* L. f. *riparia* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 119. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Potentilla crantzii* (Crantz.) Beck ex Fritsch var. *pseudoternata* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 122. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Ranunculus acris* L. f. *pusillus* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 120. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

***Ranunculus monophyllus* Ovcz. f. *multifidus* Montell**

Memoranda Soc. Fauna Flora Fennica 37: 120. 1962, nom. inval. (Greuter *et al.* 2000: art. 36.1.).

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References

- Anon. 1946: *Suomen metsänhoitajat 1931–1945*. — Suomen metsänhoitajaliitto, Helsinki.
- Averyanov, L. V. 1984: Taxonomic and nomenclature vari-

- ations in the genus *Dactylorhiza* (Orchidaceae) — *Bot. Zhurn.* 69: 875–876.
- Breiner, E. & Breiner, U. 2001: *Dactylorhiza maculata* subsp. *montelli* Landwehr, eine wenig bekannte Unterart von *Dactylorhiza maculata* aus dem nördlichen Skandinavien. — *Ber. Arbeitskr. Heim. Orchid.* 18(1): 177–182.
- Collander, R., Erkamo, V. & Lehtonen, P. 1973: Bibliographica botanica Fenniae 1901–1950. — *Acta Soc. Fauna Flora Fennica* 81: 1–647.
- Egorova, T. V. 1999: *The sedges (Carex L.) of Russia and adjacent states*. — St. Petersburg State Chem.-Pharmac. Acad., St. Petersburg & Missouri Botanical Garden Press, St. Louis.
- Elven, R. 1994: *Lid's Norsk Flora*. — Det Norske Samlaget, Oslo.
- Greuter, W., McNeill, J., Barrier, F. R., Burdet, H. M., Demoulin, V., Filgueiras, T. S., Nicolson, D. H., Silva, P. C., Skog, J. E., Trehane, P., Turland, N. J. & Hawksworth, D. L. 2000: International code of botanical nomenclature (Saint Louis Code). — *Regnum Vegetabile* 138: I–XVIII, 1–474.
- Holmgren, P. K., Holmgren, N. H. & Barnett, L. C. 1990: *Index Herbariorum. Part I: The Herbaria of the World*. — Int. Assoc. Plant Taxon. & New York Bot. Garden, New York.
- Hylander, N. 1955: *Förteckning över Nordens växter*. — Lunds Botaniska Förening, Lund.
- Hämet-Ahti, L. 1966: Some races of *Juncus articulatus* in Finland. — *Acta Bot. Fennica* 72: 1–22.
- Jalas, J. & Kukkonen, I. 1973: Typification of taxa of *Euphrasia* (Scrophulariaceae) described by Finnish botanists. — *Ann. Bot. Fennici* 10: 27–42.
- Karlsson, T. 1997: Förtäckning över svenska kärväxter. — *Svensk Bot. Tidskr.* 91: 241–560.
- Landwehr, J. 1977: *Wilde Orchideen van Europa* 1. — Vereniging tot Behoud Natuurmonumenten in Nederland, Graveland.
- Linkola, K. 1926: Suunnitelma luonnon suojelealueiden erottamiseksi Pohjois-Suomen valtionsailla. — *Silva Fennica* 1: 1–57 + 32 figs.
- Montell, J. 1910: Några anmärkningsvärda kärväxter från Muonio och Enontekis. — *Meddel. Soc. Fauna Fl. Fennica* 36: 152–157.
- Montell, J. 1912a: *Chamaeorchis alpina* (L.) Rich. och *Eri-geron Unalaschenkensis* (DC.) Vierh. nya för Finland. — *Meddel. Soc. Fauna Fl. Fennica* 38: 181–182.
- Montell, J. 1912b: *Antennaria carpatica* i Enontekis. — *Meddel. Soc. Fauna Fl. Fennica* 39: 14–15.
- Montell, J. 1914a: Ehdotus Kilpisjaurin rannalle perustettava luonnon suojelealueesta. — *Luonnon Ystävä* 18: 148–154.
- Montell, J. 1914b: Förslag till naturskyddsområde vid Kilpisjaur. — *Meddel. Soc. Fauna Fl. Fennica* 40: 175–181.
