

A REVISION OF THE SOUTH AFRICAN SPECIES OF *BRACHYLAENA* R. Brown.

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The first two species from South Africa described by *Linnaeus* and *Lamarck* respectively were placed by these authors under the genus *Baccharis* Linn. In the modern conception, this genus has no representatives in South Africa and is restricted to North and South America. *Thunberg* was more correct, when in his *Prodr. Pl. Cap.*, he described several species under the genus *Tarchonanthus* Linn. Of these some were later referred by the authors to the genus *Brachylaena* R. Br. and have since been found to be conspecific and thus synonymous with the Linnaean and Lamarckian species. The species, however, were satisfactorily grouped when R. Brown on basis of *Baccharis neriifolia* L. created the genus *Brachylaena*, which differs in certain fundamental characters from the genus *Baccharis* L. It would be superfluous to enumerate these differences as they may readily be seen from *Benth.* and *Hook* [Gen. Pl. II. 179 and 180 (1873)], where the former is placed in the *Inuloideae* and the latter in the *Asteroideae*. *Cassini*, in Bull. Sciences. Philomat. 1817, p. 151, described the genus *Oligocarpus* on basis of *Baccharis neriifolia* L. His account, however, appeared during September, 1817, whereas R. Brown's description of *Brachylaena* (with which it is congeneric as it was based on the same species) appeared towards the middle of the same year (an exact date is not available). *Brachylaena* R. Br. consequently has priority over *Oligocarpus* Cassin. *Lessing* in his Syn. Comp. 208 (1832) correctly referred some of *Thunberg's* species of *Tarchonanthus* to the genus *Brachylaena*, and his conception has since been supported by *De Candolle* and *Harvey* as well as several other authors. *De Candolle's* account in Prodr. V. 430 (1836) is fairly comprehensive. Investigation of the specimens cited by that author has shown that in one or two cases the names of the species were misapplied. This is borne out more clearly by the synonymy under the species enumerated in this paper.

The name *Brachychlaena* Post et Kuntze must be regarded merely as an erroneous spelling for *Brachylaena*.

DISTRIBUTION.

The genus is a tropical one and the distribution of the species in South Africa, as with species of other tropical genera, clearly indicates the common path of the migration of such plants. In general the south western area of the Cape Province is invaded by migration along the eastern coastal belt and from Humansdorp westward through the area lying south of the Zwartbergen Range of mountains. In the South African flora it is not uncommon to find representatives of tropical genera as far south as East London or even Bathurst where palms are found native. The two species *B. elliptica* and *B. ilicifolia* show a typical distribution in South Africa of species with tropical affinities, i.e. they range from Natal as far as Uitenhage. A similar distribution is shown by *B. discolor* but whose southern limit is Bathurst. When the species mingle with the true Cape flora they can easily be mistaken for an integral part of the original flora unless the distribution of the genus is traced. It may be significant that the two species found in the area of the Cape flora (*B. neriifolia* and *B. glabra*) have quite glabrous leaves whereas the other South African species have leaves which are tomentose beneath. *B. neriifolia* ranges from Clanwilliam, southward

through Ceres and then in the southern districts as far as Humansdorp. It is also found on the summit of the mountain ranges which carry a typical Cape flora and is a characteristic element in the vegetation of the south-western districts of the Cape Province. *B. glabra* has not become a typical "Cape" plant as *B. neriifolia* and though it has been recorded from the Caledon district it still indicates its tropical affinities by having an eastern distribution as far as Natal. One species *B. transvaalensis* is confined to the mountainous region of the north-eastern Transvaal and has probably entered from P.E. Africa as it is also found at Lourenco Marques from where it has migrated southward into Zululand. *B. rotundata* is confined to the Transvaal Highveld and Bushveld while another species *B. huillensis* is only known from a single specimen collected in the Kruger National Park. *B. uniflora* is confined to Natal.

BRACHYLAENA, *R. Br.*, in Trans. Linn. Soc. XII. 115 in not. (1817); *DC.*, Prodr. V. 430 (1836); *Harv.*, Gen. S.A. Pl. 169 (1838); *Harv. et Sond.*, Fl. Cap. III. 115 (1865); *Benth. and Hook.*, Gen. Plant. II. 288 (1873); *Engl. and Prantl*, Pflanzenfam. IV. 5. 174 (1890).

