

LITERATURE REVIEWS

Reviews by Barry Rice and Jan Schlauer

Akhriadi, P., Hernawati, Primaldhi, A., and Hambali, M. 2009. *Nepenthes naga*, a new species of Nepenthaceae from Bukit Barisan of Sumatra. *Reinwardtia* 12(5): 339-342.

Yet another new species belonging to the polymorphic and rapidly growing (in terms of names for taxa of various degrees of distinctness) *Nepenthes bongso* (syn. *N. carunculata*)/*N. lingulata*/*N. ovata* -complex that is distributed from G. Merapi in West Central Sumatra to G. Pangulubao in the north of the island. Geographically and morphologically the new species lies well within the boundaries of this complex (and beyond the distribution and variability of *N. spathulata* from southernmost Sumatra, that is also compared to the new taxon in the paper). The most striking (reliably?) distinguishing feature of the new species is the bifid appendage on the lower surface of the pitcher lids, reminiscent of a snake's tongue (the name "naga" means dragon in the local language). (JS)

Ansaldi, M., and Casper, S.J. 2009. *Pinguicula mariae* Casper nova spec. and *Pinguicula apuana* Casper et Ansaldi nova spec. — A contribution to the occurrence of the genus *Pinguicula* L. (Lentibulariaceae) in the Apuan Alps (Italy). *Wulfenia* 16: 1-31.

Both "new" taxa have been known for a long time but *P. mariae* had been assigned to *P. reichenbachiana* (*P. longifolia* subsp. *reichenbachiana*), while *P. apuana* had been identified as *P. leptoceras* or *P. vulgaris* before. Now both are considered distinct at species level by the present authors.

P. mariae is morphologically closest to *P. poldinii* from the Prealpi Carniche (northeastern Italy) but differs essentially by missing longitudinal violet stripes on the white palate patch of the central lower corolla lobe. As both are restricted to small areas well separate from each other, specific distinction is acceptable although the present reviewer would have preferred infraspecific classification, considering the high variability and subtle morphological differences.

P. apuana is closest to the widespread *P. vulgaris* from which it differs by the larger more expanded corolla with a characteristic two-parted white palate patch and by a longer spur. The paper closes "what's about the *P. vulgaris*-like populations (...) of the northern Apennines between Tuscany and Liguria"? As long as there is no satisfactory answer, specific distinction appears clearly premature in this case. (JS)

Campos, G.L., Cheek, M., and Giulietti, A.M. 2010. Uma nova espécie de *Utricularia* L. (Lentibulariaceae) da Chapada Diamantina, Bahia, Brasil. *Sitientibus Série Ciências Biológicas* 10(2-4): 233-235.

Although the rather sketchy drawing of the trap and other details do not readily identify it as a member of section *Aranella*, upon closer examination the allegedly new species, *Utricularia catoleensis*, is indistinguishable from *U. rostrata* (see review in CPN 38(3):95, 2009). (JS)

Fleischmann, A., Robinson, A.S., McPherson, S., Heinrich, V., Gironella, E., and Madulid, D.A. 2011. *Drosera ultramafica* (Droseraceae), a new sundew species of the ultramafic flora of the Malesian highlands. *Blumea* 56: 10–15.

The new species is most closely related to *D. neocaledonica* but differs by its shorter (with respect to the lamina) and less coarsely hairy petioles and reticulate rather than foveolate seeds. So

far it is known from ultramafic soils in the Philippines (Palawan), Malaysia (Borneo), and Indonesia (Sumatra). It would be interesting to know whether an intermediate vicariant exists in Celebes or New Guinea, further Malesian territories rich in ultramafic outcrops. (JS)

Fleischmann, A., Wistuba, A., Nerz, J. 2009. Three new species of *Heliamphora* (Sarraceniacae) from the Guayana Highlands of Venezuela. *Willdenowia* 39(2): 273-283.

