

## NOMENCLATURAL NOTES ON MISCELLANEOUS ASTEREAE–I

MANUEL A. PAZ  
m.a.pazlijo@gmail.com

### ABSTRACT

Four miscellaneous issues in Astereae nomenclature are addressed. The following nomenclatural novelties are validated: ***Boltonia asteroides*** subsp. ***latisquama*** (A. Gray) M.A. Paz, **stat. nov.**; ***Boltonia asteroides*** var. ***occidentalis*** (A. Gray) M.A. Paz, **comb. nov.**; × ***Cordiaster*** M.A. Paz, **nothogen. nov.**; × ***Cordiaster frikartii*** (Silva Tar. & C.K. Schneid.) M.A. Paz, **comb. nov.**; ***Eurybia*** subg. ***Leiachenis*** (Raf.) M.A. Paz, **comb. nov.**; ***Symphotrichum*** × ***cordi-belgii*** (Silva Tar. & C.K. Schneid.) M.A. Paz, **comb. nov.**; ***Symphotrichum occidentale*** (Nutt.) M.A. Paz, **comb. nov.**; ***Symphotrichum occidentale*** var. ***intermedium*** (A. Gray) M.A. Paz, **comb. nov.**; and ***Symphotrichum occidentale*** var. ***yosemitanum*** (A. Gray) M.A. Paz, **comb. nov.**

Unless otherwise stated, online images have been viewed of all cited collections via the Global Biodiversity Information Facility (GBIF, gbif.org). Type citations and brief synonymy are provided for names relevant to the discussion. References to Articles of the International Code of Nomenclature are to the Shenzhen Code (Turland et al. 2018).

### 1. The westernmost variety of *Boltonia asteroides*

Populations of *Boltonia* L'Hér. belonging to a system disjunct Idaho and northwestwards are currently recognized (Karaman-Castro & Urbatsch 2006) as belonging to the more widespread *B. asteroides* (L.) L'Hér. under the name *B. asteroides* var. *recognita* (Fernald & Griscom) Cronq., based on the name *B. latisquama* var. *recognita* Fernald & Griscom (1940). Though Karaman-Castro & Urbatsch (2006) in their Flora of North America treatment included *B. latisquama* var. *occidentalis* A.Gray (1884) in the synonymy, they apparently overlooked its priority. Whether or not the more widespread var. *recognita* is regarded as distinct from these western populations, the epithet *occidentalis* must be reinstated.

**BOLTONIA ASTEROIDES** var. **OCIDENTALIS** (A. Gray) M.A. Paz, **comb. nov.** *Boltonia latisquama* var. *occidentalis* A. Gray, Syn. Fl. N. Amer. 1(2): 166. 1884. *Boltonia occidentalis* (A. Gray) Howell, Fl. N.W. Amer. 1: 305. 1900. **TYPE: USA. Oregon. Union Co.:** River-bottoms, 1882, *W.C. Cusick s.n.* (holotype: GH barcode 00004294). The GH specimen bears two “SYN. FL. N. AMER.” labels, one annotated with collection details in what appears to be Gray’s hand. A sheet at YU (*Cusick 1037* [mounted alongside *Fletcher s.n.*]) has been annotated anonymously as “ISOTYPE” but cannot be treated as such with certainty. The label is Cusick’s own and the collection details do not match those provided by Gray (1884, and on the GH sheet).

*Boltonia asteroides* vars. *latisquama* (A.Gray) Cronquist and *occidentalis* are associated morphologically and geographically and together are distinct from the more southeastern vars. *asteroides* and *glastifolia* (Hill) Fernald (see Townsend 2013 for an overview). Accordingly, the first two may be treated under subsp. ***latisquama***, and the latter under subsp. ***asteroides***.

