

Two new species of Asteraceae from Northern and Western Cape, South Africa and a new synonym

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Keywords: Asteraceae, Cape Floral Region, *Chrysosoma hantamensis* J.C.Manning & Goldblatt, new species, *Oncosiphon*, *Senecio speciosissimus* J.C. Manning & Goldblatt, South Africa, sp. nov., systematics

ABSTRACT

We recognize two new species of Asteraceae from the winter rainfall belt of South Africa and reduce a third to synonymy. *Senecio speciosissimus* sp. nov. has been confused with *S. coleophyllus* Turcz. in the past but is distinguished by its taller stature, larger and more finely serrated leaves, and congested synflorescences containing (6–)15–40 flowerheads. The two species are also geographically separated: *S. speciosissimus* occurs in the Hottentots Holland and Franschhoek Mountains of the southwestern Cape, whereas *S. coleophyllus* is endemic to the Riviersonderend Mountains. *Chrysosoma hantamensis* sp. nov. is a distinctive new species endemic to the Bokkeveld and Roggeveld Plateaus. It is distinguished by its resprouting habit, 3–5-fid leaves and large capitula, 12–15 mm in diameter, with lanceolate, 3-veined involucre bracts, the largest 9–10 × 2 mm. Investigation of the variation in leaf morphology of the two radiate species of *Oncosiphon*, *O. africanum* (P.J.Bergius) Källersjö and *O. glabratum* (Thunb.) Källersjö, reveals that only one species can be maintained, and *O. glabratum* is accordingly reduced to synonymy in *O. africanum*.

INTRODUCTION

During the preparation of the account of Asteraceae for *Cape plants* (Goldblatt & Manning 2000) it was evident that several undescribed species were represented among the collections at the Compton Herbarium. The more distinctive of these taxa were included in the treatment of the relevant genera as numbered entries. Some of these species have since been described (Manning & Goldblatt 2002; Nordenstam 2003). One of the more distinctive of the unnamed species was *Senecio* sp. 3, which we describe here as *S. speciosissimus*. In addition, an unusual species of *Chrysosoma* with pinnatisect leaves from the Bokkeveld and Roggeveld Escarpment in Northern Cape is described as the new species *C. hantamensis*. At the same time we take the opportunity of reducing to synonymy the poorly understood species *Oncosiphon glabratum*, which further study reveals to be conspecific with *O. africanum*.

1. *Senecio* L.

Senecio L., with some 1 250 species worldwide, is by far the largest genus in the tribe Senecioneae (Bremer 1994). As the central genus of subtribe Senecioninae, it is certainly paraphyletic as currently defined (Jeffrey 1986, 1992) and its circumscription is consequently rather broad. The genus is best represented in South America (± 500 species) and Africa (± 350 species) (Bremer 1994). It is especially common in southern Africa, where some 300 species have been recorded (Herman *et al.* 2000). Around one third of the southern African species have been recorded from the Cape Floral Region, where 107 named species plus four unnamed

species were recognized by Goldblatt & Manning (2000). Among the unnamed species that they listed, was an unusually striking and distinctive taxon that is described and named here.

***Senecio speciosissimus* J.C.Manning & Goldblatt, sp. nov.**

Herba perennis robusta *Senecio coleophyllo* Turcz. affinis sed 0.9–1.8 m alta, foliis grandioribus serratis (30–)40–90(–100) × 15–25(–35) mm, capitulis synflorescentia congestis (6–)15–40.

TYPE.—Western Cape, 3418 (Simonstown): Kogelberg Forest Reserve, NE slopes of Voorberg, ± 550 m, (–BD), 2 October 1971, C. Boucher 1650 (NBG, holo.; PRE, iso.).

