

(1931) Proposal to conserve the name *Pertya* against *Myriphnois* (Asteraceae, *Pertyeae*)

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- (1931) *Pertya* Sch. Bip. in Bonplandia 10: 109. 1 Mai 1862, nom. cons. prop.
 Typus: *P. scandens* (Thunb.) Sch. Bip. (*Erigeron scandens* Thunb.).
- (=) *Myriphnois* Bunge, Enum. Pl. China Bor.: 38. Mar 1833, nom. rej. prop.
 Typus: *M. dioica* Bunge.

Pertya consists of 21 species (Freire, in prep.) of shrubs with its main centre of species concentration in mainland China (15 endemic). In addition, two species occur in Japan (one of them also in China), two in Afghanistan (one of them also in Pakistan), one confined to Taiwan, and one in Thailand. They are easily recognized by their long branches with alternate leaves and short lateral branches with clustered leaves. The genus, originally monotypic, was described by Schultz Bipontinus in 1862 (l.c.), and the name has been used in many regional works or flora treatments, such as Tseng (in Fl. Reipubl.

Popularis Sin. 79: 3. 1996), Aitchison (Fl. Kuram Valley: 72. 1880), Franchet & Savatier (Enum. Pl. Jap. 1: 265. 1875), Kitamura (in Ohwi, Fl. Japan: 863. 1965), Hara (Enum. Sperm. Jap.: 863. 1948), Numata & Asano (Biol. Fl. Japan, Sympet. 1: 116–119. 1969), Koyama (in Iwatsuki & al., Fl. Japan 3b: 165. 1995); Kitamura (in J. Jap. Bot. 14: 293–306. 1938); Li (Fl. Taiwan 4: 914. 1978), and Peng & al. (Fl. Taiwan, ed. 2, 4: 1028. 1998). Recent molecular studies (Panero & Funk in Proc. Biol. Soc. Washington 115: 909–922. 2002; Panero & Funk in Molec. Phylog. Evol. 47: 757–782. 2008), have proposed, based on the genus *Pertya*, a new subfamily, *Pertyoideae*, and a tribe, *Pertyeae*.

Bunge (l.c.) established *Myriphnois* based on *M. dioica*, which is endemic to China, characterizing the genus by its dioecious habit and its bilabiate florets. Two other species were described, *M. uniflora* Maxim. (in Bull. Acad. Imp. Sci. Saint-Pétersbourg 27: 495. 1881), later transferred to *Pertya* by Mattfeld (in Notizbl. Bot. Gart. Berlin-Dahlem 11: 105. 1931), and *M. maximowiczii* C. Winkl. (in Trudy Imp.

S.-Peterburgsk. Bot. Sada 13(1): 12. 1893), later treated by Tseng (l.c.: 5) as a synonym of *Pertya sinensis* Oliv.

Molecular phylogeny inferred from *ndhF* sequences of the Mutisieae (Kim & al. in Syst. Bot. 27: 598–609. 2002) showed that *Myriipnois* and *Pertya* formed a clade sister to *Ainsliaea* within the *Ainsliaea* group. A close relationship between *Pertya* and the genus *Myriipnois* was first indicated by Mattfeld (l.c.) who recognized only one species in *Myriipnois*, *M. dioica*, and regarded it as generically distinct from *Pertya* in having 5 herbaceous phyllaries (vs. 6–10 or more coriaceous phyllaries in *Pertya*) and bilabiate florets (vs. irregularly 5-lobed florets in *Pertya*). Following Mattfeld other authors (Hind in Kubitzki, Fam. Gen. Vasc. Pl. **vol?**: 123. 2007; Freire in Funk & al., Syst. Evol. Biogeogr. Compositae: 316. 2009) separated *Pertya* from *Myriipnois* by its phyllaries multiseriate (vs. biseriate in *Myriipnois*). According to my re-examination of the collections (about 100 specimens, including types of the generic names), however, these distinctions are insignificant or partially incorrect, showing that *Myriipnois* is congeneric with *Pertya*.