- Montell, J. 1914c: *Salix*-hybrider från Muonio och Enontekis. — *Meddel. Soc. Fauna Fl. Fennica* 40: 197–199.
- Montell, J. 1916: “*Carex macilenta* Fr.” funnen på 4 lokaler i Muonio. — *Meddel. Soc. Fauna Fl. Fennica* 42: 47–49.
- Montell, J. 1917: *Rhinanthus groenlandicus* Chabert (*Ale- torolophus borealis* Sterneck) funnen i Enontekis. — *Meddel. Soc. Fauna Fl. Fennica* 43: 80–83.
- Montell, J. 1918: *Carex brunescens × lagopida* Wbgb., ny för Finlands flora — *Meddel. Soc. Fauna Fl. Fennica* 44: 4.
- Montell, J. 1920: Förslag till ordnande af naturskyddsarbetet i Finland. — *Meddel. Soc. Fauna Fl. Fennica* 46: 120–123.
- Montell, J. 1921a: *Orchis lapponicus* Laest., en lång försedd art. — *Meddel. Soc. Fauna Fl. Fennica* 47: 55–58.
- Montell, J. 1921b: Gränserna för Malla naturskyddsområde utvidgade. — *Meddel. Soc. Fauna Fl. Fennica* 46: 68–70.
- Montell, J. 1921c: Några för Finlands flora nya *Taraxacum*-arter. — *Meddel. Soc. Fauna Fl. Fennica* 47: 90–91.
- Montell, J. 1921d: *Trisetum subalpestre* (Hartm.) Neum. et Ahlfv. (*T. agrostideum* Fr.) allvarsamt hotad på sin gamla fyndort vid Maunu i Lapponia enontekiensis. — *Meddel. Soc. Fauna Fl. Fennica* 46: 213–216.
- Montell, J. 1924a: *Carex microstachyoides* m. (*C. dioica* L. × *heleonastes* Ehrh.) hybr. n. — *Meddel. Soc. Fauna Fl. Fennica* 48: 112–113.
- Montell, J. 1924b: *Epilobium bonsdorffii* m. (*E. hypericifolium* Tausch. × *montanum* L.) hybr. n. — *Meddel. Soc. Fauna Fl. Fennica* 48: 113–114.
- Montell, J. 1924c: Några hybrida och andra former af *Cerastium arcticum* Lge (*C. Edmondstonii* Murb. et Ostf.). — *Meddel. Soc. Fauna Fl. Fennica* 48: 179–182.
- Montell, J. 1925: *Poa arctica* R. Br. funnen i Enontekis. — *Meddel. Soc. Fauna Fl. Fennica* 49: 60–61.
- Montell, J. 1935: Några för Finlands flora nya fjällväxter — *Memoranda Soc. Fauna Flora Fennica* 10: 381–382.
- Montell, J. 1936: *Agropyron caninum* (L.) P.B. × *latiglume* (Scribn. & Smith) Rydb., ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 11: 230.
- Montell, J. 1938: *Woodsia alpina* (Bolt) Gray × *ilvensis* (L.) R. Br. — *Memoranda Soc. Fauna Flora Fennica* 14: 127.
- Montell, J. 1941a: *Draba dovreensis* Fr. ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 17: 24–25.
- Montell, J. 1941b: *Carex aquatilis* Wg. v. *stans* Drej. × *rigida* Good. — *Memoranda Soc. Fauna Flora Fennica* 17: 75.
- Montell, J. 1942a: *Stellaria graminea* L. × *longifolia* Mühl. funnen i Finland. — *Memoranda Soc. Fauna Flora Fennica* 17: 74.
- Montell, J. 1942b: *Stellaria graminea* L. var. *ciliata* n. var. — *Memoranda Soc. Fauna Flora Fennica* 17: 74.
- Montell, J. 1942c: *Carex rostrata* Stokes × *rotundata* Wg. ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 17: 177.
- Montell, J. 1942d: *Erigeron eriocephalus* Fl. Dan. funnen i Finland. — *Memoranda Soc. Fauna Flora Fennica* 17: 192.
- Montell, J. 1943a: *Agropyron caninum* (L.) P. B. × *mutable* Drobov, ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 18: 94.