H. uncinata is similar to *H. exappendiculata* but differs by its larger (25-35 cm) pitchers with helmet-shaped appendages arising from a very broad base and with an acute hook-like triangular apex. *H. ciliata* is similar to *H. minor* but differs by the sparsely ciliate median pitcher nerves and by spoon-shaped appendages arising directly from a triangular neck, slightly narrowed at the base and covered with a conspicuous tuft of deciduous white ciliae on the external (abaxial) surface. *H. huberi* is similar to *H. minor* but differs by its elongate (20-30 cm) pitchers that are up to 6 cm wide and by its appendages with narrow bases and a short beak at the apex. The new taxa had previously been confused with *H. heterodoxa* or *H. minor*, respectively, on the examined herbarium sheets. (JS)

Gibson, R.P., Conn, B.J., and Conran, J.G. 2010. *Drosera hookeri* R.P.Gibson, B.J.Conn & Conran, a replacement name for *Drosera foliosa* Hook.f. ex Planch., *nom. illeg.* (Droseraceae). *J. Adelaide Bot. Gard.* 24: 39-42.

In a paper that is certain to be controversial in some quarters, Gibson *et al.* have concluded that what is often treated as a variant form of *Drosera peltata* merits full species status. This is not the first time this plant has been recognized at some level—in the past it was named *D. peltata* var. *foliosa* Benth. When the authors decided to raise this plant to the species level, selecting a name was challenging. The obvious choice was *Drosera foliosa*, but since this had already been used, the authors coined a new name—*Drosera hookeri*.

Drosera hookeri very much resembles *Drosera peltata*, with the calyx surfaces being villous to pubescent (or at least, with fringed margins); however it is a multibranched plant, while *D. peltata* is nearly or completely unbranched. *Drosera hookeri* ranges from southern New South Wales to central Victoria, southern South Australia, and north-eastern Tasmania.

At this point, where some might see a rather variable species—*Drosera peltata*—the authors see five separate taxa: *Drosera auriculata*, *D. bicolor*, *D. gracilis*, *D. hookeri*, and *D. peltata*. This will no doubt be received with some skepticism. However, Dr. Gibson's opinion in this matter should not be taken lightly, as he has spent years attempting to puzzle out order in this absolutely confounding group of plants. (BR)

Lee, C.C., McPherson, S., Bourke, G., and Mansur, M. 2009. *Nepenthes pitopangii* (Nepenthaaceae), a new species from central Sulawesi, Indonesia. *Gardens' Bulletin Singapore* 61(1): 95-100.

The new species differs from its supposedly closest congener *N. glabrata* by the widely infundibular upper pitchers with reduced wings and by its overall higher robustness. As only one individual is known of the new species, its variability cannot be assessed. Nevertheless, a hybridogenetic origin is denied by the authors. (JS)

Souza, P.C.B., and Bovem, C.P. 2011. A new species of *Utricularia* (Lentibulariaceae) from Chapada dos Veadeiros (Central Brazil). *Systematic Botany* 36(2): 465-469.

The plant described as *U. densiflora* is evidently based on juvenile (and/or cleistogamous?) individuals of a species belonging to sect. *Oligocista*. According to the distinguishing features it is closest to *U. erectiflora* and *U. meyeri*, both being known from Chapada dos Veadeiros (F. Rivadavia,

pers. comm.). Judging from the (unripe!) seed characters (strongly longitudinally ribbed interior testa walls), it appears closer to the latter species. Ripe specimens (preferably with expanded flowers of normal size and shape) would be crucial for a reliable identification of this taxon. (JS)

Studnička, M. 2009. Brazilian bladderwort *Utricularia reniformis* is a blend of two species. *Thaiszia J. Bot.* 19: 131-143.

By studying live specimens, and especially germinating seedlings, the author concludes that plants frequently identified as *Utricularia reniformis* St. Hil. actually consist of two species. As a result, he defines *Utricularia reniformis* more narrowly to include somewhat smaller plants, while the new *Utricularia cornigera* Studnička consists of larger, more robust plants. Horticulturists might be familiar with these plant groups under their previously defined cultivar names *Utricularia* 'Big Sister' and *Utricularia* 'Enfant Terrible', for *U. cornigera* and *U. reniformis*, respectively (Rice & Studnička, 2004, New cultivars, Carniv. Pl. Newslett. 33: 52-55).

Based upon the data in this paper and in earlier cultivar descriptions, the key characteristics separating the two species are as follows.

- *Utricularia reniformis*: Mature plants produce leaves that range in size from only a few mm to up to 10.5 × 8.5 cm; leaves are yellow-green and pliable; the two parallel linear marks on the flower lower lip are pale yellow and bordered with white; bladder appendages are short and curved, on robust plants they extend forwards. Specimens studied were from Serra da Mantiqueira.

