## REVIEW OF RECENT TAXONOMIC LITERATURE

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The latest version of the nomenclatural Code (ICN, Shenzhen 2018, https://www.iapt-taxon. org/nomen/main.php) allows for the description of almost everything as a new species by almost everyone. The result is a bewildering explosion of new names in the literature that makes taxonomy a challenging enterprise for specialists (and a hopeless hermetism for interested laypersons) at a worrying pace. 836 more or less widely accepted names for carnivorous plants have been published until 2018 (Fleischmann et al., Species of carnivorous plants, in: Ellison, A.M., and Adamec, L. (eds.): Carnivorous Plants: Physiology, Ecology, and Evolution, Oxford University Press, 2018, pp. 411-433). With 265 years of Linnaean nomenclature this corresponds to a mean rate of three acceptable, new names per year. Subsequent to that publication and to the end of the same year, no less than 28 additional carnivorous plant taxa at species rank or below have been proposed. The appraisal below is not an effort to dam this deluge in (a futile exercise unless the afflux will be limited) but rather an admonition: If the present nomenclatural inflation continues (and there is nothing to indicate otherwise), this will pose a serious threat not only to the science that struggles to understand biodiversity but also to any effort to conserve it. We have to deal with more and more names that mean less and less, losing perspective and targets for directed action. How should the current loss of biodiversity be explained to the people who should spend time and resources for conservation if all they see is an accelerating increase of apparent species numbers?

Drosera huegelii var. phillmanniana Y.-A.Utz & R.P.Gibson, Carniv. Pl. Newslett. 46(4): 134, 2017 SW Western Australia

Apparently confined to the Stirling Range, this is a montane taxon (above 800 m alt.) that differs from the typical variety in having a shorter stem.

Drosera × californica var. arenaria B.Rice, Drosera World Vol. 2: 1034, 2017 Florida, USA

A hybrid between *D. filiformis* var. *tracyi* and *D. filiformis* var. *floridana* and intermediate in external appearance.

Drosera filiformis var. floridana B.Rice, Drosera World Vol. 2: 998, 2017 Florida, USA

Distinguished from *D. filiformis* var. *filiformis* (that does apparently not occur in Florida) by broader leaves, thicker scapes and larger flowers.

Drosera gunniana (Planch.) de Salas, Muelleria 36: 92, 2018

Eastern Australia and Tasmania

Basionym: *Drosera peltata* var. *gunniana* Planch., another difficult to delimit Australian member of the polymorphic and widespread "*D. peltata* complex". Apparently closest to *D. hookeri* but usually larger, with pink or red (not white) tubers and denser and slightly longer sepal hairs.

Drosera albonotata A.S.Rob., A.T.Cross, Meisterl & A.Fleischm., Phytotaxa 346(3): 223, 2018 SW Western Australia

Formerly included in *D. miniata*, this is the only orange-flowered pygmy sundew with pandurate petals. *D. walyunga*, a close relative sharing the same general range and pandurate petals, has pink flowers.

Drosera xerophila A.Fleischm., Willdenowia 48(1): 94, 2018 Cape, South Africa

Another member of the *D. cuneifolia* alliance (incl. *D. admirabilis* and *D. esterhuyseniae*), characterized by cuneate leaves with tentacles confined to the distal half (*D. esterhuyseniae* has oblong leaves, *D. admirabilis* and *D. cuneifolia* have tentacles across the whole leaf surface). The borderline to *D. aliciae* (and its splitoffs, all with more intensely divided styles) thus becomes even more diffuse.

An alternative view is to regard all taxa mentioned above except *D. cuneifolia* s.str. (with three, only basally bifid style arms) as members of the *D. aliciae* alliance, which would draw the border-line closer to *D. cuneifolia*.

Nepenthes biak Jebb & Cheek, Blumea 62: 175, 2018

New Guinea, Indonesia

A segregate from *N. insignis* (with further ones already being announced) characterized by tubular pitchers that are slightly constricted above the base (vs. funnel-shaped without constriction in *N. insignis*).

Nepenthes adrianii J.Batoro & A.Wartono, Indian Journal of Plant Sciences 6(1): 14, 2017 Java, Indonesia

Related to *N. gymnamphora* but differs by 1-flowered pedicels (usually 2-flowered in *N. gymnamphora*), larger and wider pitchers with a broader peristome; has been identified with *N. spathulata* from S Sumatra by some observers.

