

23 species-level synonyms just for *Solanum aethiopicum* L., a widely cultivated food plant, and these are only the binomials in common use or based on African types; the reader is referred to a Solanaceae Source website for even more details.

The sometimes-cryptic abbreviations for literature citations throughout the work are explained on an unnumbered page just after p. 240.

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Flora Zambesiaca, 12(1) Araceae (including Lemnaceae).

Haigh, Anna and Peter C. Boyce, with contributions from Josef Bogner. 2012. ISBN 978-1-84246-374-1, paperback; 54 pp. + 3 unnumbered pages of back matter. US\$55.00. Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, UK; www.kew.org; published by University of Chicago Press and available at their website, uchicago.edu.

It may be mentioned first that the contents of this part of the flora are given neither on the cover nor on the title page, as is also true for all the preceding parts of this series, which was begun in 1960. The area covered by Flora Zambesiaca is the modern nations of Botswana, Malawi, Mozambique, Zambia, and Zimbabwe, and also the Caprivi Strip, which falls between Zambia and Botswana. The inclusion of the Lemnaceae follows the recommendation of the Angiosperm Phylogeny Group, although the overall arrangement of the flora follows Bentham & Hooker of the nineteenth century. It is estimated that, when completed, the flora will account for some 10,000 species. As hinted at by the numbers in the title proper, the entire flora is to be treated in a series of volumes, 14 in all, with these volumes divided into 50 parts. Of these 50 parts, 38 have appeared thus far.

The Araceae, in the traditional sense, include a great many cultivated species. The authors elected to treat these as a separate group, just after the family description, and they are not included in the keys. All the genera in the keys have at least one species illustrated.

The species treatments mention no common names, nor is there any discussion of local uses of any of the species, so far as I could detect. This is a

general pattern throughout the series, not peculiar to just this treatment.

The genera and species are all accompanied by complete citations of protologs and typification. The literature citations are conventionally abbreviated. Chromosome numbers are nowhere mentioned, probably because the authors and editors recognize that chromosome numbers have no place in a regional flora.

As best one can tell, from the listing given in the back matter just after p. 54, the Cyperaceae, Asclepiadaceae, and Commelinaceae are the major elements yet to appear in this monumental effort.

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Sarraceniaceae of the Americas.

Sarraceniaceae of South America.

McPherson, Stewart, Andreas Wistuba, Andreas Fleischmann, and Joachim Nerz. 2011. ISBN 978-0-9558918-7-8 (cloth, \$89.99). 566 pp. Redfern Natural History Productions, Dorset, England. www.redfernnaturalhistory.com.

Sarraceniaceae of North America.

McPherson, Stewart and Donald Schnell. 2011. ISBN 978-0-9558918-6-1 (cloth, \$89.99). 810 pp. Redfern Natural History Productions, Dorset, England. www.redfernnaturalhistory.com.

These two volumes are a much expanded volume of Stewart McPherson's 2007 book, *Pitcher Plants of the Americas* (reviewed in PSB 53: 176-177). Combined, the two new volumes are more than 1000 pages longer than *Pitcher Plants of the Americas* and they present many more gorgeous photographs of pitcher plants and their habitats. Unfortunately they add little new scientific value, and most critically, they neglect much recent literature and add much confusion to the taxonomy of Sarraceniaceae.

The two new Sarraceniaceae volumes are intended as a set. *Sarraceniaceae of South America* has chapters introducing both carnivorous plants and the family, and provides an overall broader context for looking at pitcher plants of the Western

Hemisphere. This introductory material, especially on the history of the discovery of these plants, is very interesting to read, but it will be frustrating to future scholars because most of the references cited in text are not listed in the Bibliography. *Sarraceniaceae of North America* dives right into the two North American genera and all their extreme morphological variation; like its counterpart, much of the literature cited in text is unfortunately missing from the Bibliography. The two volumes also can be read independently – each focuses on particular genera (*Heliampora* in the first, *Darlingtonia* and *Sarracenia* in the second), each has its own index, and because each has its own cadre of co-authors, each has a very different take on taxonomy of the three genera. Nevertheless, new species and infraspecific taxa, complete with Latin descriptions and assignments of type specimens, are formally described in each volume. Although it is not unheard of to erect new taxa in peer-reviewed floras, it is very rare to do it in non-peer-reviewed coffee-table books. McPherson et al. (2009a, 2009b) did the same in this two-volume treatment of *Nepenthes* (reviewed in PSB 56: 45-46). In all of these cases, it would have been better to subject these systematic hypotheses to peer review.

Although there are many more species of *Heliampora* than of *Darlingtonia* and *Sarracenia* combined, *Sarraceniaceae of South America* is the smaller of the two, and the more taxonomically conservative. In part, the smaller size of South America reflects the lack of overall information on *Heliampora*, which grows primarily on the sandstone massifs (tepuis) of the Guyana Shield of Venezuela, Guyana, and Brazil. Tepuis are hard to access, difficult places to work once there, and consequently *Heliampora* has received much less scientific attention. Co-author Andreas Fleischmann is working on the systematics of the group for his dissertation project, and because that is not yet complete, the authors are rightly conservative in identifying species in the field and not identifying innumerable ecotypes, subspecies, varieties, or forms.

The same cannot be said for *Sarraceniaceae of North America*. Here, contemporary systematic approaches to the North American pitcher-plant genera, such as those in *Flora of North America* (Mellichamp, 2009) derived from a careful consideration of both morphological and molecular data, and literally centuries of botanical research, are completely swept aside in favor of

Schnell's (2002) nomenclatural approach that formally names nearly every color morph, every isolated population, and every cultivated "sport" as a new variety or form. Although not prohibited by the International Code of Nomenclature for Algae, Fungi, and Plants, this system is neither rationally consistent (if it's appropriate for *Sarracenia*, why not for *Heliampora*?) nor can it be supported by morphological, molecular, or field data (summarized in Mellichamp, 2009). Rather, it can be seen most charitably as a philosophical view of species (and infraspecific taxa) as Platonic entities, a view roundly rejected by modern systematists who treat systematic taxonomy as a series of hypothesis to be tested, not as revealed truth. Alternatively, the seemingly infinite identification of infraspecific taxa could be seen as a way to bolster the market for unique (cultivated) varieties of pitcher plants among hobbyists and collectors. Given the extensive space in each volume dedicated to discussion of carnivorous plant "Societies and Recommended Suppliers" in both volumes, and that *Sarraceniaceae of South America* is co-authored by the owner of *Wistuba – Exotic Plants in Germany*, the latter explanation cannot be discounted.

Like other titles in McPherson's burgeoning list of volumes on carnivorous plants, the two volumes on *Sarraceniaceae in the Americas* introduce carnivorous plants to a wide audience, and the exquisite photographs and lavish production makes them a joy to leaf through. But as a resource for botanists, systematists, and evolutionary ecologists doing serious research on carnivorous plants, these volumes are disappointing.

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