Robust, single-stemmed perennial, 0.9–1.8 m tall, branching above; stems and branches densely leafy in upper parts but leafless below, thinly to moderately densely cobwebbed at first, later glabrescent. *Leaves* closely imbricate, alternate, erect or lower leaves spreading to reflexed, ovate or elliptical to lanceolate, decreasing in size acropetally, (30–)40–90(–100) × 15–25(–35) mm, sessile and obscurely decurrent on stem, obtuse at base, apiculate, hard and leathery, glabrous or thinly cobwebbed at first adaxially, later glabrous or nearly so except along midrib, usually more densely and persistently cobwebbed or felted abaxially, margins revolute and sparsely 4–10-serrulate, rarely entire, 3–5-veined from base. *Capitula* heterogamous, radiate, few to several in congested corymbs aggregated into rounded or corymbose panicles of (6–)15–40 heads, terminal corymbose ± 40 mm long, individual peduncles 10–30(–50) mm long, cobwebbed, with 1–5 scattered, lanceolate bracts. *Involucre* campanulate, calyculate, 7–12 mm diam.; involucre bracts uniseriate, 13–18, 9–13 × 1.8–3.0

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FIGURE 1.—*Senecio speciosissimus*, Boucher 1650, holo. (NBG).

mm, \pm equalling disc, lanceolate, acute or attenuate, mostly with scarious margins, ciliate-penicillate at tips, veins resinous, especially in lower half. *Receptacle* flat, glabrous. *Ray florets* female, 11–13; tube compressed-cylindrical, \pm 4 mm long, abaxial (outer) side sparsely glandular-pubescent in upper half; lamina spreading, elliptic-oblong, 4(–6)-veined, 18–20 \times 5–8 mm, pink or mauve, rarely white. *Style* branching just below mouth of tube, branches narrowly oblong, 1.5 mm long, lateral margins stigmatic, apices obtuse, shortly papillate. *Disc-florets* bisexual, many, \pm 6 mm long, glabrous, yellow; lower part of tube cylindrical, \pm 4.5 mm long, limb narrowly campanulate, \pm 2 mm long, 5-lobed; lobes triangular, 1.8 \times 0.8 mm, with submarginal veins and median resin duct. *Anthers* 2.5 mm long including ovate apical appendage; anther base minutely sagittate, ecaudate. *Ovary* narrowly ellipsoid, 8–10-ribbed, clavate-pubescent between ribs; style terete with swollen base on distinct stylopodium, branching just below mouth of tube, branches \pm 1 mm long, lateral margins stigmatic, apices truncate with crown of papillae. *Cypselas* narrowly ellipsoid, \pm 6.0 \times 1.8 mm, 8–10-ribbed, clavate-pubescent between ribs, reddish brown. *Pappus* present in all florets, bristles numerous, uniseriate, white, barbellate, deciduous, 4–5 mm long. *Flowering* time: June to November. Figure 1.

Distribution and ecology: Western Cape, restricted to the southwestern coastal mountains between 600 and 1 500 m, from Bainskloof in the north to Kogelberg in the south, a distance of \pm 40 km (Figure 2). Plants grow

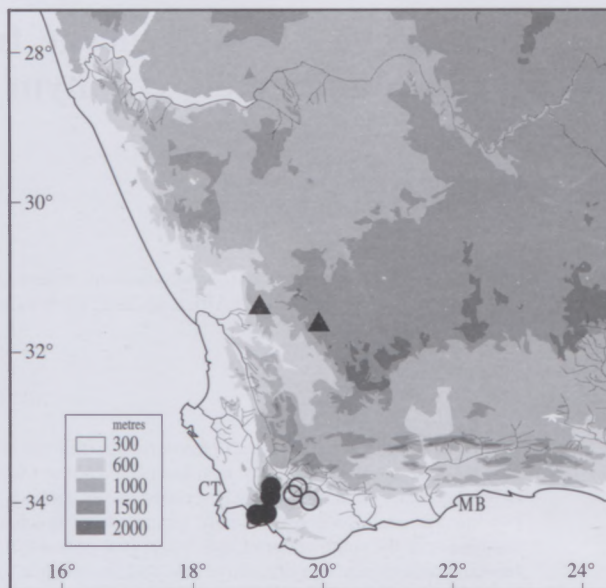


FIGURE 2.—Distribution of *Senecio speciosissimus*, ●; *S. coleophyllus*, ○; and *Chrysocoma hantamensis*, ▲.