Nepenthes alfredoi V.B.Amoroso & Lagunday, Philipp. J. Syst. Biol. 11(2): 15, 2018 Mindanao, Philippines

Another splitoff in the "N. alata group", compared to N. zygon and N. mindanaoensis (NB: the latter is not closely related to N. alata!) in the original description and predominantly characterized by fringed pitcher wings that descend down the tendril, a feature said to be otherwise unknown in the group.

Nepenthes malimumuensis Lagunday, Acma, Cabana, Sabas & V.B.Amoroso, Philippine Journal of Science 146(2): 160, 2017

Mindanao, Philippines

Compared to *N. sumagaya* (probably a later synonym of *N. copelandii*, which is not very similar to *N. malimumuensis*) in the original description and said to differ by more reduced pitcher wings, more longitudinal leaf nerves and more reduced lid appendages.

Nepenthes manobo Lagunday, Acma, Cabana, Sabas & V.B.Amoroso, Philippine Journal of Science 146(2): 161, 2017

Mindanao, Philippines

Compared to "N. surigaoensis" (a confused name, the type of which belongs to N. merrilliana) in the original description and said to differ by less decurrent petiole wings, upper pitchers with a distinct hip, more orbicular lid and shorter peristome teeth.

Sarracenia rubra subsp. viatorum B.Rice, Carniv. Pl. Newslett. 47(4): 154, 2018 Georgia & South Carolina, USA

Similar to *Sarracenia rubra* subsp. *gulfensis* but differs primarily in smaller pitcher size, a lid that is more gaping or slanted upwards, and densely pubescent pitcher exteriors.

Pinguicula olmeca Zamudio, Burelo & González-Aguilar, Botanical Sciences 96(2): 360, 2018 Tabasco. Mexico

Closely related to the polymorphic and widespread *P. moranensis* but differs by homophyllous growth (no "winter" rosette with reduced leaves is formed) and by a very long (4-6 cm) corolla spur.

Pinguicula australandina Gluch, Carniv. Pl. Newslett. 46(4): 123, 2017

Andes of Chile and Argentina

(Not only) the author thinks the type specimen of *P. chilensis* (from coastal, lowland Valdivia) belongs to *P. antarctica* and describes *P. australandina* to coin a name for most plants (from high Andean, inland Chile and Argentina) that have been called "*P. chilensis*" before. (but cf. Roccia, Carniv. Pl. Newslett. 47(2): 44-46, 2018).

Pinguicula nahuelbutensis Gluch, Carniv. Pl. Newslett. 46(4): 127, 2017 Araucania. Chile

Closely related to *P. antarctica* (and to *P. australandina*) but differs from both by an even shorter pedicel, from *P. antarctica* by a more isolobate corolla (upper lip shorter than lower in *P. antarctica*), and from *P. australandina* by a shorter spur.

Pinguicula casperi H.D.Juárez & Zamudio, Phytoneuron 2018-14: 11, 2018 Durango, Mexico

Closely related to *P. parvifolia* but differs by fewer (up to 50 instead of 60-80) "winter" leaves, broader "summer" leaves, and triangular to ovate-triangular instead of oblong-lanceolate calyx lobes that are accrescent in fruit (not accrescent in *P. parvifolia*).

Pinguicula michoacana Zamudio & H.D.Juárez, Phytoneuron 2018-14: 16, 2018 Michoacan. Mexico

Closely related to *P. oblongiloba* but differs by fewer (up to 40 instead of 60-86) "winter" leaves and by glabrous (not ciliate) petioles.

Pinguicula robertiana Zamudio & Hern.Rend., Phytoneuron 2018-14: 2, 2018 San Luis Potosi. Mexico

Closely related to *P. heterophylla* but differs by fewer (up to 20 instead of ca. 100) "winter" leaves that do not form an underground bulb, a clearly bilabiate (not isolobate) corolla with a slightly longer spur.

Pinguicula rzedowskiana Zamudio & H.D.Juárez, Phytoneuron 2018-14: 6, 2018 Queretaro, Mexico

Closely related to *P. calderoniae* but differs by "winter" leaves that do not form an underground bulb, flowering while the "winter" rosette is still present (*P. calderoniae* flowers while the "summer" rosette is developed).

Pinguicula zamudioana H.D.Juárez & Muñiz-Castro, Phytotaxa 372(4): 245, 2018 Jalisco, Mexico

Closely related to *P. oblongiloba* (and *P. michoacana*, its recent segregate) but differs by homophyllous growth with a single type of ("summer") leaves, leaves with glabrous (not ciliate) petioles, shorter pedicels, and triangular–lanceolate (instead of lanceolate) calyx lobes.