**BOLTONIA ASTEROIDES** subsp. **LATISQUAMA** (A.Gray) M.A. Paz, **stat. nov.** *Boltonia latisquama* A. Gray, Amer. J. Sci. Arts ser. 2, 33: 238. 1862. *Boltonia asteroides* var. *latisquama* (A. Gray) Cronq., Bull. Torrey Bot. Club 74: 149. 1947. **LECTOTYPE** (Fernald 1940): **USA. Colorado. [Wyandotte Co.:** Near the mouth of the Kansas river, Sep 1861, *C.C. Parry 12* (GH barcode 00004292; isolectotype: NY barcode 00162706). The NY sheet is here considered an isolectotype: although the label bears the text of a different hand, the printed portions are

identical and both include the name *Boltonia latisquama* and the number 12. Fernald's (1940) inadvertent lectotypification of the name is curious. His illustration of the species (as *B. latisquama*) consists of a number of photos, for which he provides the caption "In PLATE 645, FIGS. 1 and 2 are portions of the TYPE  $\times 1$ , from near the mouth of the Kansas River, Parry ..." The photos are clearly of part of the GH sheet, and the article is headed "CONTRIBUTIONS FROM THE GRAY HERBARIUM OF HARVARD UNIVERSITY—NO. CXXXIII," so can be accepted as a sufficiently "direct citation" for the purposes of Article 7.11.

## 2. Updated nomenclature for two popular horticultural hybrids

In his recent revision of *Aster* sensu lato, Nesom (2020) segregated the new genus *Cordiofontis* and noted that the name *Aster*  $\times$  *frikartii* [*A. amellus*  $\times$  *A. thomsonii*] would now apply to an intergeneric hybrid because of the transfer of *A. thomsonii* C.B. Clarke to *Cordiofontis* (as *C. flexuosa* [Royle ex Lindl.] Nesom). POWO (2025) has accepted the genus *Cordiofontis* but the name *A.*  $\times$  *frikartii* remains misplaced.

$\times$  **CORDIASTER** M.A. Paz, **nothogen. nov.** [*Aster* L.  $\times$  *Cordiofontis* Nesom]

$\times$  **CORDIASTER FRIKARTII** (Silva Tar. & C.K. Schneid.) M.A. Paz, **comb. nov.** [*Aster amellus* L.  $\times$  *Cordiofontis flexuosa* (Royle ex Lindl.) Nesom] *Aster thomsonii* [unranked] *hybridus* Silva Tar. & C.K. Schneid., Freiland-Staud. ed. 3: 129. 1922. *Aster*  $\times$  *frikartii* Silva Tar. & C.K. Schneid., Freiland-Staud. ed. 4: 122. 1927 [nom. nov.]. **TYPE:** Not designated. Having been almost certainly described from living material, a neotype should probably be designated, although that cannot be done pending confirmation that no original material exists.

The Royal Horticultural Society (RHS 2025) and Missouri Botanical Garden (2025) list the following cultivars pertaining to this garden hybrid: 'Eiger,' 'Flora's Delight,' 'Jungfrau,' 'Mönch,' 'Robinsonii,' and 'Wunder von Stäfa.'

On the very same page as the protologue of *Aster*  $\times$  *frikartii* is the oft-overlooked name *Aster*  $\times$  *cordi-belgii*, described as the cultivar 'Pioneer': "neue englische Hybride, 70 cm, reich verzweigt, Blumen zart rosa, zwischen den Eltern." There is no doubt as to the implied parentage of the hybrid (*A. cordifolius*  $\times$  *A. novi-belgii*), as otherwise the epithet is nonsensical (though the common name "Heart-of-Belgium Aster" may be fitting). While the cultivar 'Pioneer' is apparently no longer in use (Missouri Botanical Garden 2025, RHS 2025), the name *A.*  $\times$  *cordi-belgii* is applicable to the putative garden hybrid *Aster* 'Little Carlow' and so may prove useful.

**SYMPHYOTRICHUM**  $\times$  **CORDI-BELGII** (Silva Tar. & C.K.Schneid.) M.A. Paz, **comb. nov.** [*Symphyotrichum cordifolium* (L.) Nesom  $\times$  *Symphyotrichum novi-belgii* (L.) Nesom] *Aster*  $\times$  *cordi-belgii* Silva Tar. & C.K.Schneid., Freiland-Staud. ed. 4: 122. 1927. **TYPE:** Not designated. A neotype is not designated here, pending a thorough revision of the *S. cordifolium* and *S. novi-belgii* complexes.