in scattered communities, never very abundantly, in moist fynbos vegetation, in seepage areas or along streams. Rainfall in these mountains is relatively high, in parts averaging more than 2 500 mm per annum, falling predominantly during the winter months, although summer cloud condensing against the upper slopes provides some moisture through the summer. The single-stemmed, willowy growth form indicates that the species is a reseeder, re-establishing after fire through the germination of dispersed seeds. Plants seem to be relatively short-lived and the species is apparently a member of early successional plant communities that do not persist into more mature fynbos older than 10 years. Flowering of the species begins in winter, in July, and continues into late spring and early summer, in November or December, with peak flowering between August and October.

Diagnosis and relationships: *Senecio speciosissimus* is a distinctive species. Plants are single-stemmed, with erect, wand-like stems up to 1.8 m tall that are branched near the tops and densely leafy towards the tips. The ovate to lanceolate, leathery leaves are usually cobwebbed beneath, and the flowerheads are clustered in paniculate synflorescences, with pink to mauve (rarely white) ray florets. In its habit, foliage and pink ray florets, it approaches *Senecio coleophyllus* Turcz. (Figure 3), a smaller species, 0.5–1.0 m tall, of similar moist montane habitats in the Rivier-sonderend Mountains to the east, and the two are apparently geographic vicariants. *S. speciosissimus* is readily distinguished from *S. coleophyllus* by its taller stature, 0.9–1.8 m tall, and congested, paniculate synflorescences comprising several, relatively short inflorescences in the upper leaf axils of the flowering branches, producing an accumulated total of (6–)15–40 flowerheads. *S. coleophyllus*, in contrast, produces a solitary, slender peduncle \pm 100 mm long at each branch tip, bearing 1–3(–5) flowerheads. The leaves in that species are also smaller, 20–30 mm long vs 30–90 mm long, and proportionately more deeply and coarsely incised. *S. glastifolius* L.f., from moist mountain



FIGURE 3.—*Senecio coleophyllus*, Oliver 10919 (NBG).

slopes between George and Humansdorp, is another tall, purple-flowered species that bears a superficial resemblance to *S. coleophyllus* and *S. speciosissimus*. It is readily distinguished from both by its thinner-textured leaves with the margins flat or only slightly revolute, the complete lack of indumentum on leaves and inflorescence, its diffuse synflorescence, and by the narrower, linear involucre bracts, at most 1.5 mm wide.

History: this striking species appears to have been first collected by the German botanist Rudolf Schlechter in the mountains above Franschhoek in November 1896. Several collections have been made since then, all of which have been referred to *S. coleophyllus*, and the plant has been illustrated under that name in various wild flower guides (Anonymous 1980; Burman & Bean 1985). This persistent confusion has obscured the true identity of the species. During the preparation of *Cape plants* (Goldblatt & Manning 2000), when we had the opportunity to examine recent collections of *S. coleophyllus* from the Riviersonderend Mountains, it was clear to us that the plants from the Hottentots Holland Mountains represented a distinct species, and it was accordingly included in the account as *Senecio* sp. 3. The type of *Senecio coleophyllus* is from the Riviersonderend Mountains, as are all subsequent collections that match it. The recognition of the populations from the Hottentots Holland and adjacent mountains as a distinct species, *S. speciosissimus*, confirms that *S. coleophyllus* is endemic to the Riviersonderend Mountains, where it is found along the length of the range, from Jonaskop in the west to Pilaarkop in the east (Figure 2).

