NOMENCLATURAL NOTES FOR THE NORTH AMERICAN FLORA. III.

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ABSTRACT

Authorship of the following names is discussed: *Cyclospermum leptophyllum*, *Helianthus pauciflorus* Nutt. ssp. *subrhomboideus*, and *Lomatium macrocarpum*. The names *Luzula multiflora* (Ehrh.) Hoffm. var. *kobayasi* (Satake) Samuelsson and *Viola bicolor* Pursh are accepted as being correct. The name *Luzula multiflora* var. *contracta* is validated by the provision of a Latin diagnosis. One new combination is proposed: *Platanthera zothecina* comb. nov.


INTRODUCTION

Continuing with the “Nomenclatural notes for the North American Flora. I and II” (Kartesz & Gandhi 1989a, 1989b), a third note in the series is presented here toward the advancement of our understanding of North American plants.

APIACEAE

*Cyclospermum leptophyllum*

The name *Cyclospermum leptophyllum*, for the pantropical, European weed, was proposed by Sprague (J. Bot. 61:131. 1823) as a new combination based on *Pimpinella leptophyllum* Pers. The authorship of this new combination has generally been attributed to “(Pers.) Sprague” (Liogier & Martorell 1982;
Howard 1989; Constance & Affolter 1990). When Sprague proposed the above combination, he stated that his new combination is for those “who follow Lagasca and Calestani in treating Pimpinella leptophylla Pers. as the type of an independent genus” (i.e., Cyclospermum). On the same page, Sprague chose to accept the name Apium leptophyllum and cited his new combination as a synonym for it. Since Sprague did not accept his new combination, he cannot be the author of the name (Art. 34.1; Greuter 1988). Therefore, the first to use and accept the new combination C. leptophyllum in publication, automatically validates it. In reviewing the pertinent literature, Britton & Wilson (1925) appear to have been the first to do so, and thus, validate the new combination. Although 102 years passed between the publications of Sprague and of Britton & Wilson, no earlier publication is known to have used the name; hence, we conclude that Britton & Wilson must be credited for the new combination. Regarding the authorship of the new combination A. leptophyllum, some workers (e.g., Constance & Affolter 1990) believe that F. Mueller must be credited as the combining author. However, Bentham (1863; p. 12) clearly stated that “I alone am therefore responsible for the details of this work.” The bibliographical references are provided below:


Lomatium macrocarpum

Torrey & Gray (1840) described Peucedanum macrocarpum and attributed the name to Nuttall. They cited Ferula macrocarpa Hook. & Arn. (1839) with a “?” mark. in synonymy. Obviously, this citation has led some workers to believe that Ferula macrocarpa is the basionym for P. macrocarpum. Coulter & Rose (Contr. U.S. Natl. Herb. 7:217. 1900) transferred P. macrocarpum to the genus Lomatium and cited P. macrocarpum Nuttall (from Torrey & Gray), but did not make a reference to Hooker & Arnott.

Regarding Coulter & Rose’s new combination (Lomatium macrocarpum), Hiroe (1979) cited “Hook. & Arn.” as the parenthetical authors, rather than Torrey & Gray. It is possible that Hiroe assumed that Coulter & Rose indirectly cited Hooker & Arnott, by citing Torrey & Gray, who had mentioned Hooker & Arnott in synonymy. To help clarify the situation, we quote from Torrey & Gray: “We have described this plant from specimens collected by Mr. Nuttall. It may not be identical with Ferula macrocarpa H. & A.” It is evident from the above statement that the type specimen for Peucedanum
macrocarpum is that of Nuttall (on deposit in PH, as per Coulter & Rose), but not that of F. macrocarpa. Thus, the name P. macrocarpum cannot be considered as a new combination, but rather a name dating from 1840. Hence, the correct author citation for P. macrocarpum is: Nutt. ex Torrey & A. Gray. Since Coulter & Rose did not refer to Hooker & Arnott, but rather cited P. macrocarpum Nutt. as the basionym, the correct author citation for L. macrocarpum is: "(Nutt. ex Torrey & A. Gray) Coult. & Rose."

Although Ferula macrocarpa is the oldest name in this species complex, it cannot be transferred to Lomatium, since it would create a later homonym of L. macrocarpum (Nutt. ex Torrey & A. Gray) Coult. & Rose.


