

A new variety and a new combination in *Sulcorebutia verticillacantha*

by John Donald and Wolfgang Krahn

***Sulcorebutia verticillacantha* Ritter var. *applanata* Donald & Krahn, var. nov.;** a typo corpore applanatiore, aculeis vertice non crinitis albis, floribus majoribus omnino purpureo-magenteis differt. Holotypus: Cult. England, *Donald*, orig. coll. Bolivia, prov. Sucre, dept. Chuquisaca, 2800 m.s.m., 14 July 1964, *Krahn* WK 217a (K).

DESCRIPTION. Plant forming flat clumps of several to many stems, from a much divided tap-root, the individual heads (25-)30(-50) mm. high and (25-)30(-40) mm. diam. epidermis grass green to dark grey green; ribs spiralled or occasionally vertical, (12-)15(-17) (in var. *verticillacantha* 13-21), divided into small rounded tubercles 2-2.5 mm. high and 3-4 mm. wide (2-4 mm. x 3-5 mm. in var. *verticillacantha*) separated by a small furrow; areoles long and narrow, set in a groove on the upper side of the tubercle and broadest at the apex, 2-4 mm. long, 0.75-1 mm. wide, white-felted. Spines lateral only, in

7-9 pectinate pairs 2-4 mm. long with an occasional basal pair 2 mm. long, usually adpressed to the stem, usually white, occasionally yellow or brown, black or brown at base, curled or straight, the young spines not standing erect to form a tuft as in var. *verticillacantha* (in some clones, spines at the youngest areoles may appear chestnut brown, giving a contrasting dark reddish brown appearance to the umbilicus). Flowers arising from lower areoles, up to 30 mm. long, 40 mm. diam., larger and deeper coloured than in var. *verticillacantha*; pericarp 4 mm. diam., scales rounded, axils naked, reddish olive green; tube funnelform, up to 20 mm. long, with broad blunt reddish olive green to magenta scales merging with the outer perianth segments; outer perianth segments spatulate 10-15 mm. long, 3-4 mm. broad, magenta with fresh greenish midstripe; inner perianth segments spatulate to spatulate-acuminate, often reflexed when open in full sun with tip upturned, deep shining magenta; filaments purple with paler anthers bearing yellow pollen (white to purple or rarely orange in var. *verticillacantha*); nectary chamber 2 mm. long, not closed by filaments; style free, 20-25 mm. long, white;



stigmas 5-6, 5 mm. long. *Fruit* a flattened 'berry', 5 mm. diam., brownish to deep orange red, floral remains persistent. *Seed* as in var. *verticillacantha*, 1.3 mm. long, 1 mm. broad; *testa* black, rugose and papillate, often patchily covered with aril-like skin; *hilum* broad, basal, white; *strophiole* not well developed, covering the micropyle and slightly protruding funicular scar.

Type locality: Bolivia, prov. Sucre, dept. Chuquisaca; Sucre City on the road from Rio Chico Valley at 2800 m., on a small sandstone hill, quite isolated from other *Sulcorebutia* populations. The soil was red sandy loam with a predominant moss cover. *Parodia tuberculata* Ritter and *Rebutia fiebrigii* var. *densiseta* (Cullm.) Oeser were present nearby but not very abundant.

The plant was collected by Wolfgang Krahn on 14 July 1964 and does not appear to have been recollected since by Rausch, Lau or other collectors visiting this area. The type locality of *S. verticillacantha* (var. *verticillacantha*) is further north in prov. Arque, dept. Cochabamba, at Sayari.

The plant is close to *Weingartia ritteri* Brandt but differs in its much more flattened habit and its larger and deeper coloured flower. Both taxa belong to the *S. verticillacantha* populations. *Weingartia ritteri* has the typical short cylindric habit of *S. verticillacantha* and not the flattened form of its variety. The choice of the genus *Weingartia* by Brandt needs some comment. It is universally recognized now that *Weingartia* and *Sulcorebutia* are related but not so close as yet to demand that they are united into a single genus. Their evolution is convergent but they stem from different lines. Admittedly there are some *Weingartia* species that are probably best accommodated in *Sulcorebutia* and vice versa. Brandt in his wisdom now chooses to place all *Sulcorebutia* into *Weingartia* under a subgeneric umbrella. In our opinion he has been too hasty in his judgement. The plant he has described, today is still best placed in *Sulcorebutia* but only as a variety. It is certainly not justified as a species.

The new combination required is as follows:

Sulcorebutia verticillacantha* Ritter var. *ritteri* (Brandt) Donald & Krahn, **comb. et stat. nov.*
Basionym: *Weingartia ritteri* Brandt in Kakt. Orch. Rundschau 1978/3: 5-6 (1978) ('ritterii').

The relationships of this and other taxa of the *S. verticillacantha* complex will be discussed and developed in a later article.

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