
Essentially the present paper answers the initial question by a loud and clear “yes”, providing compelling evidence from germination pattern (cryptocotylar), pollen morphology (aperture type 7-8), chromosome number (2n = 32, 34, 36 with equal frequency), DNA data (rbcL sequence homology nests D. meristocaulis within sect. Bryastrum - the pygmy sundews, ITS+rps16 homology place it sister to the same), and leaf trichomes (stout, short yellow gland-like trichomes with four-celled peduncle and a glandular head on petiole present, but the eight-celled biseriate microglands characteristic for sect. Bryastrum are missing in D. meristocaulis). The only disturbing fact that remains is the occurrence of D. meristocaulis in the Neblina massif at the Brazil/Venezuela border, separated from the remaining pygmy sundews by the whole extent of the Pacific Ocean. But even this disjunction is not completely unknown to plant geographers, as admitted by the authors.

The impressive list of similarities mentioned in the paper above can be augmented by a personal observation by the reviewer (JS), as an investigation of dried material of D. meristocaulis (kindly provided by Fernando Rivadavia) for naphthoquinones did not reveal any detectable amount of plumbagin nor of 7-methyljuglone. These acetogenic compounds are distributed throughout the genus Drosera with the notable exception of sect. Bryastrum that apparently lacks them whatsoever.

Hermanová, Z. Kvaček, J. 2010. Late Cretaceous Palaeoaldrovanda, not seeds of a carnivorous plant, but eggs of an insect. Journal of the National Museum (Prague), Natural History Series, 179(9): 105-118

The paper discloses with reasonably good evidence that the fossils formerly interpreted as seeds and attributed to a genus Palaeoaldrovanda closely related to Aldrovanda, are in fact fossilized insect eggs. Several Tertiary Aldrovanda fossil seeds, seeds of the recent A. vesiculosa and different insect eggs are compared by scanning electron microscopy demonstrating the microstructural similarities among the Aldrovanda seeds and significant differences of these to Palaeoaldrovanda that position the latter closer to the insect eggs. In particular, according to the authors “Palaeoaldrovanda is not a seed with a basic anatropical and bitegmic organisation; there is no evidence of a raphe, and the wall structure is simple. Palaeoaldrovanda does not show a clearly pronounced micropyle or chalaza. (...) Our new interpretation of Palaeoaldrovanda significantly influences the current view of the family Droseraceae. It is at least possible that this family did not evolve until the Tertiary. It may also influence the hypotheses of the first unequivocal appearance of carnivorous plants in general.”

The following two papers that appeared in Carnivorous Plant Newsletter should be viewed from this new perspective: