Phytologia (December 1989) 67(6):461-467.

NOMENCLATURAL NOTES FOR THE NORTH AMERICAN FLORA. I.

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ABSTRACT

Nomenclatural clarifications are provided for names in *Ilex*, *Dentaria*, *Teucrium*, *Nuphar*, *Spiraea*, *Synthyris* and *Calibrachoa*. New combinations are made where necessary.

KEY WORDS: Nomenclature, North America, floristics.

In preparation of a revised *Synonymized Checklist of the Vascular Flora of the United States, Canada and Greenland* (Kartesz 1990), a number of nomenclatural notes are deemed necessary. These notes will appear in subsequent publications. This is the first of a series of such notes.

AQUIFOLIACEAE

Ilex montana Torr. & Gray, a manuscript name, was validated by Gray (1848) in his *Manual of Botany*. In 1856, Gray used the name *I. monticola* Gray and cited *I. montana* as a synonym. Both names are based on the same type; hence, the name *I. monticola* is superfluous. The names *I. mollis* Gray and *I. beadlei* Ashe are considered conspecific with *I. montana*, with the last name representing the earliest valid name in this complex.

Subsequently, these four names were treated at infraspecific rank by various authors (refer to Wunderlin & Poppleton 1977). Alphonso Wood (1870) published the combination *I. amelanchier* M.A. Curtis var. *monticola* Wood, to refer to a member of this complex. Although Wood did not cite Gray's reference for this varietal epithet, it has been attributed to "(Gray) Wood" by later authors, such as Wunderlin & Poppleton (*l.c.*), and Little (1979), who suggested that Wood had based his variety *monticola* on Gray's species *montana*. However, Wood described the variety and provided a type, therefore his epithet *monticola* is not tied to Gray's *montana*. Wunderlin & Poppleton transferred the complex to *I. ambigua* (but excluding *I. amelanchier* var. *amelanchier*) and made a new combination: *Ilex ambigua* (Michaux) Torr. var. *monticola* (Gray) Wunderlin & Poppleton. This new combination is illegitimate, since it is based on an epithet never described by Gray. However, it

is effectively published and prevents the use of the combination *I. ambigua* var. *monticola* based on Wood's epithet, which would have had priority at the variety level for the taxon in question. Therefore, the combination *I. ambigua* var. *monticola* (Wood) cannot be used because it would be a later homonym of the combination of Wunderlin & Poppleton. The next earliest combination involving a variety within what is treated here as *I. ambigua*, is *Ilex montana* var. *mollis* (Gray) Britton (1890). This combination created the autonym *Ilex montana* var. *montana*. Since autonyms have priority over the names which cause them to be formed, the oldest valid varietal name in this complex is *montana*, and accordingly Ahles' combination is correct at the varietal rank for this complex:

Ilex ambigua var. *montana* (Gray) Ahles, J. Elisha Mitchell Sci. Soc., 80:173. 1964.

BRASSICACEAE

E.L. Greene transferred *Dentaria californica* Nutt. and *D. integrifolia* Nutt. to the genus *Cardamine*, as *C. californica* (Nutt.) Greene (Greene 1891) and *C. integrifolia* (Nutt.) Greene (Greene 1886-87). Unfortunately, the latter name is a later homonym of *C. integrifolia* Gilib. (Fl. Lituan. 2:68. 1782) and hence illegitimate. If *C. californica* and *C. integrifolia* (Nutt.) Greene are considered conspecific, then the correct name for this complex is *C. californica*. Kartesz (1990) recognizes three varieties in *C. californica*: var. *californica* (incl. *Dentaria californica* var. *integrifolia* (Nutt.) Detling), var. *pachystigma* O.E. Schulz and var. *sinuata* (Greene) O.E. Schulz.

LAMIACEAE

Teucrium occidentale Gray was published in 1878 (Syn. Fl. N. Amer. 2[1]:349), while *T. boreale* Bicknell appeared in 1901 (Bull. Torrey Bot. Club 28:171). *Teucrium boreale* was reduced to a variety in 1908, as *T. occidentale* var. *boreale* (Bicknell) Fern. (Rhodora 10:85). Likewise (in 1946), *T. occidentale* was also reduced to varietal status as *T. canadense* L. var. *occidentale* (Gray) McClint. & Epl. (Brittonia 5:499). Shinners (1963) considered that a circumscription of a variety in *T. canadense* would include both *T. boreale* and *T. occidentale*. Shinners chose the epithet *boreale* for this variety of *T. canadense*. He based his view on the belief that at varietal rank, *boreale* has priority over *occidentale*, since *T. boreale* was reduced to a variety prior to that of *T. occidentale*. Hence, Shinners made a new combination: *T. canadense* var. *boreale* (Bicknell) Shinners.