## 3. An earlier name for *Eurybia* subg. *Heleastrum*

While research for a review of *Symphyotrichum* infragenerics was being completed (Paz in prep.), the author came across the obscure generic name *Leiachenis* Raf. (1837), which had been previously lectotypified by Nesom (1995) with *Aster paludosus* Aiton. This had served as the type of *Heleastrum* DC. (1836), seemingly rendering *Leiachenis* illegitimate. However, Article 52.1 stipulates that a name is "illegitimate and is to be rejected if it was nomenclaturally **superfluous when published** [emphasis added]." Further, Note 2 under Article 52.2 reads, "The inclusion, in a new taxon, of an element that was **subsequently designated as the type** of a name that, so typified, ought to have been adopted, or of which the epithet ought to have been adopted, **does not in itself make the name of the new taxon illegitimate.**" *Heleastrum* was only lectotypified by Gray in 1882 (p. 169), well after the

publication of Rafinesque's *Flora Telluriana* (1837). Thus, *Leiachenis* is legitimate and the autonym *L.* subg. *Leiachenis* (1837) was established, which has priority over *Eurybia* subg. *Heleastrum* (DC.) Nesom (first validated at the subgeneric rank by Gray [1880]).

In accordance with the Code, the well-known name *Heleastrum* must be replaced, at least at the subgeneric rank.

**EURYBIA** subg. **LEIACHENIS** (Raf.) M.A.Paz, **comb. nov.** *Leiachenis* Raf., Fl. Tellur. 2: 45. 1836 [1837]. **LECTOTYPE** (Nesom 1995): *Aster paludosus* Aiton = *Eurybia paludosa* (Aiton) Nesom

#### 4. The correct name for *Symphyotrichum spathulatum*

Cronquist (1943) treated this taxon under the name *Aster occidentalis* (Nutt.) Torr. & A. Gray (1841), citing *Aster spathulatus* Lindl. (1834, see Hooker 1840) as a later homonym of “*Aster spathulatus* Lag. ex Nees” (1832), but that name was referenced by Nees *pro synonymo* and thus is invalid. By the time of its transfer into *Symphyotrichum* (Nesom 1995), this fact had been realized and so for the past three decades the accepted name has been *Symphyotrichum spathulatum* “(Lindl.)” Nesom.

Yet the matter is apparently not settled. Dunal (1819) remarked, “Une espèce de composée de la section des Corymbifères étoit répandue dans les jardins de botanique d'Europe, et désignée dans plusieurs catalogues sous les noms d'*Aster spathulatus* ou *spathularis*.” This statement suggests widespread usage of the epithet “*spathulatus*” in *Aster* by the year 1819, at least informally. It appears the name was finally formally validated in Forbes' (1833) *Hortus Woburnensis*.

**Table 1.** Characterization of *Aster spathulatus* E. Forst. ex J. Forbes, Hort. Woburn. 189. 1833.

<b>Systematic Name.</b>	* <i>spathulátus</i> . [asterisk indicated a name provided by Edward “Foster”]
<b>English Name.</b>	<i>spathulate</i> .
<b>Form of Leaves, &amp;c.</b>	lan[ceolate]. serr[ated]. sm[ooth].
<b>Col. of Flow.</b>	<i>bl[ue]</i> .
<b>Month of Fl.</b>	8. 11.
<b>Native Country.</b>	N. Amer.
<b>Year of Introd.</b>	[lacking]
<b>Soil and Propagation.</b>	H[ardy Herbaceous]. P[erennial]. <i>Sandy soil</i> . [soil same for all of <i>Aster</i> ]

Although minimally diagnostic, Forbes' table nonetheless must be treated as such, for he states that intent explicitly in the Preface to the work — “The first part of the Work contains a descriptive Catalogue, in abbreviated terms, of the *generic* and *specific* character of upwards of 6,000 plants . . . the descriptions of which, although much compressed by being confined within a small compass, will render considerable assistance in the identifying of the numerous *genera* and *species*.” Therefore, the minimum requirements of Article 38 are fulfilled and a large number of Forbes' new names are valid.