Other material examined

Senecio speciosissimus

WESTERN CAPE.—3319 (Worcester): lower NE slopes of Seven Sisters Mountain, above Witte River Valley, (–CA), 29 November 1959, *E. Esterhuysen* 31995 (BOL, S); Tierkloof on lower slopes of Wemmershoek Mountains, (–CC), 5 November 1950, *E. Esterhuysen* 17699 (BOL); Franschhoek Pass, (–CC), 2 December 1928, *H. Herre* s.n. STE8989 (NBG); Franschhoek, (–DD), 19 November 1896, *R. Schlechter* 9266 (BOL, PRE); Franschhoek Peak, (–DD), 6 October 1946, *R.H. Compton* 18550 (BOL). 3418 (Simonstown): Sneeuokop, (–BB), 7 November 1938, *T.P. Stokoe* PRE44832 (PRE); Nuweberg Forest Reserve, north slope of Sneeuokop, (–BB), 26 November 1969, *M.F. Thompson* 993 (NBG, PRE); sheltered valley on E side of Somerset Sneeuwkop, (–BB), December 1939, *E. Esterhuysen* 3533 (BOL); Hottentots Holland Mtns, (–BB), November 1923, *T.P. Stokoe* BOL17561 (BOL); Hottentots Holland, (–BB), 13 November 1930, *T.P. Stokoe* PRE20583 (PRE); Sir Lowry's Pass (bought in Adderley Street), (–BB), September 1917, *BOL14010* (BOL); Steenbras Dam on Farm Rockview, (–BB), 7 June 1982, *C.M. van Wyk* 988 (NBG); foot of Kogelberg Peak, (–BB), 18 August 1970, *F.J. Kruger* KR1047 (NBG, PRE); Kogelberg State Forest, southern end of Five Beacon Ridge, (–BB), 8 October 1980, *C. Boucher* 4976 (NBG); Kogelberg, kloof running down to Steenbras Dam, moist area near stream, (–BD), 27 August 1971, *E.G.H. Oliver* 3461 (NBG, PRE); Palmiet River Mountains, (–BD), August 1924, *T.P. Stokoe* 977 (PRE); mountains near Palmiet River, (–BD), April 1936 (fr.), *T.P. Stokoe* s.n. (BOL); Kogelberg, (–BD), August 1924, *Stokoe* 962A (BOL, PRE); between Kogelberg and Cape Hangklip, (–BD), October 1920, *T.P. Stokoe* 623 (PRE); Hangklip, (–BD), 16 October 1923, *T.P. Stokoe* PRE44828 (PRE); Hangklip, (–BD), September 1917, *Marloth* 7745 (PRE); Pringle East Peak, sheltered SW slopes and cliffs, (–DD), 16 September 1951, *E. Esterhuysen* 18859A (BOL); Pringle East Peak, steep S slope below summit, 2500 ft, (–DD), 21 September 1952, *E. Esterhuysen* 20409 (BOL, PRE); swamp on S slopes of mountains near Betty's Bay, (–BD), *E. Esterhuysen* 13711 (BOL). 3419 (Caledon): between Viljoen's Pass and Somerset Sneeuwkop, (–AA), 3 October 1938, *T.P. Stokoe* 7039 (BOL); Grabouw-Boland trail, upper Riviersonderend River, 600 m, (–AA), 29 October 1983, *C. Burman* 1243 (BOL).

Senecio coleophyllus

WESTERN CAPE.—3319 (Worcester): Riviersonderend Mtns, Jonaskop, moist slopes among rocks, (–CD), 25 January 1982, *J.P. Rourke* 1772 (MO, NBG, PRE); Onklaarberg, 20 miles S of Worcester, (–DC), December 1924, *T.P. Stokoe* 1073 (PRE). 3419 (Caledon): Riviersonderend Mtns, Schilpadkop, steep, marshy, S slope, (–BA), 30 November 1952, *E. Esterhuysen* 20791 (BOL); Riviersonderend Mtns, Pilaarkop, moist rocky area, (–BB), 28 October 1997, *E.G.H. Oliver* 10919 (NBG); Riviersonderend Mtns, (–BB), November 1940, *T.P. Stokoe* SAM57807 (SAM), October 1945, *T.P. Stokoe* SAM57546 (SAM); Riviersonderend, (–BB), *K.H. Barnard* 472 (SAM); mountains near Riviersonderend, Appelskraal, (–BB), November 1830, *Zeyher* 2953 (K, PRE!, S, SAM!, iso.).

