Literature Reviews

By Doug Darnowski

Fleishmann, A. and Rivadavia, F. (2009) *Utricularia rostrata* (Lentibulariaceae), a new species from the Chapada Diamantina, Brazil. Kew Bulletin 64: 155-159.

The authors present a new species of bladderwort from Bahia, Brazil. It occurs in an area of sandstone exposures, and is not only in a protected area but is also fairly abundant. The authors speculate that its only recent identification in spite of its common occurrence is due to its minute size. The description sounds lovely: a tiny species with flowers that vary from purple/mauve to white depending on the amount of light the plant receives. Two of its closest relatives which Carnivorous Plant Newsletter readers might have cultivated are *U. parthenopipes* and *U. blanchetii.*

Libantova, J., Kamarainen, T., Moravcikova, J., Matusikova, I., and Salaj, J. (2009) Detection of chitinolytic enzymes with different substrate specificity in tissues of intact sundew (*Drosera rotundifolia* L.). Molecular Biology Reports 36: 851-856.

While plants can and do make chitinases, it is clear that many carnivores do not make large amount of these enzymes based on the insect exoskeletons, composed of chitin, left behind in many traps once digestion is done. Chitin is also critical in the cell walls of fungi, which can act as plant pathogens, so its production can also be a defense against fungi. This paper shows, using molecular techniques, that *Drosera rotundifolia* produces not only a very wide range of chitinase types but also in many different tissues throughout the plants, Since many of these tissues are internal and/or not part of leaves, it is clear that at least many of these chitinases are not involved in carnivory in *D. rotundifolia*, though exactly what they are doing for the plants in these locations is not yet known.

Bove, C.P. (2008) A new species of *Utricularia* (Lentibulariaceae) from central Brazil. *Revista Brazil*. Bot. 31: 555-558.

In this paper the author describes *Utricularia cochleata*, a new species of bladderwort from Brazil, notable for growing on rocks covered by liverworts and moss, watered by mist from a waterfall. It is most closely related to *U. aureomaculata* and *U. steyermarkii*. The flowers of deep yellow and the challenge of cultivating a lithophyte (see Barry Rice's book on which groups of bladderwort species are most commonly cultivated, by natural habitat type) may tempt some ICPS members to give it a try if and when it becomes available in the trade.