THE GENUS *POELLNITZIA* INCLUDED IN *ASTROLOBA*

Considered by various authors to be a species of *Aloe* L., *Astroloba* Uitewaal or *Haworthia* Duv., the monotypic *Poellnitzia rubriflora* (L.Bolus) Uitewaal has had a particularly chequered taxonomic history since its original description in the genus *Apicra* Willd. (Smith 1994). Vegetatively the species shows close affinities to some species of *Astroloba* and accords completely with the genus in its tubular, actinomorphic flowers with included stamens. A close relationship between the two genera is also supported by the results of a preliminary survey of lipophilic anthranoid aglycones in the roots of subfamily Alooideae (B-E. van Wyk pers. comm.). The genus *Poellnitzia* was distinguished from *Astroloba* on the basis of the red flowers with connivent, reduplicate-valvate tepals (Smith 1995; Smith *et al.* 1995). Careful examination of the flowers, however, shows that the aestivation is in fact imbricate and the species thus differs from *Astroloba* only in the more or less horizontal racemes bearing secund, orange-red flowers with connivent tepals. These floral adaptations are now recognised as part of the syndrome of sunbird pollination which is widespread in southern Africa (Goldblatt & Manning 1999) and the resemblance between the flowers of *Poellnitzia* and the bird-pollinated genus *Microloma* R.Br. (Apocynaceae: Asclepiadoideae) is particularly striking. In the wild the species is visited by Lesser double-collared sunbirds, which insert just the tip of their beak into the flowers before extending the tongue into the tube to extract the nectar. Species of *Astroloba* are pollinated by anthophorine bees and have smaller, dull-coloured flowers. The sugar composition of the nectar of *Poellnitzia* also reflects a shift from insect- to bird-pollination and is hexose-dominant whereas the nectar of *Astroloba* is sucrose-dominant (Van Wyk *et al.* 1993). Adaptations for specialised pollination strategies alone are insufficient grounds for the recognition of genera and we believe that *Poellnitzia* is best treated as a species of *Astroloba* adapted to pollination by sunbirds.

Astroloba rubriflora *(L.Bolus) G.F.Sm. & J.C.Manning*, comb. nov.

Apicra rubriflora L.Bolus, The Annals of the Bolus Herbarium 3: 13, t. 2D (1923). Type: South Africa, Western Cape, Bonnievale, *Smith s.n.* (BOL, holo.!).

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