2. *Chrysocoma* L.

Chrysocoma L., a genus of 20 species, is endemic to southern Africa, mainly the drier western and southwestern regions, with a single species extending into Mozambique (Bayer 1981; Herman *et al.* 2000). In the tribe Astereae the genus is distinguished by its shrubby habit and linear or oblanceolate leaves that are usually viscid, mostly entire and often ericoid, usually solitary capitula borne on elongate, naked peduncles, biseriate pappus with an outer series comprising a row of minute, persistent scales and an inner series of caducous bristles, and flattened cypselae with thickened margins containing apical resin sacs beneath the marginal ribs. All but two species have discoid capitula and just a single species, *C. tridentata* DC. is known to have some of the leaves toothed or lobed (Bayer 1981). The species described here as *C. hantamensis* is anomalous in

Chrysocoma in its distinctly pinnatifid leaves and unusually large capitula but accords with the genus in other respects; particularly the fruit characters.

***Chrysocoma hantamensis* J.C.Manning & Goldblatt, sp. nov.**

Species insignis suffrutescens, ramis decumbentibus, foliis 3(–5)-fidis, capitulis magnis 12–15 mm diam. solitariis, bracteis involucri lanceolatis 3-costatis, 9–10 × 2 mm.

TYPE.—Northern Cape, 3119 (Calvinia): 12 km E of Nieuwoudtville, 2.5 km S of Calvinia road, (–AC), 12 September 2004, P. Goldblatt & L.J. Porter 12418 (NBG, holo.; E, K, MO, PRE, S, iso.).

Suberect subshrub with strong taproot; stem partly subterranean, compactly branched, producing annual flowering shoots; branches decumbent, woody at base and closely leafy, becoming pedunculoid and almost naked distally, 150–250 mm tall, sparsely villous with hairs 0.5–0.75 mm long. Leaves patent or suberect, lowermost opposite and decussate with bases connate but soon becoming alternate, rarely subtending dwarf axillary shoots, mostly trifid or subdigitately pinnatisect and then 5-lobed, outline spatulate, 10–14 × 4–6 mm, lobes linear-lanceolate, 3–6 × 0.8–1.0 mm, obtuse, lower leaves and often uppermost becoming progressively oblong-lanceolate, 1.0–1.5 mm wide, leathery, margins strigose with coarse hairs 0.75 mm long and scattered glandular hairs. Capitula homogamous, discoid, solitary, terminal, pedunculate; peduncle sparsely villous but densely villous apically beneath capitula, (40–)60–100 mm long, naked or with one or two linear-lanceolate bracts 6–8 mm long. Involucre broadly hemispherical, 7–8 × 12–15 mm; involucre bracts 4(5)-seriate, lanceolate, thinly hairy or subglabrous, with narrow, scarious, fimbriolate margins, 3-veined, outer bracts 5–6 × 1–2 mm, acute, sparsely or more closely ciliate with hairs ± 0.5 mm long, inner bracts 9–10 × 2 mm, acuminate-attenuate, glabrous. Receptacle convex, epaleate, alveolate. Florets bisexual, yellow or apparently reddish at tips, tube cylindrical but widening slightly in upper 2.0–2.5 mm, middle third sparsely pubescent with tapering, eglandular hairs, 4.5–5.0 mm long, 5-lobed; lobes recurved, triangular with thickened margins, ± 0.8 × 0.4 mm. Anthers ± 2 mm long including ovate, somewhat keeled apical appendage; anther bases obtuse, ecaudate. Ovary obovate, flattened with thickened margins, adpressed-hairy; style terete, branches ± 1 mm long, incurved, linear, margins stigmatic, apical appendage triangular, papillate with sweeping hairs at base. Cypselas obovate, ± 3.0 × 1.5 mm, flattened with thickened margins, moderately densely adpressed-hairy, with two small apical resin sacs beneath ridges. Pappus biseriate; outer series of minute, obtuse scales united basally in ring; inner series of ± 20 bristles, 3–4 mm long, barbellate above but subplumose basally, caducous. Flowering time: August and September. Figure 4.