Heads many to few-flowered, unisexual. *Receptacle* naked. *Involucral scales* imbricate, dry, shorter than the florets; in fruit longer or shorter than the achenes. *Corolla* tubular, unequally 5-lobed. *Male flowers*: bisexual; anthers tailed at the base, connate, exserted; style filiform, simple or bifid; ovary hispid, abortive; pappus sparingly developed. *Female flowers*: anthers abortive, separate; style bifid; achenes pubescent or subglabrous; pappus of bristles in two rows.

Dioecious shrubs or trees. Leaves alternate, coriaceous, shortly petiolate or subsessile, entire or toothed, glabrate above, often tomentose beneath. Capitula in racemes or panicles. Flowers yellow. Geograph. distribution: Africa and Mascarene Islands.

Syn.: *Oligocarpa* Cass., in *Bull. Soc. Philomatique*, 1817, p. 151; *Journ. de Physique LXXXVII.* 26 (1818). *Brachychlaena* Post et Kunze, *Lexic. gen. Phan.* 77 (1903).

KEY TO SPECIES.

Leaves glabrous beneath, very rarely rusty tomentose:

Leaves usually long-lanceolate, 5-8 times longer than broad..... 1. *neriifolia*.

Leaves usually elliptic or obovate, 2-4 times longer than broad..... 2. *glabra*.

Leaves white or greyish tomentose beneath:

Male heads 1-3-flowered..... 3. *uniflora*.

Male heads 7-50-flowered:

Leaves distinctly mucronate:

Involucre of bracts 3-4-seriate; bracts densely albo-tomentose.. 4. *huillensis*.

Involucre of bracts 5-8-seriate; bracts never white tomentose.. 5. *ilicifolia*.

Leaves not mucronate:

Heads usually less than 1 cm. long; the innermost bracts scarcely as long as the fruits:

Leaves with petioles 1 or more cm. long, generally over 2 cm. broad 6. *transvaalensis*.

Leaves sessile or subsessile, rarely up to 1.5 cm. broad..... 7. *elliptica*.

Heads usually over 1 cm. long; the innermost bracts longer than the fruits and hiding them:

Involucre of female heads 6-7-seriate; style not swollen at the base (a Transvaal and Rhodesian species)..... 8. *rotundata*.

Involucre of female heads 7-10-seriate; style swollen at the base (Cape Province and Natal)..... 9. *discolor*.

1. *B. neriifolia* (L.), *R. Brown*, in *Trans. Linn. Soc. XII*, 115 in not. (1816); *Steud.*, *Nomencl.* I, 98 (1821); *Less.*, *Syn. Comp.* 208 (1832); *DC.*, *Prodr.* V, 430 (1836); *Drège*, *Zwei Pflzgeogr. Docum.* 169 (1843); *Krauss*, in *Flora*, 1844, p. 671; *Dietrich*, *Fl. Univ. N. Folge*, t. 4 (1849); *Harvey*, *Fl. Cap.* III, 116 (1865); *Bibl. Bot.* X, No. 52, 18 (1901); *Bolus* and *Wolley-Dod*, in *Trans. S. Afr. Phil. Soc.* XIV, 3, 277 (1903); *Sim*, *Forest Flor. C.G.H.* 246 (1907); *Juel*, *Plant. Thunb.* 381 (1918); *Sim*, *Native Timb. S. Afr.* 44 (1921).

Syn.: *Baccharis neriifolia* Linn., *Sp. Pl.*, 860 (1753); Willd., *Sp. Pl.*, III, iii, 1914 (1804); Pers., *Syn.*, II, 423 (1807); *Steud.*, *Nomencl.*, I, 98 (1821); Spreng., *Syst. Veg.*, III, 462 (1826).

Tarchonanthus lanceolatus Thunb., *Prodr. Pl. Cap.*, 145 (1794); Willd., *Sp. Pl.*, III, iii, 1793 (1804); Pers., *Syn.*, II, 405 (1807); *Steud.*, *Nomencl.*, II, 826 (1821); Thunb., *Fl. Cap. ed. Schult.*, 638 (1823); Spreng., *Syst. Veg.*, III, 456 (1826).

