



Syncolostemon attwoodii, a new species from Limpopo, South Africa

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ABSTRACT

Syncolostemon attwoodii was recently discovered on the eastern escarpment in Limpopo. It is similar to, but differs from *S. albiflorus* by the shorter internodes (about 1.5–3 mm, not 8–20 mm) and dense white indumentum of the inflorescence axis and lilac rather than white corollas that do not constrict towards the mouth. It is endemic to the Limpopo-Mpumalanga-Eswatini Escarpment and has a suggested conservation status of Rare.

1. Introduction

In a quest to relocate *Thorncroftia media* Codd, which had not been seen in the wild since its original collection by Dave Hardy in 1976, the Mpumalanga Plant Specialist Group (PSG) organised an outing to the Ga-Ditsephe Trail, one of the venues used by the Maruleng Hiking Club, and Lefahla Peak in the Thaba Kgolo Mountains north of the Olifants River in March 2025. At the second locality, most of those on the trip only reached the foothills of the escarpment, but Simon Attwood (SA) together with Sebara Tshehla of the Maruleng Hiking Club reached the summit of the mountain (Lefahla Peak). No *Thorncroftia* N.E.Br. was found, but SA sent photographs and collected a specimen of *Syncolostemon* E.Mey. ex Benth., which has some features of *Syncolostemon eriocephalus* I.Verd. and some of *S. albiflorus* (N.E.Br.) D.F.Otieno as well as some characteristics that distinguished it from both. Subsequently in April, SA, his sister Maru Attwood, Tiva Baloi, Sebara Tshehla, and Thabang Kgohloane, the latter two being members of the Maruleng Hiking Club, ascended the escarpment from the west and camped in Gibraltar Kloof (known locally as Mogale) on the farm Gibraltar 79 KT. They climbed to the summit of Thaba ya Maru and found a large population of *Thorncroftia media* (their target) as well as more specimens of the new species of *Syncolostemon*.

A worldwide revision of *Syncolostemon* was published in 2022 (Otieno et al., 2022) and included 51 species, after the inclusion of *Hemizygia* (Benth.) Briq. (Otieno et al., 2006). Since then, a new species similar to *S. albiflorus* was highlighted by SA and has been written up and accepted for publication (Balkwill et al., 2025). Here, the most recent addition to the genus is described.

2. Taxonomy

Syncolostemon attwoodii K.Balkwill **sp. nov.** Type: South Africa, Limpopo, 2430 (Pilgrim's Rest): Thaba Kgolo Mountains, north-east of Ga-Mankele [previously Ostend], on the farm Gibraltar 79 KT, near the Thaba ya Maru Peak, 1807 m (–AD), 20 Apr 2025, Attwood 49 (J, holo.; E, K, LYD, MO, PRE, iso.).

Sprawling suffrutex to 0.6 (–1) m tall; stems with internodes about 25–40 mm long on main stems and 2–3 mm on side branches, so that leaves appear clustered. Leaves opposite, those on side branches held at between 45° and 70° to the vertical, linear to very narrowly elliptic, about 6–8 × 1–1.5 mm (when dry), green above, covered with dense white hairs below, with little odour, surface shiny, slightly convoluted and uneven above, with one clearly visible main vein and secondary veins not visible, midrib impressed above and raised below although often obscured by indumentum on lower leaf surface, with sparse simple hairs to 0.3 mm long above and dense simple hairs (which may obscure glandular hairs) below; margins very strongly revolute, entire; petiole to 0.3 mm long or leaves sessile. Inflorescence terminal, simple, up to 25 mm long; peduncle with very short internodes 1.5–3 mm long, clothed with dense simple white hairs and very short remains of pedicels 1.5 mm long; bracts present at the tips of young inflorescences but caducous as soon as flowers open, narrowly elliptical, about 9 × 2 mm, reddish green, with dense silky hairs, especially below and on margins, sharply acute. Calyx 4–5.5 mm long at anthesis; all sinuses of similar depth and 4 lower lobes of similar length, adaxial lobe narrowly obovate, wider than the tube and with margins decurrent on it, dark green with silky hairs and sessile glandular hairs above; tube and lower teeth densely covered