The identity of the name *Aster spathulatus* E. Forst. ex J. Forbes is uncertain, but it certainly cannot apply to Lindley's (1834) *A. spathulatus*, which has leaf margins entire. *Aster spathulatus* Lindl. and *Symphyotrichum spathulatum* Nesom are both rendered *nom. illeg.* and the second-earliest name must be reverted to.

**SYMPHYOTRICHUM OCCIDENTALE** (Nutt.) M.A. Paz, **comb. nov.** *Tripolium occidentale* Nutt., Trans. Amer. Philos. Soc. ser. 2, 7: 296. 1840. *Aster occidentalis* (Nutt.) Torr. & A. Gray, Fl. N. Amer. 2(1): 164. 1841. **LECTOTYPE** (Cronquist 1943): **USA.** By the margins of muddy ponds in the Rocky Mts., 7000 ft. above the level of the sea, 1834–1835, *T. Nuttall s.n.* (PH barcode PH00028441; isolectotypes: BM barcode BM000645529, GH barcode 00013250/00872213?, 00013251, K barcode K000890510). All sheets bear Nuttall's handwritten “*Tripolium occidentale* R. Mts.” label except for Gray's duplicate, on which he has transcribed the collection information himself. Cronquist (1943) cited “Lewis” as the collector, but the protologue and specimen labels suggest otherwise.

**SYMPHYOTRICHUM OCCIDENTALE** var. **INTERMEDIUS** (A.Gray) M.A. Paz, **comb. nov.** *Aster occidentalis* var. *intermedius* A. Gray, Syn. Fl. N. Amer. 1(2): 192. 1884. *Aster occidentalis* subsp. *intermedius* (A. Gray) Piper, Contr. U.S. Natl. Herb. 11: 574. 1906. *Aster spathulatus* var. *intermedius* (A. Gray) Cronq., Intermount. Fl. 5: 294. 1994 *Symphyotrichum spathulatum* var. *yosemitanum* (A. Gray) Nesom, Phytologia 77: 292. 1994 [1995]. **LECTOTYPE** (Piper 1906 [first-step], Cronquist 1943 [second-step]): **USA. Washington.** [Yakima Co.:] Wet meadows, Falcon Valley, Washington Terr., 5 Sep 1882, *Suksdorf 62* (GH barcode 00003696; isolectotype: MPU barcode MPU023867? not seen). Gray (1884) cited a number of syntypes, which are here omitted. Piper (1906) cited the collection “Falcon Valley, Washington. Collected by Suksdorf.” = *Suksdorf 62*, and only later did Cronquist (1943) cite the herbarium. Under Article 9.17, both authors may be cited in sequence. See Hardin (2013) for information regarding the location of Suksdorf's “Falcon Valley.”

**SYMPHYOTRICHUM OCCIDENTALE** var. **YOSEMITANUM** (A. Gray) M.A. Paz, **comb. nov.** *Aster adscendens* var. *yosemitanus* A. Gray, Syn. Fl. N. Amer. 1(2): 191. 1884. *Aster yosemitanus* (A. Gray) Greene, Fl. Francisc. 383. 1897. *Aster occidentalis* var. *yosemitanus* (A. Gray) Cronq., Amer. Midl. Naturalist 29(2): 467. 1943. *Symphyotrichum spathulatum* var. *yosemitanum* (A. Gray) Nesom, Phytologia 77: 292. 1994 [1995]. **LECTOTYPE** (Cronquist 1943): **USA. California.** [Mariposa Co.:] Yosemite, near Vernal Fall, 1877, *J.D. Hooker & A. Gray s.n.* (GH barcode 00002888; isolectotype: K barcode K000890514). Both original labels bear the curious unpublished name “*Aster falcatus* forma *hisua* [?]”

#### ACKNOWLEDGEMENTS

My thanks are due the Biodiversity Heritage Library and its collaborators (biodiversitylibrary.org) and the Harvard Library's HOLLIS platform (hollis.harvard.edu) for facilitating access to literature, and to all the herbaria that continue to maintain their digital collections with care. Thanks to Guy Nesom for his review of the manuscript.