Oligocarpa neriifolia Cass., *Dict. Sc. Nat.*, XXXVI, 21 (1817).

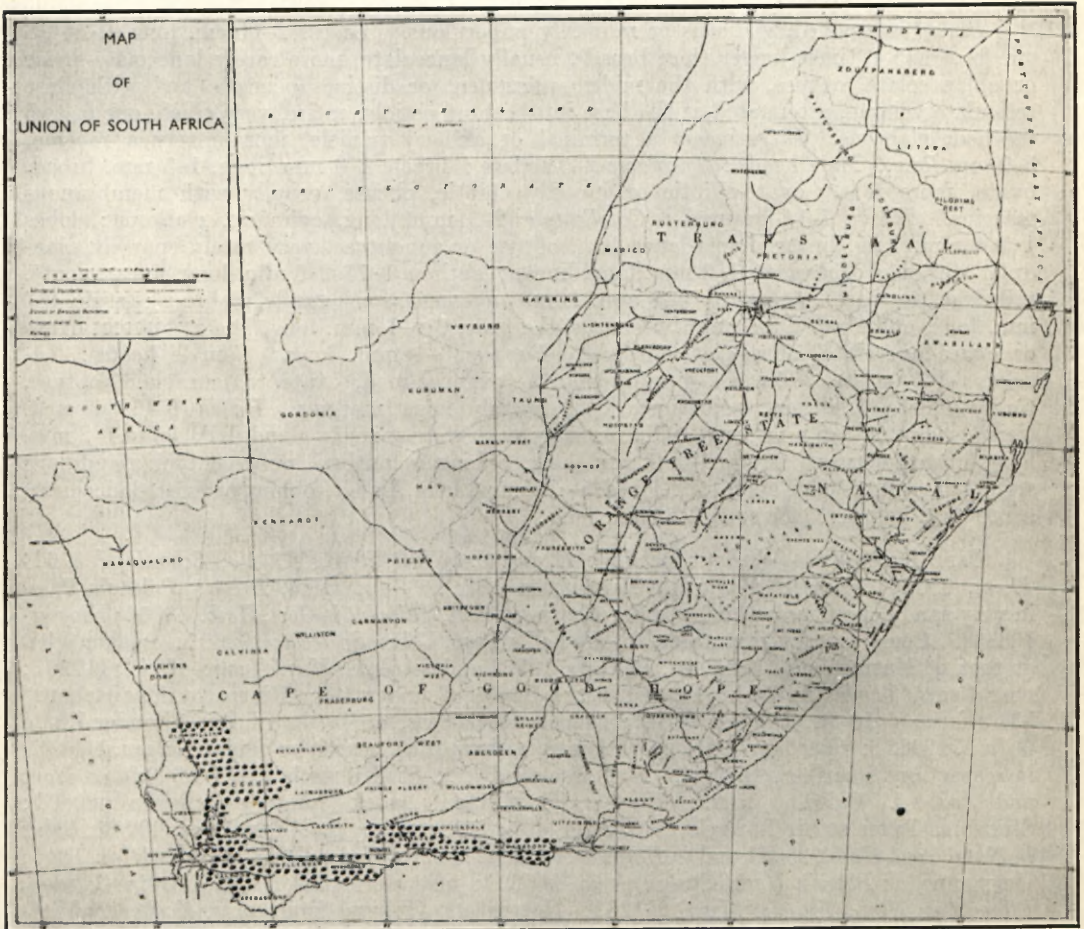
Conyza neriifolia L'Hér. ex *Steud.*, *Nomencl.*, I, 98 (1821).

Tarchonanthus dentatus Eckl. and Zeyh. ex *DC.*, *Prodr.*, V, 430 (1836), non Thunb.