Although acceptable at the time, due to changes in the Code, Shinners' interpretation of the situation is incorrect according to the present Code of Botanical Nomenclature. Although *T. occidentale* var. *boreale* was published

prior to *T. canadense* var. *occidentale*, publication of the combination *T. occidentale* var. *boreale* created the autonym *T. occidentale* var. *occidentale*, which has priority over var. *boreale*. Therefore, the correct name for the plant represented by the types of *T. boreale* and *T. occidentale*, when recognized as a variety of *T. canadense*, is *T. canadense* var. *occidentale*. Soil Conservation Service (1982) also took a similar stand in accepting *T. canadense* var. *occidentale* as the correct name for this complex.

NYMPHAEACEAE

E.O. Beal (1956) treated *Nymphaea macrophylla* Small as a subspecies of *Nuphar luteum* (L.) Sibth. & Sm.: *Nuphar luteum* ssp. *macrophyllum* (Small) Beal. R.B. Kaul (1986) followed Beal's treatment and cited *Nymphaea advena* Ait. as a synonym. With the inclusion of *Nymphaea advena* as a synonym of this subspecies, a new combination is necessary. The necessity of the new combination is caused by the combination of *Nymphaea advena* ssp. *erythraea* Miller & Standley in 1912, thus creating the autonym *Nymphaea advena* ssp. *advena*, which will have priority at the subspecies level. Therefore, the new combination is proposed here to supersede *Nuphar luteum* ssp. *macrophyllum* (Small) Beal.

Nuphar luteum ssp. **advenum** (Ait.) Kartesz & Gandhi, *comb. nov.* BASIONYM: *Nymphaea advena* Ait., Hort. Kew., Ed. 1, 2:226. 1789.

Nymphaea advena ssp. *erythraea* Miller & Standley, Contr. U.S. Natl. Herb. 16:91. 1912.

Nymphaea macrophylla Small, Bull. Torrey Bot. Club 25:465. 1898. *Nymphaea advena* var. *macrophylla* (Small) Miller & Standl., Contr. U.S. Natl. Herb. 16:89. 1912. *Nymphozanthus advena* (Ait.) Fern. var. *macrophylla* (Small) Fern., Rhodora 21:186. 1919. *Nuphar luteum* ssp. *macrophyllum* (Small) Beal, J. Elisha Mitchell Sci. Soc. 72:332. 1956.

ROSACEAE

The name *Spiraea densiflora* has been attributed to Nutt. (Greenman 1898; Jepson 1936), Nutt. *ex* Torr. & Gray (Hitchcock & Cronquist 1961), or Nutt. *ex* Greenm. (Soil Conservation Service 1982). Torrey & Gray (1940) discussed this Nuttalian manuscript name in *S. betulifolia*. Their discussion implied that they treat *S. densiflora* as a synonym of *S. betulifolia* (*c.f.* Greenman; Jepson). Hence, *S. densiflora* cannot be attributed to Torrey & Gray. Greenman's usage of this name validated it. Hence, the correct authority for *S. densiflora* is Nutt. *ex* Greenm. For *S. densiflora*, the following two names have been treated as synonyms: *S. betulifolia* Pallas var. *rosea* Gray and *S. arbuscula* Greene.

In Kartesz (1990), the *S. densiflora* complex will be recognized as a variety of *S. splendens* Baumann *ex* K. Koch (Monats. Ver. Bef. Gart. Preuss. 18:294. 1875), and a new combination is proposed here.

Spiraea splendens Baumann *ex* K. Koch var. *rosea* (Gray) Kartesz & Gandhi, *comb. nov.* BASIONYM: *Spiraea betulifolia* Pallas var. *rosea* Gray, Proc. Amer. Acad. Arts 8:381. 1873.

Spiraea arbuscula Greene, Erythea 3:63. 1895.