Distribution and ecology: Northern Cape, known from two populations on the Bokkeveld and northern Roggeveld Escarpments (Figure 2). This region, known locally as the Hantam (Manning & Goldblatt 1997), is a significant centre of endemism (Van Wyk & Smith 2001). *C. hantamensis* appears to be restricted to doleritic clays, growing in

succulent karoo vegetation. The fine-grained, red dolerite soils of the Hantam support a wealth of edaphic endemic taxa adapted to their peculiar characteristics, including other recently described species of Asteraceae (Manning & Goldblatt 2001). *C. hantamensis* bears a remarkable superficial resemblance to another distinctive, narrow endemic of this region, *Euryops mirus* B.Nord. The two species, which grow together at the type locality east of Nieuwoudtville, are extraordinarily similar in vegetative form, sharing short, partially subterranean stems and branches bearing pinnatifid leaves, and producing annual flowering shoots with long, naked peduncles bearing solitary flowerheads. It would appear to be a marked instance of ecological convergence.

Diagnosis and relationships: the highly distinctive *C. hantamensis* is readily separated from all other species of *Chrysocoma* by its 3–5-fid leaves and large capitula, 12–15 mm diam. with lanceolate, 3-veined involucre bracts, the largest 9–10 × 2 mm. In its distinctly lobed leaves it approaches *C. tridentata* DC. (including *C. pinnatifida* DC.) (Bayer 1981) but this species from the Little Karoo is a divaricately branched shrublet with rather fleshy, mostly subterete leaves, and with short peduncles at most 30 mm long, bearing capitula 10–12 mm diam. In addition, the involucre bracts, like those of all other species of *Chrysocoma*, are smaller, ± 5 × 1.0–1.5 mm, linear-lanceolate and 1-veined. *C. hantamensis* is probably most closely allied to *C. oblongifolia* DC., which extends from Namaqualand through the Hantam and into the Tanqua Karoo. Both species are subshrubs with decumbent annual stems bearing relatively broad leaves with strigose margins and large capitula carried on long peduncles. The decussate lower leaves of *C. hantamensis* and *C. oblongifolia* are also evident in the few other species of *Chrysocoma* that are subshrubs rather than true shrubs, although their opposite arrangement is easily overlooked. *C. oblongifolia* differs from *C. hantamensis* in its entire, oblanceolate leaves, glandular-hairy rather than villous stems and peduncles, slightly smaller capitula, 10–12 mm diam., and smaller, 1-veined involucre bracts.

History: this unusual species was brought to our attention by Simon Todd, who collected it as part of his vegetation studies in the Nieuwoudtville area. Subsequent investigation brought to light an earlier collection from the northern Roggeveld Escarpment, made by M.F. Thompson in 1975, at which time it was filed among the undetermined species of *Chrysocoma*. The specimen was apparently overlooked by Bayer (1981) in her revision of the genus.

Additional material examined

NORTHERN CAPE.—3119 (Calvinia): 10 km towards Calvinia from Nieuwoudtville along R27, ± 2.5 km S of road, (–AC), September 2003, S. Todd 302 (NBG); N end of Roggeveld Escarpment, De Hoop, (–DD), 22 August 1975, M.F. Thompson 2534 (NBG, PRE).

