

Rubrivena, a new genus of Polygonaceae

Rubrivena, nový rod čeledi Polygonaceae

Miloš KRÁL

KRÁL M. (1985): *Rubrivena*, a new genus of *Polygonaceae*. — *Preslia*, Praha, 57 : 65–67.

A new genus *Rubrivena* M. KRÁL is described to include *Polygonum polystachyum* WALLICH ex MEISNER. It differs from the most closely related genus, *Aconogonon* (MEISNER) REICHENB., mainly in having long styles with smaller stigmas. *Aconogonon alpinum* (ALL.) SCHUR is proposed as the nomenclatural type of the genus *Aconogonon*.

339 01 Klatovy 496./III., Czechoslovakia.

The species *Polygonum polystachyum* WALLICH ex MEISNER has been included by MEISNER and many subsequent authors in the section *Aconogonon* of the genus *Polygonum* L., on account of its paniculate inflorescence and obliquely truncate ochreae. For the same reasons the combination *Aconogonon polystachyum* (WALLICH ex MEISNER) M. KRÁL has been proposed. HARALDSON (1978) also places this species in the genus *Aconogonon*.

The inclusion in *Aconogonon* has not been generally accepted, however, and also the generic key published by HEDBERG prevents it. WEBB and CHATER did not adopt the generic rank for *Aconogonon* on account of the differences between this species and other species of *Aconogonon*. MOLDENKE (according to WEBB and CHATER) included this species in the genus *Reynoutria* HOUTT. but this is quite unacceptable. This species has some biological features (late flowering, forming of dense extensive polycormons) in common with the species of the genus *Reynoutria* HOUTT. but is different in morphological respect. Moreover, HARALDSON places the genera *Aconogonon* (incl. *A. polystachyum*) and *Reynoutria* in different tribes (*Persicarieae* and *Coccolobeae* respectively). HARA (who adopted the generic rank for *Aconogonon*) proposed to refer this species “to the section *Cephalophilon* of the genus *Persicaria*”. He gave no reasons for this but he probably had in mind the long styles with small stigmas and the colpate pollen that *P. polystachyum* and the section *Cephalophilon* have in common. The section *Cephalophilon* belongs now to the genus *Truellum* HOUTT. em. SOJÁK, which is well characterised by its capitate inflorescences and therefore *P. polystachyum* cannot be included in it. The best solution of this problem therefore seems to create a new genus for the cited species:

***Rubrivena* M. KRÁL, genus novum (*Polygonaceae*)**

Herbae perennes, rhizomatibus subterraneis ramosis propagatae. Caules erecti, elati. Folia alterna, oblongo-lanceolata, acuminata, petiolata. Ochreae magnae, anguste infundibuliformes, oblique truncatae et in latere oppositifolio longe linguiformiter productae, fuscae, crassae,

eciliatae, perennes. Paniculae magnae, hic-illie foliosae. Flores hermaphroditii, pedicellati. Tepala 5, petaloidea, alba, inaequalia, 2 exteriora elliptica, minora, 3 interiora late obovata usque suborbiculari-obovata, exterioribus parumper longiora et subduplo latiora. Stamina 8, tepalis breviora; filamenta subulata alba; antherae late ellipticae, parvae, dorsifixae, atroviolaceae. Pollen (sec. HARA) 6 colpatum, grosse reticulatum. Discus intrastaminalis e glandulis 8 subglobosis cum staminibus alternantibus compositus. Ovarium ellipsoideum, triquetrum, rubellum;

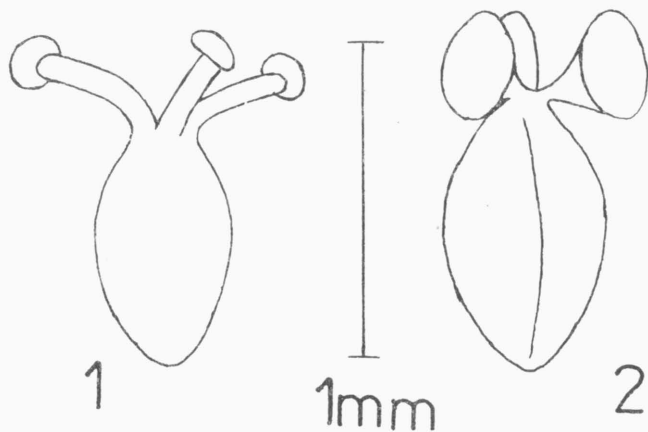


Fig. 1. — Pistil. — 1.: *Rubrivena polystachya* (WALLICH ex MEISNER) M. KRÁL; 2.: *Aconogonon alpinum* (ALL.) SCHUR.

