

## HALORRHAGIDACEAE

### A NOTE ON *LAUREMBERGIA REPENS*

Although plants of *Laurembergia* from southern Africa are vegetatively similar in appearance and agree in their choice of habitat, a distinction has been made between the southern Cape species, *L. repens* Berg. and plants occurring in the northern parts, i.e. South-West Africa, Transvaal, etc., because of differences in the flowers. Bergius in his *Descriptiones Plantarum ex Capite Bonae Spei* p. 350, t.5, f. 10 (August 1767) published the genus *Laurembergia*,

naming it after the Swedish botanist Peter Lauremberg and giving it the specific name *repens* because of its prostrate habit. His book appeared two months before the first *Mantissa* of Linnaeus (October 1767) in which the same genus received the name *Serpicula repens*. Typical for this species from the winter rainfall region are the male flowers which are borne on long pedicels 10–15 mm long, and clustered in the upper axils of the branches. The

female flowers are sessile and form glomerules in the lower axils. The plants may be monoecious as was the case with the type, but they are predominantly dioecious in the Cape and were described as such by Linnaeus.

Material collected further north in the summer rainfall region lacks these long stalked male flowers but instead bears 1-2 bisexual flowers on short (c. 2 mm) pedicels in between clusters of females. These bisexual flowers possess 4 petals similar to those of the males. (In this genus the female flowers are without petals or these may be rudimentary). This taxon was placed under *L. tetrandra* (Schott) Kanitz, a South American species which, according to Schindler, must have come from north Africa originally.

In the eastern Cape and southern Natal the distinctions between these two "species" break down. Here we get plants in which the bisexual flower turns into a short stalked male flower through suppression of the ovary. (cf *Strey* 9322, a plant collected at Ngome in the Nongoma district of Natal). In other plants the pedicels of the male flowers have become longer, c. 7 mm (e.g. *Strey* 6392 from Weza in the Alfred district, Natal,) and so it links up with the Cape collections. In several of the eastern Cape plants a reduction in the number of female flowers in the upper axils is also noticeable, leading to a complete separation on the stems and ultimately dioecism.

One could therefore interpret the evolution of this *Laurembergia* taxon as follows in its migration from north to south; 1, the monoecious plants bear short, stalked, bisexual flowers in the midst of the female, sessile, axillary glomerules; 2, the bisexual flowers become male through the suppression of the ovary; 3, the male flowers develop longer pedicels; 4, in the upper axils the female flowers tend to disappear, likewise the males from the lower parts of the stems; 5, separation into male and female plants. *L. repens* from the southern Cape thus represents a final stage in the evolution of its flowers.

Recently Raynal (1965) subdivided the African species in 2 subgenera. *L. repens* Berg. and *L. veroniciifolia* (Bory) Schindl. from Madagascar were placed in the subgenus *Laurembergia* while the other subgenus *Serpiculastrum* of Raynal contained only one variable tropical African species, *L. tetrandra* (Schott) Kanitz, which he divided into 2 subspecies and 3 varieties. He reached this conclusion after a survey of all the tropical African material and thus reduced a large number species, described by Schindler (Pflanzenreich IV, 1905) and others, to synonyms or to subspecific rank. Hiern in Cat. Welw. Afr. Plants 1: 332 (1896), using the synonym *Serpicula repens* L., placed the Angolan collection of Welwitsch under this Cape species as a variety, var. *brachypoda*. Oliver in the Flora of Tropical Africa 2: 405 (1871) concurred. I too agree with this interpretation but since there is a geographical separation I follow Raynal in assigning to it the rank of subspecies.

*L. repens* Berg. subsp. ***brachypoda*** (Hiern) Oberm., comb. et stat. nov.

*Serpicula repens* L. var. *brachypoda* Welw. ex Hiern, Cat. Welw. Afr. Plants 1: 332 (1896). Lectotype: *Welwitsch* 1612a (BM, P).

*L. tetrandra* (Schott) Kanitz subsp. *brachypoda* (Welw. ex Hiern) Raynal in *Webbia* 19: 694 (1965).

#### REFERENCES

- ADAMSON, R. S., (1950). Fl. Cape Peninsula. 608.  
 BERGIUS, P. J., (1767, August). Descr. Plant. Cap. 350, t.5 f. 10.  
 HARVEY, W., (1862). Fl. Cap. 2: 572.  
 LINNAEUS, C., (1767, October). Mantissa 1: 16.  
 OLIVER, D., (1871). Flora of Tropical Africa 2: 405.  
 RAYNAL, A., (1965). Les Espèces Africaines du Genre *Laurembergia*. *Webbia* 19: 683.  
 SCHINDLER, A. K., (1905). Halorrhagaceae in Pflanzenr. IV, 225: 61-74.  
 VAN DER MEIJDEN, R. & CASPERS, N., (1971). Flora Maleisiana ser. 1, 71: 246.

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