Spiraea densiflora Nutt. *ex* Greenm., Bot. Gaz. 25:261. 1898.

SCROPHULARIACEAE

Synthyris stellata Pennell, found in Oregon and Washington, is closely related to *S. missurica* (Raf.) Pennell. C.L. Hitchcock, *et al.* (1959) remarked that *S. stellata* (mentioned as forms of *S. missurica* found in and about Columbia Forge, OR) was distinct with more sharply toothed leaves and better developed bracts beneath the inflorescences. But C.L. Hitchcock, *et al.* considered these traits to represent only slight variations and treated *S. stellata* as a synonym of *S. missurica.* However, Soil Conservation Service (1982) considers these two species as distinct.

We suggest that *S. stellata* be considered as a subspecies of *S. missurica* and propose a new combination.

Synthyris missurica ssp. **stellata** (Pennell) Kartesz & Gandhi, *comb. nov.* BASIONYM: *Synthyris stellata* Pennell, Proc. Acad. Nat. Sci. Philadelphia 85:94. 1933.

SOLANACEAE (Contributed by W.G. D'Arcy, Missouri Botanical Garden)

When he described the genus *Petunia* in 1803, A.L. Jussieu also described two species, *P. parviflora* and *P. nyctaginiflora.* The first of these, *P. parviflora*, was selected as the lectotype species by several later botanists, for example Cabrera (1954: 417), most of whom worked independently but probably had in mind the monograph of Fries (1911). Fries placed *P. parviflora* into his subgenus *Eupetunia* (or "true" *Petunia*). His other species, *P. nyctaginiflora*, which is now correctly known as *P. axillaris* (Lam.) B.S.P., was placed into a second subgenus *Pseudonicotiana.*

Until recently, *Petunia parviflora* and *P. nyctaginiflora* were considered to be congeneric, and to embrace *Petunia hybrida*, or *Petunia violacea*, the garden petunia. In a series of papers which looked at chromosomes, attempted hybridizations, and examined gross foliage and floral morphology, workers in the Netherlands (Wijsman & DeJong 1985) have concluded that *Petunia parviflora* and *P. axillaris* are not congeneric, and that one of them must be placed in a different genus.

A proposal was made (Wijnands, *et al.* 1986) under the International Botanical Code to formally conserve *P. nyctaginiflora* A.L. Juss. as a new type for *Petunia*. Although this contradicts the traditional practice of adherence to the first lectotypification, the Committee for Spermatophyta (Brummitt 1989: 301) has chosen by a vote of 10 to 1 to recommend this conservation action. "The proposal is to conserve the generic name . . . so that the common garden *Petunia* still belongs to *Petunia*."

It is almost (but not absolutely) unknown for the Committee's recommendations to be overruled, and it is likely that the Netherland workers are correct in their separation of the traditional *Petunia* into the two genera. Therefore, consideration of a new correct name for the "Wild Petunia" or "Seaside Petunia" (Correll & Johnston 1970: 1404) is in order. The next earliest generic name is *Calibrachoa*, described by Llave & Lex. in 1825. The paper with their generic description included an excellent drawing of the plant they called *C. procumbens* Llave & Lex. The earliest name for this species is *Petunia parviflora* A.L. Juss., and as the combination of this name in *Calibrachoa* seems not yet to have been made, it is made here.

Calibrachoa parviflora (Juss.) D'Arcy, *comb. nov.* BASIONYM: *Petunia parviflora* A.L. Jussieu, Ann. Mus. Natl. Hist. Nat. 2:216. 1803.

Calibrachoa procumbens La Llave & Lexarza, Novorum vegetabilium descriptiones fasc. 2:3. 1925. [fasc. 2: first set of pagin., 10; repr. in Naturaleza 5: Apendice. 1881].

Other synonyms are also known for this species and other transfers from *Petunia* into *Calibrichoa* will be needed consequent nomenclatural actions noted above, but they will not be presented here.

This species occurs in Texas, and other southern states as a low growing paludal weed bearing little resemblance to the garden petunia. It ranges at least as far south as central Argentina, and it is probably a native of South America.

ACKNOWLEDGMENTS

The authors are grateful to Ms. Carolyn Wilczynski, for editing the manuscript and to Librarians at the New York Botanical Garden and California Academy of Sciences for their assistance with certain literature.

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