

ASTERACEAE

A NEW SPECIES OF *ARCTOTHECA* FROM NORTHERN CAPE, SOUTH AFRICA

Arctotheca marginata Beyers, sp. nov., habitu *A. prostratae* (Salisb.) Britten similis sed foliis lineari-ellipticis vel lineari-obovatis, adaxiale tomentosis, abaxiale coactis, margine erosa revoluta distincte aculeato, involucri abaxiale coacto, pappo flosculorum discorum squamis 7–10 hyalinis differt.

TYPE.—Northern Cape, 3119 (Calvinia): Nieuwoudtville, Farm Grootvlei, along edge of pan, \pm 760 m, (–AC), 23-11-2001, *Bosenberg 1* (NBG, holo.; BOL, K, MO, PRE).

Perennial, tufted, stoloniferous herb. *Stem* prostrate, rooting at nodes. *Leaves* alternate, petiolate; blade linear-elliptic or linear-obovate in outline, $35\text{--}75 \times 3\text{--}10$ mm, adaxially tomentose, abaxially felted, margin erose, revolute and distantly aculeate; petiole $25\text{--}70 \times 2\text{--}3$ mm, up to 7 mm wide at base, felted. *Capitula* heterogamous, radiate,

solitary on long peduncles; peduncles 40–80 mm long, felted. *Involucre* widely cup-shaped, 10–13 mm diam. *Involucral bracts* 5- or 6-seriate, imbricate; outer narrowly ovate or narrowly oblong with acute apex, $2.8\text{--}4.7 \times 0.9\text{--}1.0$ mm, coriaceous, abaxially felted; inner gradually larger, narrowly elliptic to elliptic with acute apex, coriaceous, abaxially felted; innermost elliptic to obovate, $6\text{--}9 \times 2.2\text{--}2.3$ mm, with broad scarious margin, central coriaceous portion abaxially tomentose, apex rounded to obtuse. *Receptacle* flat, honeycombed, fimbriiferous. *Ray florets* neuter, 13 or 14; tube cylindrical, 2.0–2.4 mm long; lamina spreading, narrowly elliptic, $8.7\text{--}9.2 \times 1.7\text{--}2.0$ mm, yellow above, reddish brown below, 4-veined, apically minutely 3-lobed; vestigial staminodes 2–4; ovary with aborted style; pappus absent. *Disc florets* bisexual, numerous; corolla yellow, narrowly cyathiform tapering into tube below, $3.4\text{--}4.4 \times 1.0\text{--}1.2$ mm; corolla lobes 5, ascending,