Branches grooved, glabrous or minutely puberulous. *Leaves* 2–11 cm. long, 0.5–1.8 cm. broad (5–8 times longer than broad), usually lanceolate, more rarely lanceolate-linear or oblanceolate, obtuse, with the midrib prominent or distinct beneath, and with close reticulate veining, attenuated at the base into a short petiole, entire, very rarely one or two toothed, glabrous. *Inflorescence* a terminal or axillary panicle, more rarely a raceme, 3–9 cm. long. *Male heads*: *Involucre* 2–5-seriate; bracts 1–3 mm. long, 1–3 mm. broad, ovate, more rarely ovate-elliptic or broadly elliptic, obtuse, usually with membranous margins. *Heads* 7–14-flowered. *Corolla-tube* 2–3 mm. long, cylindric, glabrous; lobes 1.5–4 mm. long, linear, linear-lanceolate, obtuse or subobtuse, very rarely sparsely glandular without. *Filaments* 1–2 mm. long, linear; anthers 1.75–2.5 mm. long, linear, acute, tailed at the base. *Ovary* 0.75–2 mm. long, pubescent, very rarely glabrous; style 4–7 mm. long, cylindric, sometimes bulbous at the base, 0.5–1 mm. long, linear, oblong, ovate or ovate-lanceolate, obtuse or subacute. *Pappus* 3–4 mm. long. *Female heads*: *Involucre* 4–5-seriate. *Bracts* 2–4 mm. long, 1–3 mm. broad, ovate to lanceolate, obtuse, rarely ciliate, glabrous, sometimes with membranous margins. *Heads* 6–11-flowered. *Corolla-tube* 2.5–3.5 mm. long, cylindric, glabrous, rarely sparsely glandular; lobes 1–2 mm. long, linear, obtuse. *Ovary* 1–1.5 mm. long, oblong in outline, pubescent or glandular; style 4.5–6 mm. long, cylindric; lobes 5–7.5 mm. long, linear, oblong or linear-lanceolate, acute or subobtuse. *Pappus* 3–5 mm. long.

CAPE PROVINCE.—Without locality: *E.* and *Z.* in *Nat. Herb.*, 11934!; *Schonland*, 576!; *Thom*, 950!; *Niven*!; *Wallich*! *Clanwilliam* distr.: *Wupperthal*, *Drège*; *Pakhuis Pass*, in very sandy spots under bushes and rocks, very rare, *Leipoldt in Govt. Herb.*, 1905!; *Rogers*, 16836!. *Ceres* distr.: *Mountains at Mitchell's Pass*, *Febr.*, *Schlechter*, 9960!; *Laaken Vlei*, at foot of *Matroosberg*, 3,500 ft., *Phillips*, 1926! and in *Herb. Mus. Austro-Afric.*, 11726!; near *Ceres*, *Thode*, A2250!. *Paarl* distr.: *Banks of upper Berg River*, south of *Roberts' Vlei*, shrub 4–10 ft., *Pillans*, 6754!; *French Hoek Pass*, on banks of *River Zonder Einde Galpin*, 12382!; *river banks*, *Klein Drakenstein Mountains*, near farm *Saleni*, *Galpin*, 11044!; in respectibus *Paarlberg*, *Drège*!. *Stellenbosch* distr.: *Stellenbosch*, 2,000–4,000 ft., *Ecklon*, and *Zeyher*!. *Caledon* distr.: *Nieuwe Kloof*, *Houw Hoek Mountains*, *Burchell*, 8080!; *Steenbras River at Sir Lowry's Pass*, *MacOwan*, 184!; near *Steenbras River*, 900 ft., *Bolus in Natal Govt. Herb.*, 2559! and in *Herb. Wood*, 3802! and in *Herb. Norm. Austro-Afric.*, 184!; *Hermanus*, *de Beer in Herb. Transv. Mus.*, 16529!; near *Hermanus*, *Smuts*, 1204!; *Caledon*, *Elbrecht in Herb. Transv. Mus.*, 22126!; *Hottentots' Holland Mountains*, *Zeyher*!. *Worcester* distr.: On mountains above *Worcester*, *Rehmann*, 2657; *Hex River Valley*, 2,000 ft., *Tyson*, 757!; near *De Doorns*, *Bolus in Nat. Herb.*, 21079!; *Du Toits Kloof*, *Marloth*, 635!;