3. *Oncosiphon Källersjö*

The genus *Oncosiphon* Källersjö (Anthemidae: Matriariae) (Källersjö 1988) was established for a small group of annual species from Western and Northern Cape

Bot. J. Linn. Soc

1988

96: 310-314.

Bot. 35: 58-60

2005



FIGURE 4.—*Chrysocoma hantamensis*, Todd 302 (NBG). A, whole plant; B, variation in leaf morphology; C, detail of leaf margin; D, involucre bracts (outermost on left, innermost on right); E, floret; F, single anther; G, style branches; H, cypsela. Scale bars: A, 10 mm; B, 5 mm; D, 2 mm; E, H, 1 mm; C, F, G, 0.5 mm. Artist: J. Manning.

that had been previously placed either in *Matricaria* (Harvey 1865), or segregated between the genera *Pentzia* (discoïd species) and *Matricaria* (radiate species) (Hutchinson 1917). As circumscribed by Källersjö (1988), *Oncosiphon* is defined by its annual habit, 4-lobed corolla with a brittle, swollen tube, and 4-ribbed cypselae that lack myxogenic hairs and bear a small, unequal-sided pappus. Seven species are currently recognized in the genus (Källersjö 1988), just two of them with radiate capitula. These two species, *O. africanum* (P.J.Bergius) Källersjö and *O. glabratum* (Thunb.) Källersjö, are endemic to the coastal lowlands of the southwestern Cape (Goldblatt & Manning 2000), from near Leipoldville to Cape Town. They occur along the margins of seasonal, often somewhat saline pans, and flower in late spring as the pans dry out. The two species

were retained as distinct by Källersjö (1988) on the basis of the degree of dissection of the lower leaves. The leaves in *O. glabratum* are described as simply pinnatisect, whereas in *O. africanum* the lower leaves at least are bipinnatisect. The degree of leaf dissection is notoriously variable within species of Asteraceae (see Hilliard 1977). Significantly, no well-preserved recent specimens have been unequivocally associated with *O. glabratum* among the collections of radiate *Oncosiphon* material that we have examined. The collection Ecklon & Zeyher 213/323 (SAM) that was associated with this species by Harvey (1865), actually has distinctly bipinnatisect leaves and thus falls within the circumscription of *O. africanum*. In contrast, the ample material determined as *O. africanum* displays a range of leaf forms that suggests that the degree of dissection is often associated with the luxuriance of the

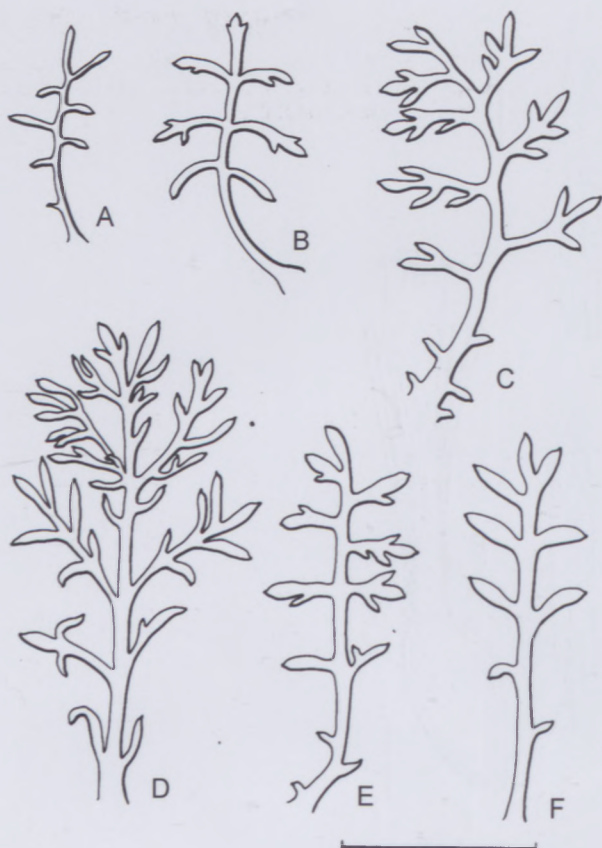


FIGURE 5.—*Oncosiphon africanum*, variation in lower leaves. A, B, leaves from two different plants, *Compton* 9815 (NBG); C, leaf from *Compton* 5086 (NBG); D–F, leaves from three different stems on single plant, *Compton* 15129 (NBG). Scale bar: 10 mm. Artist: J. Manning.