The involucre of *Myriipnois dioica* is shallowly 2-seriate with the outer phyllaries slightly shorter to half the length of the inner, and inner phyllaries equal to subequal in shape and length. The number of series of phyllaries varies enormously within the genus *Pertya*. The dioecious species *P. discolor* has phyllaries 2- or 3-seriate, another dioecious species *P. sinensis* has phyllaries 4–6-seriate, and many monoecious species, e.g., *P. cordifolia* and *P. phylloides*, have phyllaries 6- or 7-seriate. Membranous phyllaries are also seen in some species of *Pertya*, such as *P. aitchisonii* C.B. Clarke, *P. discolor* Rehder, and *P. mattfeldii* Bornm. The corollas of *Pertya* are irregularly 5-lobed with an external 3-cleft lip and an internal 2-cleft lip (i.e., bilabiate). In *Myriipnois* the corollas are also irregularly 5-lobed but vary considerably in type, ranging from ligulate with unilateral lobes to bilabiate with an external 3-cleft lip and an internal 2-cleft lip, commonly in the same specimen.

Additionally, the genera *Pertya* and *Myriipnois* share other significant morphological and palynological characters. *Pertya* and *Myriipnois* share similar characters in habit with long and short shoots bearing alternate and tufted leaves, respectively. Both have pollen grains with macrogranular exine sculpture and long colpi (Lin & al. in J. Integr. Pl. Biol. 47: 1036–1046. 2005). *Myriipnois* and many species of *Pertya*, such as *P. discolor*, *P. sinensis*, and *P. uniflora*, are dioecious. On the basis of this evidence and cladistic studies (Freire, in prep.), I prefer to unite the two genera until further molecular studies have been done.

When *Pertya* and *Myriipnois* are treated as synonyms, *Myriipnois* is the earliest legitimate name for the combined genus. However, as discussed above, the genus *Myriipnois* includes only one species endemic to

China, whereas *Pertya* includes 21 species accepted in regional floras from Afghanistan to Japan. Therefore, in order to preserve nomenclatural stability and avoid the need to publish 20 new combinations in *Myriipnois* (only the name *M. uniflora* is currently available), it seems appropriate to conserve the name *Pertya* against *Myriipnois*.

Lectotypification of the name *Erigeron scandens* Thunb.

The basionym, *Erigeron scandens* Thunb., of *Pertya scandens* (Thunb.) Sch. Bip. was published in Thunberg's *Flora Japonica* (1784). According to Stafleu & Cowan (in Regnum Veg. 115: 306. 1986), the original material of Thunberg is kept at UPS. Since no specimen was mentioned in the protologue, the specimen at UPS THUNB 19479 labelled "*a Japonia C.P. Thunberg*" is designated here as lectotype.

Lectotypification of the name *Myriipnois dioica* Bunge

In the protologue of *Myriipnois dioica*, Bunge (l.c.) did not cite any particular specimen as type, he only included remarks concerning the habit and locality: "*Habit. frequens in rupestribus boream spectantibus montium Zui-wei-schan; floret Aprili*". Three specimens have been located, two at LE and one at K. All these specimens bear the handwritten annotation "*Myriipnois dioica*, Chin. bor. (or Ch. b.), Bunge", probably by Bunge, and are considered original material for this name. In LE one specimen is from Herb. Ledebour (male specimen) and another from Herb. Fischer (female specimen), both mounted on the same sheet (mixed with a third specimen not considered as type). The third specimen at K (male specimen) is from Herb. Hookerianum (mixed with a specimen not considered as type). Since a single gathering is in three herbaria a lectotype may be chosen (ICBN Art. 9.2, McNeill & al. in Regnum Veg. 146. 2006). As any of these would be appropriate, I am designating here as lectotype of the name the specimen with abundant material labelled "*Myriipnois dioica*, Ch. b. (male specimen), Bunge, herb. Ledebour" deposited at LE where original material of Bunge is kept.

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is "(or Ch. b.)" part of the quote? (without space before?) or a remark by you?