12746!; Waterkloof, 20 miles south of Worcester, *Andreae*, 332!. Tulbagh distr.: Tulbagh Waterfall, 600 ft., Febr., *Schlechter*, 7511!; *Mund*!. Wellington distr.: Baines Kloof, *Smith*, 2686!. Swellendam distr.: Swellendam, 500–2,500 ft., *Mund*!; *Kuntze*!; *Smith*, 2733!; between Grootvaders Bosch and Zuurbraak, *Burchell*, 7260!; Zuurbraak, *Thode*, A2332!. George distr.: George, *Patterson*, 1267!; in moist woods, *Prior*!; The Wilderness, Febr., *Moss*, 5613!; Montagu Pass, *Schweickerdt in Nat. Herb.*, 21080!. Knysna distr.: Plettenberg Bay, *Pappe*!; *Zeyher*!; near Deepwalls, *Phillips in Herb. Forest Dept.*, 5512!; 5497!; Forest Station, *Schonland*, 3583!; Gouna River, *Keet in Herb. Forest Dept.*, 2754; Lily Vlei Forest, *Keet*, 712! and in *Nat. Herb.*, 2108, 3322!; Plettenberg Bay, *Rogers*, 26787!. Riversdale distr.: Corente River, *Muir*, 214!; Glen, *Muir in Nat. Herb.*, 3719!. Humansdorp distr.: Ratels Bosch, Zitzikamma, *Fourcade*, 576!; north side of Kromme River, near Wagenboom Station, *Burchell*, 4850!; Lottering River, Zitzikamma, *Galpin*, 9489!, 4130!; Witkliprivier, *Marloth*, 13064!; Storm's River, *Zahn in Herb. Forest Dept.*, 4049!, 4095!. Oudtshoorn distr.: Cango Valley, *Marloth*, 12130!. Prince Albert distr.: Zwartberg Pass, near Kliphuis Vlei, *Pocock in Nat. Herb.*, 21082!.



B. nervifolia (L.) R. Br.

Common in the Knysna district on banks of mountains and forest streams, up to 6 ft. high and 1-2 in. stem diameter; sometimes a tree 15-18-ft. high. Common name "Water Wit Els."

The type specimens deposited in the *Herb. Linn. Soc. Lond.* and the *Hort. Clifford.* in *Herb. Mus. Brit.* consist of sterile material. The leaves and branches of these resemble modern gatherings in every respect; furthermore the characteristic rusty brown indumentum on the young parts, leaves very little doubt as to the identity of the species.

2. B. glabra (L.f.) *Druce*, in *Rep. Bot. Exch. Cl. Brit. Isles*, 1916, p. 611 (1917).

Syn.: *Tarchonanthus glaber* Linn., f. *Suppl.*, 360 (1781); Linn., f. *Syst. Nat.*, ed. 13, 1204 (1791); Steud., *Nomencl.*, II, 826 (1821); Thunb., *Fl. Cap. ed. Schultes*, 638 (1823).

Tarchonanthus dentatus Thunb., *Prodr. Pl. Cap.*, 145 (1794); Willd., *Sp. Pl.* III, iii, 1793 (1804); Pers., *Syn.*, I, 405 (1807); Steud., *Nomencl.*, II, 826 (1821); Thunb., *Fl. Cap. ed. Schultes*, 638 (1823).

Brachylaena grandifolia DC. *Prodr.*, V, 430 (1836); Drège, *Zwei Pflzgegor. Doc.*, 135 (1843).

Brachylaena dentata (Thunb.) Less., *Syn. Comp.*, 208 (1832); Harv., *Fl. Cap.*, III, 116 (1865); Sim, *Forest Flor. C.G.H.*, 246 (1907); Wood, *Flor. Natal*, 169 (1908); Juel, *Plant. Thunb.*, 381 (1918); Sim, *Native Timb. S. Afr.*, 44 (1921); Bews, *Flor. Nat. and Zulul.*, 215 (1921); Henkel, *Woody Pl. Nat. and Zulul.*, 72 (1934).