plants (Figure 5). Well-grown, branched specimens typically have larger, more highly dissected leaves than smaller, unbranched specimens. For instance, *Compton* 9815 (NBG) comprises a dozen depauperate plants, most of which bear simple, pinnatisect leaves (Figure 5A) but one of which has the lower leaves weakly bipinnatisect (Figure 5B). While most of the leaves of *Compton* 5086 (NBG) are bipinnatisect (Figure 5C), the lower leaves of different branches on the well-grown plants that comprise *Compton* 15129 (NBG) and *Hugo* 667 (NBG) display a range of degrees of dissection, from simply pinnatisect to strongly bipinnatisect (Figure 5D–F). The leaves in all other species of *Oncosiphon* are bipinnatisect (rarely tripinnatisect) (Goldblatt & Manning 2000). Examination of the type of *O. glabratum*, which comprises unbranched plants, reveals that one of the leaves displays a secondary lobe and is therefore by definition bipinnatisect. The distinction between the two taxa is clearly untenable and *O. glabratum* is accordingly reduced to a synonym of *O. africanum*.

Oncosiphon africanum (P.J.Bergius) Källersjö in Botanical Journal of the Linnean Society 96: 312 (1988). *Matricaria africana* P.J.Bergius: 296 (1767). Type: Western Cape, Milnerton, 2 March 1980, H.P. Linder 2208 (BOL, neo.), designated by Källersjö (1988).

Oncosiphon glabratum (Thunb.) Källersjö in Botanical Journal of the Linnean Society 96: 312 (1988). *Matricaria glabrata* (Thunb.) DC.: 51 (1838). *Chrysanthemum africanum*

Thunb.: 161 (1800). Type: South Africa, Thunberg no. 20132 in Herb. Thunb. (UPS, microfiche!), syn. nov.

Other material examined

WESTERN CAPE.—3218 (Clanwilliam): outside Leipoldtville on road to Sandberg, (–BC), 13 October 1976, L. Hugo 667 (NBG); Clanwilliam, Bergvlei, (–BC), 23 September 1934, R.H. Compton 5086 (NBG); Piketberg, Papkuil Valley, (–CA), 22 September 1940, Compton 9523 (NBG); salt marsh opposite Berg River Marsh, (–CC), 14 October 1986, M. O'Callaghan 1159 (NBG); Berg River, (–CD), 21 September 1940, R.H. Compton 9469 (NBG); Berg River Station, (–CD), 1 October 1943, R.H. Compton 15129 (BOL, NBG). 3318 (Cape Town): halfway between Yzerfontein and Langebaan turnoff, near Salt Pan, (–AA), 3 August 1985, Källersjö 29 (BOL, S); north of Yzerfontein, (–AB), 21 November 1991, A. Craven 26 (NBG); Yzerfontein, (–AB), August 1931, L. Bolus s.n. (BOL); Mamre Road, (–BD), 12 October 1940, R.H. Compton 9815 (NBG); Cape Town, Rietvlei, (–CD), C.F. Ecklon & C.L. Zeyher 213/323 (SAM); Observatory, Varschvlei, (–CD), 10 November 1891, C. Wolley Dod 3636 (BOL); Rugby near Milnerton, (–CD), February 1939, M.R. Levyns 7016 (BOL); Paarden Island, (–CD), December 1920, Pole Evans BOL16870 (BOL).

ACKNOWLEDGEMENTS

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