Pinguicula saetabensis M.B.Crespo, Mart.-Azorín & M.A.Alonso, Plant Biosystems 153(1): 79, 2019 (electronic pre-publication in 2018 was not valid, as no pagination was available then) SE Spain

Closely related to *P. mundi* but differs by longer, erect summer leaves approaching the condition in *P. vallisneriifolia*. The aberrant population from the Sierra de Segura (cf. Schlauer, Carniv. Pl. Newslett. 46(4): 156, 2017) comes to mind in this respect. Further study may provide additional insight.

Utricularia sunilii Naveen Kum. & K.M.P.Kumar, Phytotaxa 371(2): 140, 2018 Kerala, India

This plant has obviously malformed flowers (with additional lateral lobes on the lower corolla lip), otherwise there is no obvious difference to *U. polygaloides* (incl. *U. babui*).

Utricularia biceps Gonella & Baleeiro, Phytotaxa 376(5): 215, 2018 Minas Gerais, Brazil

Similar to *Utricularia tricolor* but distinguished by the corolla lower lip with a prominent bilobed crest with tuberculate texture on the palate, a spur with swollen bifid apex, the upper lip of the stigma with ciliate apex, and ovoid seeds. As already indicated by Taylor (Utricularia - a Taxonomic Monograph, 1989), any number of taxa could be (and have been) defined in the highly polymorphic and widespread *U. amethystina* alliance (*Utricularia* sect. *Foliosa* - 3 species with almost 50 synonyms!) based on criteria such as those mentioned above.

*Utricularia albertiana* R.W.Jobson & Baleeiro, Telopea 21: 58, 2018 Kimberleys, Western Australia

Differs from *U. dunstaniae* (with which it was identified by Taylor, l.c.) in having spur apex rounded/obtuse, central corolla lower lip lobe longer than the spur, calyx lower lip almost as long as the spur, and trap dorsal appendage usually present (but not so in the figure that accompanies the description and that only shows the lateral appendages that are occasionally also present in *U. dunstaniae*), doubtfully sufficient to split an otherwise well circumscribed, distinctive species.

Utricularia bidentata R.W.Jobson & Baleeiro, Telopea 21: 59, 2018 Northern Australia

Closely related to *U. kimberleyensis* (with which it was identified by Taylor, l.c.) but differs in having two white, prominently raised central ridges at the base of the lower corolla lip that are longer than the two outer ridges, and a peduncle that is sparsely papillose (vs. occasionally shortly hispid) towards the base.

Utricularia hamata R.W.Jobson & M.D.Barrett, Telopea 21: 65, 2018 Kimberleys, Western Australia

Related to *U. hamiltonii* (that is apparently confined to the Northern Territory) but differs in having bifid lateral trap appendages, a white corolla, lobes of upper lip limb rounded, corolla lower lip limb obovate, spur broadly conical, curved upwards with apex yellow.

*Utricularia magna* R.W.Jobson & M.D.Barrett, Telopea 21: 68, 2018 Kimberleys, Western Australia

Similar to *U. tridactyla* but differs in having a light-mauve corolla, a shallowly 3-lobed corolla lower lip, corolla upper lip superior part obovate, bladder-traps usually to c. 7.2 mm (rarely to 10 mm) long. Morphology strongly indicates *U. magna* is rather a synonym (or the closest relative) of *U. arnhemica* from the Northern Territory although genetic data do apparently not support this.

*Utricularia papilliscapa* R.W.Jobson & M.D.Barrett, Telopea 21: 71, 2018 Kimberleys, Western Australia

Related to *U. tridactyla* but differs in having peduncles that are densely papillose at the base, a light pink corolla with a more shallowly 3-lobed lower lip and an upper lip with its superior part oblong and acutely bifid. Doubtfully distinct.

Utricularia limmenensis R.W.Jobson, Telopea 21: 74, 2018 Northern Territory, Australia

Similar to *U. albiflora* from Queensland but differs in having a pale violet corolla, a narrow upper lip limb slightly constricted near middle, corolla lower lip limb three-lobed, and spur 1.3–2 times longer than lower lip. The similar *U. linearis* (likewise from the Northern Territory, with white, not pale violet flowers that have a less pronounced palate and a slightly shorter spur) is not mentioned at all.

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