ASTERACEAE

Helianthus

The new combination Helianthus pauciflorus Nutt. ssp. subrhomboideus (Rydb.) Spring & E. Schilling (Biochem. Syst. Ecol. 18(1):22. Mar 1990) predates H. pauciflorus ssp. subrhomboideus (Rydb.) Kartesz & Gandhi (Phytologia 68(6):423. Jun 1990) and renders the latter to be superfluous. The March issue of Biochemical Systematics & Ecology was received in May 1990 at UNC-Botany Library, and by this time, our article in Phytologia was already in press. Nevertheless, we regret the oversight and correct the subspecies authorship to: (Rydb.) Spring & E. Schilling.

JUNCACEAE

Luzula multiflora complex

The epithet contracta, in the Luzula multiflora (Ehrh.) Lej. complex, most likely appeared first at the rank of forma, in the protologue of L. multiflora var. frigida (Buches.) Samuelsson (Hultén 1937; Pp. 134, 135). The epithet contracta, although effectively published, was invalid. Bocher (1938; p. 248), in his treatment of L. frigida (Buches.) Samuelsson, remarked that the var. contracta was the most widespread form. However, the name was not validated by him.
Bocher (1950; p. 11) stated that there was "no description of the variety contracta available." Likewise, Scoggan (1957) stated that "Var. contracta Sam. is the form represented in Manitoba, ..., this entity was never officially described." Although Bocher used the name Luzula multiflora ssp. frigida (Buches.) Krecz. var. contracta Samuelsson and included it in a key on p. 17, no Latin diagnosis was provided, which is a requirement for validation of names published after 1 Jan 1935 (Art. 36.1). The same situation exists in Bocher, et al (1957; 1968) and in Porsild (1957). Hence, to this date, the varietal name remains invalid for the lack of a Latin diagnosis. We provide a Latin diagnosis under the varietal epithet contracta for its validation.

For the North American flora (north of México), we assign the following to the L. multiflora complex.

Luzula multiflora (Ehrh.) Lej., Fl. Env. Spa. 1:169. 1811.


L. multiflorae (Ehrh.) Lej. var. frigidae (Buch.) Samuelsson similis sed differt inflorescentia capituli solitarii, aut si capitula plures, nunc uno plerumque ementi super cetera. Plantae caespitosae; culmi castanei rigidis validique; folia comparata angusta, planae trichomatis candidis mollibusque secus margines; capitula fusca. globularibusque; segmenta perianthiorum 2.5-3.5 mm longa; fructus quam periantha fere longiores; semina 1.1-1.4 mm longa. (Latin translation is based on Bocher's [1950] and Porsild's [1957] treatment of this taxon.)

Plants tufted; culms dark brown, stout and stiff; leaves flat with soft white hairs along the margins; inflorescence of a solitary dark reddish brown globular head or if of several heads, then one (head) usually projecting above the others; perianth segments 2.5-3.5 mm long; fruits almost as long as perianth; seeds 1.1-1.4 mm long.

Luzula multiflora (Ehrh.) Lej. ssp. multiflora var. kobayasii (Satake) Samuelsson in Hultén, Fl. Aleut. Isl., ed. 1. 126. 1937. BASIONYM: Luzula kobayasii Satake var. kobayasi, automatically created by L. kobayasii var. minor Satake, 1932.


ORCHIDACEAE

Platanthera

L. Higgins & S. Welsh (in Welsh, Great Basin Naturalist 46:259. 1986) described a new orchid species, endemic to Utah: Habenaria zothecina Higgins & Welsh. From their treatment, it is clear that both authors recognize the genus Habenaria Willd. sens. lato, which includes several generic segregates, such as Coeloglossum Hartman, Piperia Rydb., and Platanthera L.C. Rich. C. Luer (1975), in his treatment of United States orchids, remarked as follows: "No true Habenaria is found north of the southeasternmost region of the US ..." What have been known as habenarias from other regions of the U.S., were assigned to the genus Platanthera by him. We summarize his assessment of these two genera below.

Habenaria: primarily tropical in distribution; tubers or corms present; leaves more than 2; flowers small; corolla lip often tripartite into linear divisions; stigmatic processes conspicuous.

Platanthera: mostly temperate in distribution; generally stem tubers or corms absent; leaves 1 or more; flowers small or medium sized; corolla lip entire, divided, or fringed; stigmatic processes absent, rudimentary, or inconspicuous.