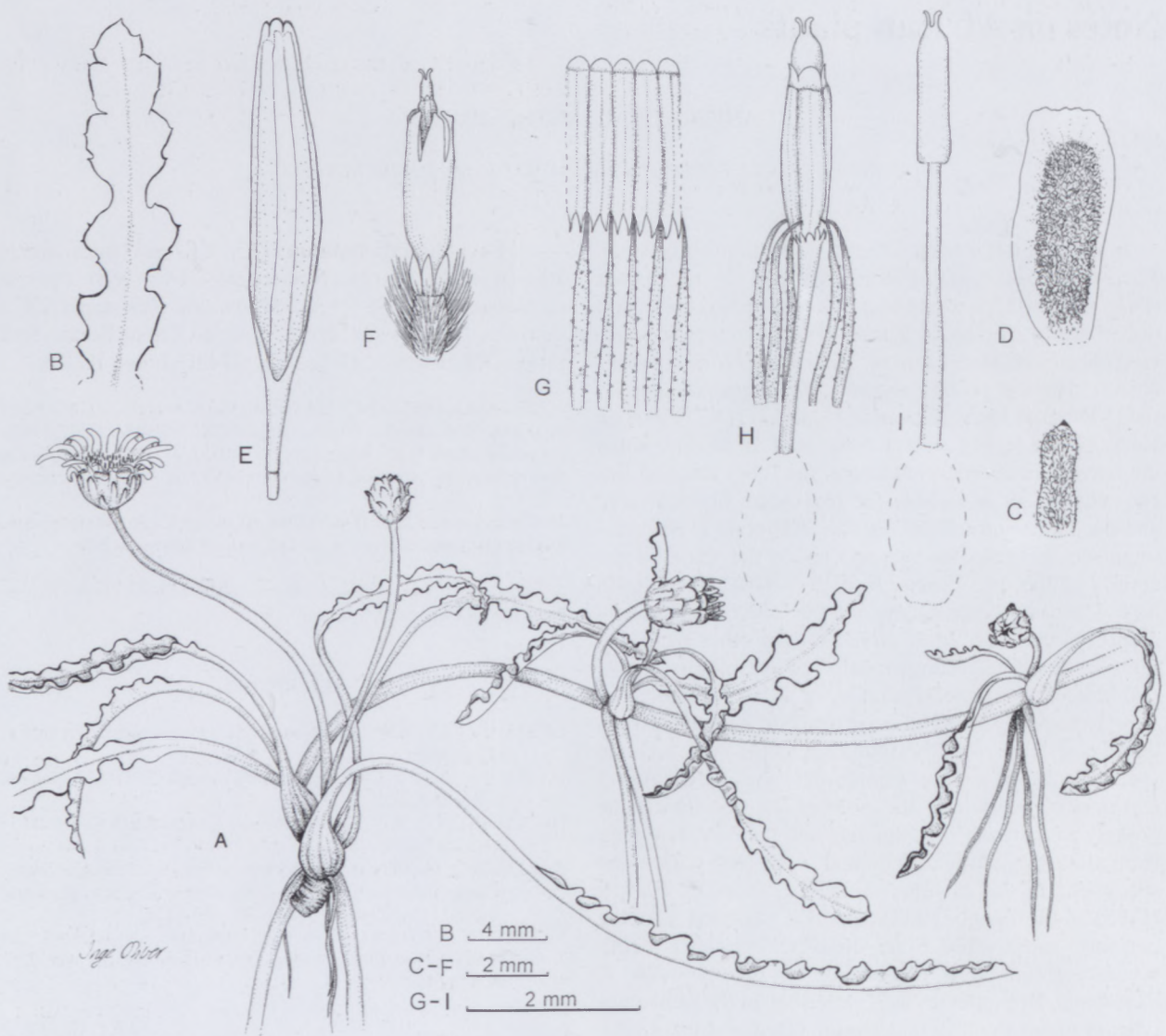


FIGURE 1.—*Arctotheca marginata*, Bosenberg 1 (NBG). A, portion of a plant, $\times 1$; B, portion of leaf blade; C & D, involucral bracts (abaxial view): C, outer; D, innermost. E, ray floret. F–I, disc floret: G, stamens; H, stamen and style; I, style. Scale bars: B, 4 mm; C–F, 2 mm; G–I, 2 mm. Artist: Inge Oliver.

ovate-triangular, up to 1.3×0.5 – 0.8 mm; stamens 5; anthers 2.0 – 2.2 mm long, linear, with sterile flat, depressed-ovate apical appendage, base triangular; filament scabrous; style 4.9 – 5.7 mm long, terete, thickened above, bifid, style branches up to 0.2 mm long; cypselas narrowly ellipsoid, 1.5 – 1.7 mm long, densely pilose, hairs tending to cohere; pappus scales hyaline, 7–10, narrowly elliptic, 1.0 – 1.3×0.3 – 0.5 mm, apex acute. Figure 1.

Diagnostic characters: *Arctotheca marginata* is morphologically rather close to *A. prostrata* due to the stoloniferous growth, but is distinguished from it by the leaves which are linear-elliptic or linear-obovate in outline with an erose, revolute and distantly aculeate margin, tomentose above and felted beneath, and the involucre which is abaxially felted. In *A. prostrata* the leaves are lyrate-pinnatifid, green above, white-woolly beneath, the involucre is glabrous or thinly tomentose with white-woolly apices and the pappus is absent.

Distribution and ecology: *Arctotheca marginata* is known only from the Farm Grootvlei in Nieuwoudtville. It occurs in deep, waterlogged, sandy soil along the edge of a pan. Figure 2.



FIGURE 2.—Geographical distribution of *Arctotheca marginata*.

Etymology: the specific epithet, *marginata*, meaning edge, was prompted by this species growing on the edge of the pan.

Other specimen examined

NORTHERN CAPE.—3119 (Calvinia): Nieuwoudtville, Farm Grootvlei, along edge of pan, \pm 760 m. (–AC), 7-11-2001, Roux 3168 (NBG).

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