SOME IMPROVEMENTS AND AMENDMENTS TO THE NOMENCLATURE OF MEADOWS AND ALPINE CARPETS FROM THE GREAT CAUCASUS

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New names of alpine carpet syntaxa (Korotkov 2006) were published invalidly [Art. 3o, *International Code of Phytosociological Nomenclature* (ICPN 3), Weber *et al.* 2000] because the word ‘typus’ was not used *expressis verbis* for the designation of the type of syntaxa names (Art. 5 of ICPN 3). Therefore these syntaxa names should be validated in the following form, corresponding to Art. 5, 3o, 9 and 10b of ICPN 3.

***Carici pyrenaicae-Colpodietum pontici* ass. nov. hoc loco**

TYPUS: Table 2, relevé 3 (Korotkov 2006, pp. 286–287).

***Geranio gymnocauli-Taraxacetum confusi* ass. nov. hoc loco**

TYPUS: Table 3, relevé 5 (Korotkov 2006, p. 289).

***Carici atratae-Anthoxantheum odorati* ass. nov. hoc loco**

TYPUS: Table 4, relevé 2 (Korotkov 2006, pp. 291–292).

***Colpodio variegati-Taraxacetum crepidiformis* ass. nov. hoc loco**

TYPUS: Table 5, relevé 17 (Korotkov 2006, pp. 294–295).

***Agrostio lazicae-Minuartietum imbricatae* ass. nov. hoc loco**

TYPUS: Table 6, relevé 5 (Korotkov 2006, pp. 297–298).

***Colpodion variegati* all. nov. hoc loco**

TYPUS: *Colpidio variegati-Taraxacetum crepidiformis*

Three alpine meadow associations – *Nardo strictae-Geranium gymnocauli*, *Polygono vivipari-Kobresietum bellardi* and the subassociation *Potentilletum crantzii kobresietosum* – were published (Korotkov & Belonovskaya 2001a, b), also invalidly, because no types were explicitly mentioned (Art. 5 of ICPN 2, Barkman *et al.* 1986). Later an attempt to validate *Nardo strictae-Geranium gymnocauli* and *Potentilletum crantzii* was made (Korotkov & Belonovskaya 2002). This proved to be a failed effort, however, because the new edition of ICPN, requiring the use of the word ‘typus’ *expressis verbis* to indicate types, became *res judicata* just prior to publication. Unfortunately again the types were assigned to units with mistakes. The following validation conforms to ICPN rules.

***Nardo strictae-Geranium gymnocauli* ass. nov. hoc loco**

TYPUS: the following auct. relevé 183, 27.07.1994 by K. Korotkov.

Karatchay, Teberdinsky State Reserve, not far from the border with Abkhazia, above waterfalls, 2800 m a.s.l., on the 5° SSW slope to the Ptysh River, herb cover 75%, moss cover 3%, lichen cover 3%. Species and abundance (Braun-Blanquet cover scale): *Geranium gymnocaulon* DC. 3, *Nardus stricta* L. 2, *Campanula tridentata*

Schreb. 1, *Carum meifolium* (Bieb.) Boiss. 1, *Anthoxanthum odoratum* L. 1, *Veronica gentianoides* Vahl 1, *Colpodium variegatum* (Boiss.) Griseb. 1, *Festuca ovina* L. 1, *Sibbaldia procumbens* L. 1, *Cerastium purpurascens* Adams in F. Weber & D. Mohr 1, *Carex umbrosa* Host 1, *C. atrata* L. +, *Anemone speciosa* Adam ex Pritz. +, *Gagea liotardi* (Sternb.) Schult. & Schult. +, *Luzula multiflora* (Ehrh.) Lej. +, *L. spicata* (L.) DC. +, *Ranunculus oreophilus* M. Bieb. +, *Corydalis alpestris* C. A. Mey. +, *Minuartia imbricata* (M. Bieb.) Woronow +, *Chamaesciadium acaule* (M. Bieb.) Boiss. +, *Antennaria dioica* (L.) Gaertn. +, *Potentilla crantzii* (Crantz) Beck ex Fritsch +, *Sedum tenellum* M. Bieb. +, *Taraxacum crepidiforme* DC. +, *Hedysarum hedysaroides* (L.) Schinz & Thell. +, *Campanula collina* Sims +, *Cirsium simplex* C. A. Mey. +, *Abietinella abietina* (Hedw.) M. Fleisch. +, *Desmatodon latifolius* (Hedw.) Brid. +, *Pohlia cruda* (Hedwig) Lindberg +, *Rhytidium rugosum* (Hedwig) Kindberg +, *Cetraria islandica* (L.) Ach. +.

***Nardo strictae-Geranietum gymnocauli cerastietosum purpurascens* ass. nov. hoc loco**

TYPUS: the same as for association.

***Nardo strictae-Geranietum gymnocauli festucetosum variae* subass. nov. hoc loco**

TYPUS: Table 4, auct. relevé 53 (Korotkov & Belonovskaya 2001a, pp. 23–25), and the same as in Table 1, field relevé 53 (Korotkov & Belonovskaya 2001b, pp. 328–331).