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with long, simple hairs. Corolla pale lilac to lilac except inner surface of upper two lobes, which is mauve to purple; tube expanding gradually at the base and then parallel-sided to the mouth, up to 9 mm long and 3–3.5 mm deep at mouth, with minute papillae, some sessile glandular hairs and simple eglandular hairs without, the latter more common along the abaxial surface, with short-stalked and sessile glandular hairs within; upper lobes about 2×1 mm with dense simple eglandular hairs on the outer surface; lower lobe about 2×1.5 mm, densely hairy on outer surface. Stamens initially just shorter than lower lip, but then exceeding it very slightly; upper pair attached about one third above the base of the corolla tube with filaments white and with eglandular hairs on side facing the corolla and papillae and short-stalked glandular hairs in the side facing the inside of the flower but glabrous on the exerted portion; lower stamens with filaments attached at the mouth of the corolla and united to near their apex, glabrous; anthers mauve, ageing to brownish; pollen orangey yellow. Stigma bifid. Mericarps not seen.

Diagnostic characters: The leaves of *S. attwoodii* are very similar to those of *S. albiflorus*, with their markedly rolled margins and undersurfaces that are white due to a covering of dense white unbranched

hairs. *Syncolostemon attwoodii* is usually a sprawling suffrutex and sometimes an upright suffrutex to 1 m tall (Fig. 1B) — both habits occur in *S. albiflorus* along with some plants that are taller and more woody (Fig. 1C). However, in *S. attwoodii*, the internodes of the inflorescence axis are short (1.5–3 mm long; Figs. 2B & E) and covered with dense white eglandular hairs (Fig. 2E), but long (8–20 mm long; Figs. 2C & F) and with both eglandular and glandular hairs in *S. albiflorus*. Corollas are lilac with mauve upper lips and not constricted at the mouth in *S. attwoodii*, but are white with reddish brown upper lobes and are constricted towards the mouth in *S. albiflorus*. In both *S. eriocephalus* and *S. attwoodii*, the inflorescence axes have short internodes and are covered in dense white hairs (Figs. 2D & E), but the hairs on the calyces are much longer in *S. eriocephalus* (Fig. 2A vs Fig. 2E). The corolla tubes are white proximally and yellowy-brown distally and are constricted towards the mouth in *S. eriocephalus* (Fig. 2A), but are lilac and mauve and not constricted towards the mouth in *S. attwoodii* (Fig. 2B). *Syncolostemon eriocephalus* also differs by being a woody suffrutex to shrub up to 2 m tall (Fig. 1A), whereas *S. attwoodii* is a sprawling suffrutex or occasionally has some slightly woody stems to 1 m tall (Fig. 1B). Leaves



Fig. 1. Habit and leaves: A & D. *Syncolostemon eriocephalus*; B & E. *S. attwoodii*; C & F. *S. albiflorus*. Photographers: K. Balkwill (A, C, D & F); S. Attwood (B & E).



Fig. 2. Inflorescence axes: A & D. *Syncolostemon eriocephalus*; B & E. *S. attwoodii*; C & F. *S. albiflorus*. Photographers: T. van der Merwe on iNaturalist (A); S. Attwood (B); K. Balkwill (C, E & F); A. Short (“adshort”) on iNaturalist (D).