- Montell, J. 1943b: *Carex lasiocarpa* Ehrh. × *rotundata* Wg. (*C. enontekiensis* mihi), en ny hybrid. — *Memoranda Soc. Fauna Flora Fennica* 18: 94–95.
- Montell, J. 1943c: *Agrostis borealis* Hn. × *tenuis* Sibth. (*A. lapponica* mihi), hybrida nova. — *Memoranda Soc. Fauna Flora Fennica* 18: 95.

- Montell, J. 1944a: *Euphrasia frigida* Pugsl. var. vel. f. *purea* f. nova. — *Memoranda Soc. Fauna Flora Fennica* 19: 114–115.
- Montell, J. 1944b: *Euphrasia frigida* Pugsl. var. *palustris* (E. Jörg.) Nordh. ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 19: 115.
- Montell, J. 1945a: *Calamagrostis epigejos* (L.) Roth. × *lan- ceolata* Roth. (*C. Neumaniana* Torges), ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 20: 13–16.
- Montell, J. 1945b: *Rhinanthus (Alectorolophus) minor* (L.) Ehrh. var. *lapponicus*, nova var. — *Memoranda Soc. Fauna Flora Fennica* 20: 16–17.
- Montell, J. 1945c: Bidrag till kännedomen om adventiv- och ogräsförfloran i Muonio socken, Lapponia kemensis. — *Memoranda Soc. Fauna Flora Fennica* 20: 82–91.
- Montell, J. 1945d: Den sällsynta hybriden *Calamagrostis epigejos* (L.) Roth. × *purea* Trin. funnen i Finland. — *Memoranda Soc. Fauna Flora Fennica* 20: 91–94.
- Montell, J. 1945e: *Achillea millefolium* L. var. *lapponum*, nova var. och f. *Neumanii*, nova forma. — *Memoranda Soc. Fauna Flora Fennica* 20: 94–95.
- Montell, J. 1945f: *Luzula pallescens* (Wg.) Bess. × *sudetica* (Wlld.) DC. funnen i Lapponia kemensis. — *Memoranda Soc. Fauna Flora Fennica* 21: 80.
- Montell, J. 1945g: *Calamagrostis lapponica* (Wg.) Hartm. × *purea* Trin. (*C. onnелensis* mihi) hybrida nova. — *Memoranda Soc. Fauna Flora Fennica* 21: 80–83.
- Montell, J. 1945h: *Sedum villosum* L. på Olostunturi. — *Memoranda Soc. Fauna Flora Fennica* 21: 83–84.
- Montell, J. 1945i: *Alpine biflora* (L.) Wg. f. *rosea* mihi, nova forma. — *Memoranda Soc. Fauna Flora Fennica* 21: 166–167.
- Montell, J. 1945j: Hybriden *Carex brunescens* (Pers.) Poir. × *tenuiflora* Wg., nova hybrida. — *Memoranda Soc. Fauna Flora Fennica* 21: 167–168.
- Montell, J. 1945k: *Erigeron (Trimorpha) borealis* (Vierh.) funnen vid Kilpisjäure i Lapponia enontekiensis. — *Memoranda Soc. Fauna Flora Fennica* 21: 168–169.
- Montell, J. 1945l: *Epilobium anagallidifolium* Lam. × *palustre* L., ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 21: 169.
- Montell, J. 1946a: *Epilobium montanum* L. × *rubescens* Rydb. (*E. aboense* mihi) hybr. nova. — *Memoranda Soc. Fauna Flora Fennica* 22: 10–11.
- Montell, J. 1946b: *Agrimonia odorata* Mill. v. *sepium* Bré- bisson (*A. eupatoria* × auct. svec.) anträffad på Åland. — *Memoranda Soc. Fauna Flora Fennica* 22: 143–144.
- Montell, J. 1946c: Hybriden *Epilobium collinum* Gmel. × *montanum* L., ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 22: 144–146.
- Montell, H. 1946d: Hybriderna *Festuca pratensis* Huds. × *Lolium perenne* L. f. *pseudoglyceria* Holmb. och *Lolium multiflorum* Lam. × *perenne* L. funna i Åbo. — *Memoranda Soc. Fauna Flora Fennica* 24: 176–177.