***Polygono vivipari-Kobresietum bellardi* ass. nov. hoc loco**

TYPUS: Table 4, auct. relevé 152 (Korotkov & Belonovskaya 2001, pp. 26–28), and the same as in Table 1, field relevé 152 (Korotkov & Belonovskaya 2001b, pp. 328–331).

***Potentilletum crantzii* ass. nov. hoc loco, and *Potentilletum crantzii vaccinietyosum myrtilli* subass. nov. hoc loco**

TYPUS: Table 5, auct. relevé 21 (Korotkov & Belonovskaya 2001, pp. 29–31).

Pohlia nutans (Hedw.) Lindb. + was omitted in the above mentioned publication.

***Potentilletum crantzii kobresietosum simpliciusculae* subass. nov. hoc loco**

TYPUS: Table 5, auct. relevé 8 (Korotkov & Belonovskaya 2001, pp. 29–31), and the same as in Table 1, field relevé 8 (Korotkov & Belonovskaya 2001b, pp. 334–337).

Anemone speciosae-Campanuletum tridentatae eritrichietosum nanae Korotkov & Belonovskaya (Korotkov & Belonovskaya 2001b) was published with a wrong ending in the species epithet and should be corrected to *Anemone speciosae-Campanuletum tridentatae eritrichietosum nani* Korotkov & Belonovskaya according to Art. 40b and 48 of ICPN 3.

Four subalpine meadow associations from the northern slope of Skalisty (Rocky) Ridge, – *Inulo orientalis-Pedicularietum condensatae*, *Cephalario giganteae-Tanacetetum coccinei*, *Carici caespitosae-Ligularietum subsagittatae*, and *Cirsio pugnacis-Trifolietum ambigui* – were published as provisional (Korotkov & Tzepakova 1991) and need validation according to Art. 3b of ICPN 2 (Barkman *et al.* 1986). The following validation conforms to ICPN 3 rules.

***Inulo orientalis-Pedicularietum condensatae* ass. nov. hoc loco**

TYPUS: Table 3, relevé 22 (Korotkov & Tzepakova 1991, pp. 75–82).

***Cephalario giganteae-Tanacetetum coccinei* ass. nov. hoc loco**

TYPUS: Table 5, relevé 6 (Korotkov & Tzepakova 1991, pp. 87–89).

***Carici caespitosae-Ligularietum subsagittatae* ass. nov. hoc loco**

TYPUS: Table 4, relevé 47 (Korotkov & Tzepakova 1991, pp. 84–85).

***Cirsio pugnacis-Trifolietum ambigui* ass. nov. hoc loco**

TYPUS: Table 7, auct. relevé 34 (Korotkov & Tzepakova 1991, pp. 93–95).

***Astrantion maximae* all. nov. hoc loco**

TYPUS: *Inulo orientalis*-*Pedicularietum condensatae*.

To avoid later rejection of syntaxa names according to Art. 3f of ICPN 3 or correction according to Art. 43 of ICPN 3, here I list some potentially confusing plant species names used in this publication, with their substitutes:

Carex pyrenaica Wahl. instead of *Carex micropodioides* Krecz.

Colpodium ponticum (Bal.) Woronow instead of *Hyalopoa pontica* (Bal.) Tzvel.

Carex atrata L. instead of *Carex medwedewii* Lesk.

Anthoxanthum odoratum L. instead of *Anthoxanthum alpinum* A. Löve & D. Löve

Colpodium variegatum (Boiss.) Griseb. instead of *Catabrosella variegata* (Boiss.) Tzvel.

Taraxacum crepidiforme DC. instead of *Taraxacum stevenii* sensu Hand.-Mazz. (1907) non (Sprengel) DC. (1838)

Festuca ovina L. instead of *Festuca supina* Schur

Carex umbrosa Host instead of *Carex huetiana* Boiss.

Gagea liotardi (Sternb.) Schult. & Schult. instead of *Gagea fistulosa* (Ram. ex Lam. & DC.) Ker.-Gawl, *G. anisanthos* C. Koch

Antennaria dioica (L.) Gaertn. instead of *Antennaria caucasica* Boris.

Hedysarum hedysaroides (L.) Schinz & Thell. instead of *Hedysarum caasicum* M. Bieb.

Festuca varia Haenke instead of *Festuca woronowii* Hack.

Kobresia bellardii (All.) Degland non Hartm. instead of *Kobresia capillifolia* (Decne) Clarke, *K. cappiliformis* Ivanova

Kobresia simpliciuscula (Wahl.) Mackenzie instead of *Kobresia persica* Kuk. & Bornm., *K. humilis* (C. A. Mey. ex Trautv.) Serg.

Tanacetum coccineum (Willd.) Grierson instead of *Pyrethrum roseum* (Adams) M. Bieb.

Luzula multiflora (Ehrh.) Lej. instead of *Luzula pseudosudetica* (Krecz.) Krecz.

Sibbaldia procumbens L. instead of *Sibbaldia parviflora* Willd., *S. semiglabra* C. A. Mey.

Eritrichium nanum (All.) Schrad. ex Gaud. instead of *Eritrichium caasicum* (Alb.) Grossh.

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