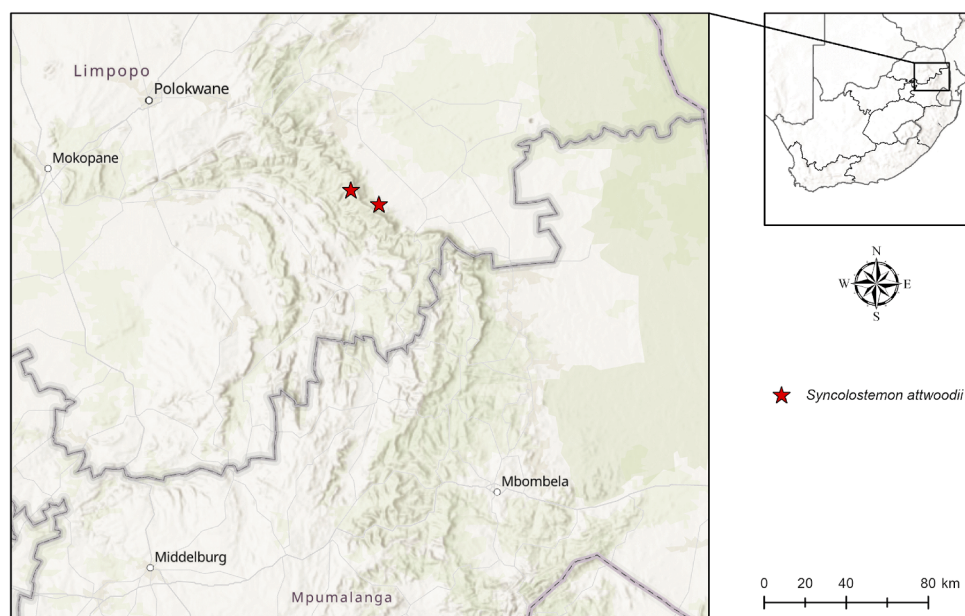


Fig. 3. Distribution map of *S. attwoodii*. Cartographer: Mervyn Lötter.

of *S. eriocephalus* are silvery on both surfaces (Fig. 1D), whereas those of *S. attwoodii* are green above and white hairy below (Fig. 1B).

Etymology: *Syncolostemon attwoodii* is named for Simon Attwood (born 1997), who is a qualified and accomplished artist with a passionate and informed interest in rock art and plants. In the course of seeking new rock art sites, he discovers new or interesting plants and vice-versa. He has developed incisive knowledge of *Syncolostemon* through identifying the observations of the genus on iNaturalist. In the course of diligently and persistently searching for *Thorncroftia media* in the remote and difficult to access escarpment area between the Olifants River and Lekgalameetse Nature Reserve, he discovered, photographed and collected this new species of *Syncolostemon*.

Distribution and Ecology: *Syncolostemon attwoodii* has been collected in the northern section of the Limpopo-Mpumalanga-Eswatini Escarpment (Clark et al., 2022) in the Thaba Kgolo Mountains between the Olifants River Gorge and Lekgalameetse Nature Reserve (Fig. 3). The species has been collected and seen from elevations of about 1750 m asl and upwards and grows in shallow sandy soil derived from Black Reef Quartzite in Northern Escarpment Afromontane Fynbos (Gm 24; Mucina and Rutherford, 2006). It grows around rock sheets or between rocks, together with *S. eriocephalus* and *Passerina montana* Thoday.

Phenology: So far, *S. attwoodii* has been collected in flower in March and April. The specimen collected in April does not yet carry mericarps.

Conservation Notes: A polygon drawn around the known locations and expanded to include areas that may be of suitable altitude provides an Extent of Occupancy (EOO) of 30 km², and suitable habitat is probably much <10 % of this area (i.e. <3 km²). Although cattle graze in the lower reaches of the area, there was no evidence of negative cattle effects where the plants occur. Along the main cattle trails and in the general area there are also some weeds (i.e. *Bidens pilosa* L. and *Tagetes minuta* L.), but not amongst the *S. attwoodii* plants. Although only one plant was seen at the southern locality and about 100 at the second, it is likely that plants are scattered between these two sites. Although the EOO is <100 km² and the Area of Occupancy (AOO) is <10 km², there are likely to be more locations and there are no threats, so *S. attwoodii* does not qualify for threatened status under Criterion B (IUCN, 2012). We have no data to assess decline in the population and the population is likely to be stable, so Criteria C and E do not apply. If a full census was undertaken, there are likely to be >1000 individuals, so Criterion D does not apply. Thus, under the IUCN categories (IUCN, 2012), *S. attwoodii* would be of Least Concern. In terms of the South African categories, *S. attwoodii* occurs at more than one site, so does not qualify for Critically Rare. It has a restricted range under 500 km², it is a habitat specialist with an AOO <20 km², and it is likely to have <10 000 mature

individuals and so qualifies for a South African status of Rare (SANBI, 2025).

Additional specimen examined: South Africa. LIMPOPO. 2430 (Pilgrim's Rest): Thabo Kgolo Mountains, west of Ntswelemotse, just south of Lefahla Peak, on the farm Turkey 106 KT, 1759 m (–AD), 22 Mar 2025, Attwood 38 (J, K, PRE).

iNaturalist Observations: 266419545, 272033603, 272034241.

CRediT authorship contribution statement

K. Balkwill: Writing – review & editing, Writing – original draft, Investigation, Data curation, Conceptualization.

Declaration of competing interest

The author declares that he has no conflict of interest.

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