Weber (1989) transferred Habenaria zothecina to the genus Limnorchis Rydb. and made a new combination. Luer treated Limnorchis as a section of Platanthera. For the North American flora, we follow Luer's treatment, and thus, transfer Higgins & Welsh's species to Platanthera, and propose the following new combination.
Platanthera zothecina (Higgins & Welsh) Kartesz & Gandhi, comb. nov.

VIOLACEAE

Viola bicolor

For the American representative of the Old World pansy group of violets, Greene (Pittonia 4:9. 1899) proposed the name Viola rafinesquii to replace the name V. tenella Raf. (Amer. M. Mag. 4:191. 1819, non Poir. 1810). Greene cited two other synonyms: V. arvensis sensu Ell. (1817), non Murray (1770) and V. bicolor Pursh (1814). Greene considered Pursh’s name to be a later homonym of Gilibert (1782).

Although Greene’s rejection of Viola bicolor Pursh and V. tenella Raf. was appropriate at his time, his rejection of V. bicolor does not conform with the present International Code of Botanical Nomenclature (ICBN). Gilibert did not consistently employ the Linnaean system of binary nomenclature for species in his works. As per ICBN Art. 23.6C, epithets in such works must be rejected. Example 11 of this article, cites Gilibert’s Fl. Lit. Inch. (1781) for rejection. The invalidity of names in Gilibert’s Floras of Lithuania was also explicitly demonstrated by McVaugh (1949).

Since Viola bicolor Gilibert does not have nomenclatural standing, it does not render V. bicolor Pursh a later homonym. In this connection, Dr. L.E. Brown brought to our attention, Shinners’ 1961 publication on the nomenclature of V. bicolor. Shinners indicated that Hoffmann (1804; p. 170) described V. bicolor in the protologue of V. tricolor L. Shinners believed that the name “V. bicolor Hoffm.” was validly published and concluded that it renders V. bicolor Pursh to be a later homonym. Shinners, therefore accepted the name V. rafinesquii and also mentioned that the name “V. bicolor Hoffm.” was not listed in Index Kewensis. It has not been listed in Index Kewensis to date.

On verification, we found that Hoffmann (1804) numbered each of his accepted taxa, which has been a widespread custom of various workers both historically and presently. With reference to the genus Viola, we found nine species numbered. Although eight of these nine species were described in Linnaeus’ Species Plantarum, only three species were referred to Linnaeus by Hoffmann; for the remaining five species, such as Viola tricolor (number 9), Hoffmann did not cite Linnaeus in reference.

It is clear from Hoffmann’s work that the type font of the descriptions of all accepted taxa was slightly larger than the type font of the subsequent
discussion portions. In the last two paragraphs of the protologue of *Viola tricolor*, Hoffmann included the names *V. bicolor* and *V. arvensis*. He neither cited authorship of these two names nor numbered them, but he did provide descriptions. The smaller type font used for *V. bicolor* is suggestive of a discussion, whereas the relatively larger type font used for *V. arvensis* is suggestive of the description of an accepted taxon. We are not certain whether Hoffmann was aware of "*V. bicolor* Gilib." and *V. arvensis* Murr. (1770). If Hoffmann intended to describe *V. arvensis* as a new species, then there is the possibility that he inadvertently failed to number it. However, in the past (Bentham 1892; Jackson 1895), *V. arvensis* was treated as a synonym, as a form, or as a variety of *V. tricolor*. With reference to *V. bicolor*, Persoon (1805) proposed the new combination: *V. tricolor* var. *bicolor* Pers., which was based on *V. bicolor* Hoffm., whereas Jackson mentioned *V. bicolor* as being a synonym of *V. tricolor*.

Since Hoffmann did not number the name *Viola bicolor*, its inclusion in the protologue of *V. tricolor* could be interpreted as being a described name in synonymy (*pro syn.;* Rec. 50A) or as a provisional name (Art. 34.1), or both; however, none of these can be considered as valid publication. Hence, we conclude that neither Gilibert nor Hoffmann validly published the name *V. bicolor*. Persoon's (1805) usage of this epithet at varietal status does not alter the nomenclature. Until it can be shown that someone validly used the name *V. bicolor* prior to Pursh, we should continue to accept *V. bicolor* Pursh to be the correct name for the species. With this disposition, we accept the name *V. bicolor* Pursh and provide the following references.


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