

A new species of *Brachystelma* (Asclepiadaceae) from Natal

Ralph Peckover



Fig. 1. *Brachystelma christianeae* in habitat between rocks

Diagnosis

Brachystelma christianeae Peckover, sp. nov., *Tenaris chlorantha* Schlechter affinis, sed caule supra terram in caules 3-6 efferente, caulibus brevioribus, floribus in quoque nodo 4, corolla bulbo amplo rubello instructa, coronae interioribus appendiculis crassioribus, folliculis longioribus tenuioribusque differt.

Description

Plant a perennial herb. *Tuber* 30-40 mm diameter and 15-20 mm thick. *Stem* single to few, 150-200 mm long, branching just above ground to give 3-6 stems, 1-1.5 mm in diameter, glabrous green, internodes 10-60 mm long with the longest internodes at apex. *Leaves* erect, sessile, linear, 20-70 mm x 1-2 mm, glabrous, green except for a reddish tinge at the axil, very slightly recurved at margins. *Flowers* 1-2 axillary to and produced from the 6th or 7th node. *Pedicels* slender, glabrous, 5-10 mm long and reddish-brown. *Calyx lobes* erect, 4 mm x 0.3 mm at base, linear-lanceolate and glabrous. *Corolla* at first with round reddish-brown bulb and long reddish-brown, straight, terete beak. Corolla at dehiscence being semidecumbent, bulb being a whitish-green colour on the outside and red within, 4-5 mm x 3 mm with

a narrowing to 2.5-3 mm at the base of the corolla lobes, lobes yellow-green, spreading, 18-20 mm x 0.5-0.75 mm, straight with margins recurved, glabrous. *Corona* 3 mm diameter and 1 mm high. *Outer*

corona appendages 0.6 mm at base and 0.5 mm at apex, orange-mottled red-brown, pouch-like and upper part beak-shaped. *Inner corona appendages* 0.6 mm at base thickened with yellow-green apex 0.2 mm across, incumbent on the backs of the others, glabrous. *Follicles* paired, reddish-grey, 90-100 mm x 1.5 mm.

Name

For the author's wife, Christiane Peckover.

Type

Natal 2830CD (Nkandla) R.G. Peckover 0141

Distribution

This species was first discovered near Nkandla in Kwazulu between sandstone rocks in a poor, greyish, sandy soil during May 1992. Plants were subsequently observed on a quartzitic ridge, 25 km south of Vryheid during October 1992. The annual rainfall at Nkandla is about 1 000 mm and falls



Fig. 2. Flowering branch of *B. christianeae* with a characteristic star-shaped flower



Fig. 3. The contrasting yellow and red colours of the flower of *B. christianeae*

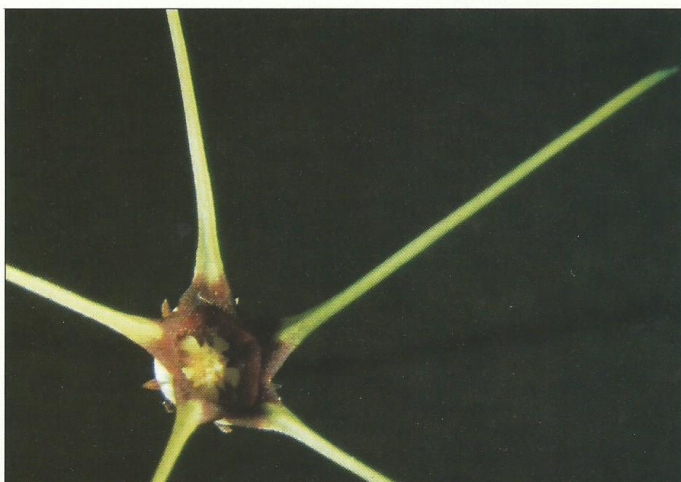


Fig. 4. Close-up of the corona showing the mottled outer corona appendages and yellow inner appendages

mainly during the summer months. The area is in the mist-belt and experiences a temperate climate. In the area concerned, the black wattle, *Acacia mearnsii*, is invading the rocky slope and the observed *B. christianeae* plants were only metres away from these trees. The fusiform-rooted *Sisyranthus imberbis* was growing in association with *B. christianeae*. The distribution of this species is probably from the Vryheid area through to the mist-belt areas in KwaZulu around Nkandla. The small size as well as the thin leaves of this species is the most probable reason for its not being collected to date. The contrasting red

and yellow-green colour of the flower is very attractive.

Discussion

The nearest relative to *B. christianeae* is a species in the *Tenaris* group, *T. chlorantha*, which differs mainly in being taller, single-stemmed, having up to 8 flowers per peduncle and having no corolla bulb. The major differences between *B. christianeae* and *T. chlorantha* are contained in Table 1.

Representative specimen

Nkandla (2830CD) R.G. Peckover 0141 (Holotype PRE)

Table 1

Differences between *Brachystelma christianeae* and *Tenaris chlorantha*

B. christianeae

1. Plant 150–200 mm tall
2. Stem branched above ground giving 3–6 stems
3. Only 1–2 flowers borne at the nodes
4. Corolla 30–40 mm in diameter
5. Corolla lobes 18–20 mm long and 0.5–0.75 mm broad at base, yellow-green
6. Corolla bulb distinctly urn-shaped, 3 mm deep, red on inner and whitish-green on outer surface
7. Inner corona appendages thickened and pronounced
8. Seed pods, 90–100 mm long and 1.5 mm broad, reddish

B. christianeae

1. Plant 300–400 mm tall
2. Stem usually single
3. Flowers borne on peduncles, numbering up to 8
4. Corolla 7–10 mm in diameter
5. Corolla lobes 5–8 mm long and 1–2 mm broad at base, yellow-mottled brown
6. Corolla bulb slightly saucer-shaped, 1 mm deep, yellow-mottled brown on both surfaces
7. Inner corona appendages less conspicuous
8. Seed pods, 25–30 mm long and 1.5–2 mm broad, greyish

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Ralph Peckover

P.O. Box 29191

0132 Sunnyside