- Montell, H. 1946e: *Melampyrum silvaticum* L. subsp. *aestivale* Ronniger f. *pseudoroseum* mihi f. n. — *Memoranda Soc. Fauna Flora Fennica* 21: 180–181.
- Montell, H. 1946f: En anmärkningsvärd form av *Erigeron (Trimorpha) politus* Fr. — *Memoranda Soc. Fauna Flora Fennica* 21: 182–183.
- Montell, J. 1946g: *Carex fusca* Allioni (*C. goodenowii* J. Gay) var. *pseudadelostoma* mihi, nova var. — *Memoranda Soc. Fauna Flora Fennica* 22: 189.
- Montell, J. 1946h: Växtformer från Åland — *Memoranda Soc. Fauna Flora Fennica* 22: 189–193.
- Montell, J. 1947a: *Eriophorum russeolum* Fr. var. *fallax* mihi, nova var. — *Memoranda Soc. Fauna Flora Fennica* 23: 166.
- Montell, J. 1947b: *Orchis maculatus* L. var. *kolaensis* mihi, nova var. — *Memoranda Soc. Fauna Flora Fennica* 23: 166–167.
- Montell, J. 1947c: Hybriden *Festuca arundinacea* Schreb. × *pratensis* Huds. funnen på Åland. — *Memoranda Soc. Fauna Flora Fennica* 23: 168.
- Montell, J. 1947d: *Rumex conglomeratus* Murr. × *obtusifolius* L., ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 23: 169.
- Montell, H. 1950a: Även huvudformen av *Erigeron (Trimorpha) borealis* (Vierh.) nu funnen i Finland. — *Memoranda Soc. Fauna Flora Fennica* 25: 103–104.
- Montell, H. 1950b: *Carex rotundata* Wg. × *saxatilis* L., ny för Finlands flora. — *Memoranda Soc. Fauna Flora Fennica* 25: 105.
- Montell, H. 1950c: Hybriderna *Carex rhynchophysa* C.A.M. × *rostrata* Stok. och *C. rhynchophysa* C.A.M. × *vesicaria* L. från Björneborgstrakten. — *Memoranda Soc. Fauna Flora Fennica* 25: 106–107.
- Montell, J. 1951a: Hybriden *Carex Bigelowii* Torr. × *juncella* Fr. i finska Lappland — *Memoranda Soc. Fauna Flora Fennica* 26: 108–109.
- Montell, J. 1951b: *Agropyron caninum* (L.) P.B. var. *glaucescens* Lge. × *mutabile* Drob., en för Finlands flora ny hybrid. — *Memoranda Soc. Fauna Flora Fennica* 26: 108–109.
- Montell, J. 1951c: Växtformer från Åland. II — *Memoranda Soc. Fauna Flora Fennica* 26: 109–112.
- Montell, J. 1962: Vegetationen och floran i Muonio socken. — *Memoranda Soc. Fauna Flora Fennica* 37: 70–130.
- Nordman, A. 1955: In memoriam. — *Not. Entom.* 35: 33–34.
- Nygren, A. 1946: The genesis of some Scandinavian species of *Calamagrostis*. — *Hereditas* 32: 131–262.
- Orlova, N. I. 1966: [Flora of the Murmansk Region, V]. — Nauka, Moskva. [In Russian].
- Stafleu, F. A. & Cowan, R. S. 1986: *Taxonomic literature VI*: Sti-Vuy. — 2nd ed. Bohn, Scheltema & Holkema, Utrecht.
- Valle, K. J. 1954: Justus Montell †. — *Suomen Hyönteistieellinen Aikakausikirja* 20: 191.
- Väre, H. 2001: Pohdintaa pikkulaukusta ja lapinlaukusta. — *Lutukka* 17: 50–60.
- Vermeulen, P. 1947: Studies on *Dactylorhizis*. — *Contr. Bot. Inst. Amst.* 2(7): 1–180 + 8 plates.
- Widén, K.-G. 1971: The genus *Agrostis* L. in eastern Fennoscandia. Taxonomy and distribution. — *Flora Fennica* 5: 1–209.