- *Utricularia cornigera*: Mature plants produce only large leaves (up to 17.5 × 13.5 cm); leaves are grey-green and rigid; the two parallel linear marks on the flower lower lip are orange; bladder appendages are long and curve along the bladder lateral surfaces. Specimens studied were from Serra dos Órgãos.

The author noted that intermediate specimens have not been observed. However, it will be interesting to see, with further research, whether the ranges of these plants overlap and if hybrids or intermediate populations can be detected. Further work may also elucidate differences in seed characteristics. At least one researcher has proposed that *U. cornigera* may be a hybrid between *U. nelumbifolia* and *U. reniformis* (F. Rivadavia, pers. comm.). (BR)

Suksathan, P., and Parnell, J.A.N. 2010. Three new species and two new records of *Utricularia* L. (Lentibulariaceae) from northern Thailand. *Thai Forestry Bulletin (Botany)* 38: 23–32.

The notoriously under-collected (most species except *U. striatula* occupy restricted localities in montane areas difficult to access) section *Phyllaria* of *Utricularia* (type: *U. striatula*) is obviously even more polymorphic than anticipated in Peter Taylor's monograph (*The Genus Utricularia*, Kew, 1989). All three taxa described as new species in the present paper (*U. inthanonensis*, *phusoidaoensis*, *spinomarginata*) belong to this section, adding a few morphological features (or bridging the morphological gaps between the taxa separated previously, depending on perspective). The first two are compared to *U. garrettii* (of which the known distribution in Thailand is extended by a new find reported in the present paper), the last one is more similar to *U. striatula*. *U. furcellata* (likewise sect. *Phyllaria*) and *U. babui* (sect. *Oligocista*), both originally described from India, are reported as new for Thailand.

Somehow the authors forgot to credit Andreas Fleischmann for reporting on remarkably similar findings (based on field observations made in 2005) already in 2008 (<http://www.cpkforum.com/forum/index.php?showtopic=27920>). (JS)

Wakabayashi, H. 2010. *Utricularia linearis* (Lentibulariaceae), a new species from the Howard Springs, Northern Territory, Australia. *Journal of the Insectivorous Plant Society (Japan)* 61(2): 33-38.

The new taxon belongs to sect. *Pleiochasia* and is (A. Lowrie & A. Fleischmann, pers. comm.) identical to *U. fistulosa* although its white flowers are more similar to and almost indistinguishable from *U. albiflora* (which is not known from the Howard Springs area yet). (JS)

Wakabayashi, H. 2010. *Utricularia ramosissima* (Lentibulariaceae), a new species from north-eastern Thailand. *Journal of the Insectivorous Plant Society (Japan)* 61(4): 88-92.

The features (branched inflorescence, spur longer than corolla lower lip) said to distinguish the new taxon from *U. geoffrayi* (sect. *Meionula*) are (A. Fleischmann, pers. comm.) not sufficiently constant to warrant taxonomic distinction. (JS)

Zamudio, S., and Olvera, M. 2009. A new species of *Utricularia* (Lentibulariaceae) from Guerrero, Mexico. *Brittonia* 61(2): 119-125.

Within *Utricularia* sect. *Psyllosperma*, the new species (*U. regia*) is similar to two other Mexican endemics, *U. hintonii* and *U. petersoniae*. It differs by the upper lip of the corolla being divided into two linear-spatulate divergent lobes that are separated almost to the base. Both lobes are again divided about a quarter of their length into two smaller lobes, yielding a four-lobed upper lip, a characteristic that is otherwise very uncommon in the genus. (JS)



petflytrap

THE ORIGINAL VENUS FLYTRAP

- Mail order and Internet U.S. sales
- *Dionaea*, *Sarracenia*, *Nepenthes*, *Drosera*, *Pinguicula*, books, supplies, and **much more**
- We stock **multiple sizes** of most plants
- Terrarium kits with **live plants** (no seeds)
- Rare nursery-grown, imported lowland/intermediate *Nepenthes*
- Most plants shipped potted and **ready to grow!**

www.petflytrap.com
orders@petflytrap.com
281-433-3286