## LITERATURE CITED

- Cronquist, A. 1943. Revision of the Western North American species of *Aster* centering about *Aster foliaceus* Lindl. Amer. Midl. Nat. 29: 429–468.
- de Candolle, A.P. 1836. Prodrômus Systematis Naturalis Regni Vegetabilis. Vol. 5. Paris.
- Dunal, F. 1819. Note sur deux genres de plantes de la famille des Composées. Mém. Mus. Hist. Nat. 5: 45–58.
- Fernald, M.L. 1940. A century of additions to the flora of Virginia. Rhodora 42: 355–416.
- Forbes, J. 1833. Hortus Woburnensis. James Ridgway, Picadilly, London.
- Gray, A. 1880. Contributions to North American botany. Proc. Amer. Acad. Arts n.s. 8: 78–108.
- Gray, A. 1882. Contributions to North American botany. Proc. Amer. Acad. Arts n.s. 9: 163–230.
- Gray, A. 1884. Synoptical Flora of North America, Vol. 1, part 2 (Gamopetalae, including Compositae). Ivison, Blakeman, Taylor, and Co., New York.
- Hardin, D. 2013. Who Was Wilhelm Suksdorf? Washington Native Plant Society Blog. <<https://www.wnps.org/blog/who-was-wilhelm-suksdorf>>
- Hooker, W.J. 1840. Flora Boreali Americana, Vols. 1 and 2. H.G. Bohn, London.
- Karaman-Castro, V. and L.E. Urbatsch. 2006. *Boltonia*. Pp. 353–357 in Flora of North America Editorial Committee (eds.). Flora of North America North of Mexico. Vol. 20. Oxford Univ. Press, New York and Oxford.
- Missouri Botanical Garden. 2025. Gardening Help: Plant Finder. <<https://www.missouribotanicalgarden.org/PlantFinder/PlantFinderSearch.aspx>> Accessed July 2025.
- Nees, C.G.D. 1832. Genera et Species Asterearum. Recensuit, descriptionibus et animadversionibus illustravit. Sumtibus Leonardi Schrag, Norimbergae.
- Nesom, G.L. 1994 [1995]. Review of the taxonomy of *Aster* sensu lato (Asteraceae: Astereae), emphasizing the New World species. Phytologia 77: 141–297.
- Nesom, G.L. 2020. *Cordiofontis* (Asteraceae: Astereae), a new genus of Himalayan species segregated from *Aster*. Phytoneuron 2020-60: 1–20.
- Piper, C.V. 1906. Flora of the state of Washington. Contr. U.S. Natl. Herb. 11: 1–637.
- POWO. 2025. Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. <<https://powo.science.kew.org>> Accessed July 2025.
- Rafinesque, C.S. 1836 [1837]. Flora Telluriana, Part 2. Printed for the author by H. Probasco, Philadelphia.
- RHS. 2025. Help, advice & tips from the RHS on all kinds of plants. The Royal Horticultural Society. <<https://www.rhs.org.uk/plants>> Accessed July 2025.
- Silva Tarouca, E.G. & C. Schneider. 1927. Unsere Freiland-Stauden: Anzucht, Pflege und Verwendung aller bekannten, in Mitteleuropa im freien kulturfähigen ausdauernden krautigen Gewächse, ed. 4. Hölder-Pichler-Tempsky A.G., Wien und G. Freytag A.G., Leipzig.
- Torrey, J. and A. Gray. 1841. A Flora of North America, Vol. 2, part 1. Wiley and Putnam, New York.
- Townsend, J.F. 2013. Recognition of *Boltonia asteroides* var. *glastifolia* and reestablishment of a more restrictive taxonomic concept for *Boltonia asteroides* var. *asteroides*. Phytoneuron 2013-9: 1–8.
- Turland, N.J. et al. (eds.). 2018. International Code of Nomenclature For Algae, Fungi, and Plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. Regnum Vegetabile 159. Koeltz Botanical Books, Glashütten. <<https://doi.org/10.12705/Code.2018>>