

Problems in *Pertya* SCH. BIP.

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Abstract

Recent work on the genus *Pertya* has revealed a problem in the application of names to the type, *P. scandens* (THUNB.) SCH. BIP., and a second species thought to have been published at the same time. The problem is discussed. *Pertya ovata* MAXIM. is the name that should apply to the plant commonly known as *P. scandens*; the plant usually referred to as *P. glabrescens* is actually *P. scandens*.

Introduction

Recent work for the tribe *Mutisieae* in the forthcoming Compositae volume of KUBITZKI'S *The Families and Genera of Vascular Plants*, has unearthed an interesting problem with the genus *Pertya* SCH. BIP. *Pertya* is a small genus of fifteen species. The genus is distributed from Afghanistan east to China and Japan, with the greatest concentration of species in China.

A considerable literature (e.g. KOYAMA 1975, NAGATA 1991, NAKAI 1927, NUMATA & ASANO 1969, OHWI 1965, SATAKE et al. 1985) has cited SCHULTZ BIPONTINUS as the author of three names: *Pertya*, *P. scandens* (THUNB.) SCH. BIP. and '*Pertya glabrescens* SCH. BIP.' *Pertya scandens* sensu auct. pl. refers to plants with fascicles of leaves beneath the capitula.

The genus *Pertya* was validly published by SCHULTZ BIPONTINUS (1862) based on a single species, and named after his friend Dr JOSEPH ANTON MAXIMILIAN PERTY ('Professor in Bern of Zoology and general Natural History'). *Pertya scandens* (THUNB.) SCH. BIP. was based on *Erigeron scandens* THUNB. (THUNBERG 1784) and was first described with two unnamed varieties; it was published with a good diagnostic plate which was clearly assigned to *Pertya scandens*.

The problem I wish to highlight follows the short diagnosis 'Folia elliptico-lanceolata, glabrescentia, 1-2½ pollicaria.' under 'Var. II' where SCHULTZ BIPONTINUS cited: 'Syn. *Leucomeris scandens* SzBip. In litt. ad b. a Klenze (1845) et in Zollinger! Syst. Verz. der im ind. Archipel 1842-1848 ges. so wie aus Japan empf. Pflanzen p. 126 (an. 1854). = *Pertya glabrescens* SzBip. MS. si specie a planta Thunbergiana differat.' (SCHULTZ BIPONTINUS 1862). [The ZOLLINGER reference (1854-55) is simply to a list of published determinations by SCHULTZ BIPONTINUS and refers to '*Leucomeris scandens* SCH. BIP.'].]

SCHULTZ BIPONTINUS (1862), although not explicitly naming the varieties certainly did not accept the second as the species '*Pertya glabrescens*' (he clearly refers to 'species generis unica'); the name '*Pertya glabrescens* SCH. BIP.' is therefore invalid (GREUTER et al. 2000: Art.34.1). Since the two 'varieties' are now generally regarded as two distinct species a name is required for each. When researching this it became evident that there is a problem with the application of names to the taxa concerned.

SCHULTZ BIPONTINUS clearly applied the name *P. scandens* to a taxon with apparent fascicles of leaves beneath the solitary capitula; this is well illustrated in 'tab. 10' of the protologue and directly referred to the species (SCHULTZ BIPONTINUS 1862). It is also clear from the protologue of *Pertya* that this was considered a generic characteristic; indeed nothing was mentioned of solitary alternate leaves. The distinction provided by SCHULTZ BIPONTINUS between the two taxa was simply on leaf shape (ovate vs. elliptic-lanceolate) and the presence or absence of an indumentum.

Successive authors have clearly applied the name '*P. scandens*' to plants with capitula on 'elongated branches' (e.g. KOYAMA 1995, NAKAI 1927, etc.). '*Pertya glabrescens*' is applied to plants with capitula on 'abbreviated branches' with fascicles of three to five subtending leaves (e.g. KOYAMA 1995, NAKAI 1927, NUMATA & ASANO 1969, NAGATA 1991, SATAKE et al. 1985, etc.). This approach is incorrect and is at odds with the protologue of *P. scandens*.

Taxonomy

The resolution to the problem is as follows:

Pertya SCH. BIP., Bonplandia 10: 109. 1862. - Type: *Pertya scandens* (THUNB.) SCH. BIP.

Pertya scandens (THUNB.) SCH. BIP., Bonplandia 10: 109. 1862. Basionym: *Erigeron scandens* THUNB., Fl. Japonica: 313. 1784. (type: 'crescit in insula

Nipon.' - type not cited). *Leucomeris scandens* SCH. BIP. in ZOLLINGER, Syst. Verzeich. Ind. Arch. Japan Pflanz.: 126. 1854–55, nom. nud. *Leucomeris scandens* (THUNB.) SCH. BIP., Flora 37: 275. 1854. *Pertya glabrescens* SCH. BIP., Bonplandia 10: 109. 1862, nom. nud. *Pertya glabrescens* sensu auct. pl. [pro 'var. II' and including tab. 10]. *Pertya scandens* SCH. BIP. forma *schultzi-ana* FRANCHET, Mem. L'Herb. Boiss. 14: 1. 1900. (syntypes: 'Hab. Ile de Sikoku, sur les montagnes de Tosa ([FAURIE] n. 11829. Ile de Nippon, aux environs de Sendai ([FAURIE] n. 6756; au pied du Fudsi Yama ([FAURIE] n. 6657.' - types in P). *Pertya scandens* SCH. BIP. var. *viridis* NAKAI, Trees and shrubs indig. Japan proper. 1: 710. 1922. (type: apparently not cited).

The combination *Leucomeris scandens* (THUNB.) SCH. BIP. was effectively made in the same year (SCHULTZ BIPONTINUS 1854).

Distribution. China and Japan (KOYAMA et al. 1970, KOYAMA 1975)

Pertya ovata MAXIM., Bull. Acad. Imp. Sci. St Pétersbourg 16: 217. 1871. (syntypes: 'Hab. in Nippon peninsula Idzu in fruticetis sat frequens, a Simoda (KUSNEZOFF) per montium jugum Hakone dictum usque ad Yokohamam et planitiem Yedoensem.' - types in LE; in K there is a MAXIMOWICZ collection 'Iter secundum Japonia. Yokohama. 1862' which may represent type material). *Pertya scandens* sensu auct. pl. [pro 'var. I' and usually excluding tab. 10]. *Pertya scandens* SCH. BIP. forma *maximowicziana* FRANCHET, Mém. L'Herb. Boiss. 14: 2. 1900. (syntypes: 'Hab. Ile de Sikoku, dans les montagnes de Tosa ([FAURIE] n. 11834). Ile de Nippon, collines à Yokohama ([FAURIE] n. 6736.' - types in P).

Distribution. An endemic to Japan.

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