styli 3, supra angulos ovarii dispositi, columniformes, tota longitudine aequicrassi, longi, stigmatibus inclusis ovario paulo tantum breviores, divaricati, albi, ima basi connati, conjunctim decidui; stigmata peltata, parva, stylis parumper latiora, alba. Achaenium (sec. HOOKER) triquetrum, perianthio immutato brevius et in eo non arcte inclusum.

Typus: *Rubrivena polystachya* (WALLICH ex MEISNER) M. KRÁL, comb. nova (basonym: *Polygonum polystachyum* WALLICH ex MEISNER in WALLICH, Pl. Asiat. Rar. 3 : 61. 1832).

A genere maxime affini *Aconogono* (MEISNER) REICHENB., quocum inflorescentiis paniculatis ochreisque oblique truncatis congruit, stylis longis et stigmatibus parvis praecipue differt.

In the genus *Aconogonon* (MEISNER) REICHENB. the styles are very short, many times shorter than the ovary, and obconic, from the narrow base quickly gradually dilated to the large capitate stigma. Besides that, the pollen is 3colpate (HEDBERG) or 3colporate (HARA) with the exception of *A. campanulatum* (HOOK. f.) HARA which is probably worthy of its own genus too). At least *A. alpinum* (ALL.) SCHUR does not form dense extensive *Reynoutria*-like polycormons as does *Rubrivena*.

It is possible that some other species belong to *Rubrivena* too, especially *Polygonum pinetorum* HEMSLE.

As far as is known to the present author, the nomenclatural type of the genus *Aconogonon* has not yet been chosen. *A. alpinum* (ALL.) SCHUR must be designated as the type as it is the first (and from 1853 to 1917 the sole) species for which the nomenclatural combination under the generic name *Aconogonon* has been formed.

ACKNOWLEDGEMENTS

The author is greatly indebted to Dr. Hideaki Ohba for providing the Japanese literature and to Dr. Jindřich Chrtěk, C.Sc., for helpful suggestions.

V názorech na systematické postavení druhu *Polygonum polystachium* WALLICH ex MEISNER se dosud autoři rozcházelí, proto je pro tento druh navržen nový rod *Rubrivena* M. KRÁL. Od nejbližší příbuzného rodu *Aconogonon* (MEISNER) REICHENB. se liší především dlouhými čnělkami a malými bliznami. Jako nomenklatorický typ rodu *Aconogonon* je navržen druh *A. alpinum* (ALL.) SCHUR.

REFERENCES

- HARA H. (1966): Taxonomic comparison between corresponding taxa of Spermatophyta in Eastern Himalaya and Japan. — In: HARA H., The flora of Eastern Himalaya, p. 627—657. — Tokyo.
- HARALDSON K. (1978): Anatomy and taxonomy in Polygonaceae subfam. Polygonoideae Meisn. emend. Jaretzy. — Symb. Bot. Upsal., Uppsala, 22.2 : 1—95.
- HEDBERG O. (1946): Pollen morphology in the genus *Polygonum* L. s. lat. and its taxonomical significance. — Svensk Bot. Tidskr., Uppsala, 40 : 371—404.
- HOOKE J. D. (1890): Flora of British India. Vol. 5. — London.
- KRÁL M. (1969): *Aconogonon polystachyum* comb. n. — Preslia, Praha, 41 : 258—260.
- MEISNER C. F. (1856): *Polygonum*. — In: DECANDOLLE A., Prodrromus Syst. Nat. 14 : 83 to 143. — Parisiis.
- SOJÁK J. (1974): Bemerkungen zur Gattung *Truellum* Houtt. (Polygonaceae). — Preslia, Praha, 46 : 139—156.
- WEBB D. A. et CHATER A. O. (1963): Generic limits in the Polygonaceae. — Feddes Repert., Berlin, 68 : 187—188.

Received 26 January, 1984