Branches grooved, minutely tomentose or glabrescent. *Leaves* distinctly petioled, 3-13.5 cm. long, 1.2-4.5 cm. broad, elliptic-lanceolate, obovate, elliptic-oblong, rounded, subacuminate or distinctly acuminate, obtuse, with the mid-rib and lateral veins distinct beneath, narrowed at the base, entire or sinuate-toothed near the apex, glabrous or more rarely rusty tomentose beneath; petiole 1-1.5 cm. long, concave above, convex beneath. *Inflorescence* a terminal or axillary panicle, 2.5-12 cm. long, rarely up to 15 cm. long. *Male heads*: *Involucre* 3-6-seriate; bracts 1.75-5 mm. long, 2-4 mm. broad, elliptic, ovate-elliptic, ovate, obtuse, sometimes with membranous margins. *Heads* 13-24-flowered. *Corolla-tube* 2-4.5 mm. long, cylindric, sometimes subcampanulate above, glabrous; lobes 1.5-3 mm. long, linear, linear-lanceolate, obtuse or subobtus. *Filaments* 1-2 mm. long, linear; anthers 2-3 mm. long, linear, acute, tailed at the base. *Ovary* 1.5-2 mm. long, oblong in outline, pubescent, more rarely villous; style 5-7 mm. long, cylindric; lobes 0.5-1 mm. long, linear, linear-lanceolate or ovate-lanceolate, obtuse or subobtus. *Pappus* 4-4.5 mm. long. *Female heads*: *Involucre* about 6-seriate. *Bracts* 2-3 mm. long, 1.5-3 mm. broad with membranous edges; the outer ovate, obtuse; the inner linear to lanceolate. *Heads* 4-5-flowered. *Corolla-tube* 4 mm. long, cylindric; lobes 1.25 mm. long, linear-lanceolate, subobtus. *Ovary* 3-25 mm. long, terete, linear in outline, shortly villous; style 6 mm. long, cylindric; lobes 1 mm. long, oblong-linear, obtuse.

CAPE PROVINCE.—Without precise locality: In Cap. b. spei circa Essenbosch rivum, Nov., Thunberg (2 sheets in *Herb. Thunberg, Uppsala*)!. Caedon distr.: Hermanus, *Smuts in Herb. Marloth*, 11905!. Knysna distr.: Stinkhout Bosch, *Sim* and *Hewson in Herb. Forest Dept.*, 2236!. Humansdorp distr.: Clarkson; Thode, A 860!; Storm's River, Zahn in *Herb. Forest Dept.*, 4050; Kwaaibrand Forest, 700 ft., Burton in *Herb. Forest Dept.*, 40!; near the mouth of the Storm's River, 200 ft., Fourcade, 537!; Stinkhout Bosch, about 2,000 ft., Ross in *Herb. Forest Dept.*, 2061!; Sim and Hewson in *Herb. Forest Dept.*, 2236!; Storm's River, Keet, 543! and in *Herb. Forest Dept.*, 3064!. Port Elizabeth distr.: Waterfall at Van Staden's River, MacOwan, 2076!; Van Staden's Mountains, Zeyher, 2785!; Patterson, 879!; Longmore Forest Reserve, Long, 1051!. Alexandra distr.: Zuurbergen, 2,000-3,000 ft., Drège!. Lusikisiki distr.: Egossa Forest, Sim, 2395!. Uitenhage distr.: Eastern slopes Eland's River Mountains, Sim in *Herb. Forest. Dept.*, 2102!.

NATAL PROVINCE.—Without precise locality, *Garrard*, 1512!; edge of wood, Noodsberg, *Wood*, 5274!, 4129! and in *Natal Govt. Herb.*, 4731!.

Ross in Herb. Forest Dept., 2062 may be a water shoot of the species; if so then the leaves are closely tomentose beneath.

Found in some quantity in Kwaaibrand Forest (Humansdorp distr.) which is almost entirely on Table Mountain sandstone. Common name "Malbar."

According to notes on various sheets this species is a tree of "considerable height" (40–50 ft.) the stem of which may reach a diameter of 10–12 inches. It is a good waggon-wood and is common in parts of the coast region, especially in open places along road-margins in high forest (*Keet*).



B. glabra (L. fil.) Druce.

3. *B. uniflora* Harv., Fl. Cap., III, 117 (1865); Wood, Flor. Natal, 170 (1908); Bews; Flor. Nat. and Zulul., 215 (1921).

Type specimen deposited in *Herb. Hort. Bot. Reg. Kew*.

Branches slightly grooved, glabrous or the younger parts minutely tomentulose. *Leaves* petioled, 6–12 cm. long, 1.5–4 cm. broad, elliptic-lanceolate, obovate, obovate-oblong to oblong-lanceolate, sometimes subacuminate or acuminate, rounded or obtuse at the apex, narrowed at the base, entire or with crenate-serrated margins in the upper portion, with the mid-rib and lateral veins prominent beneath; petiole 0.5–1.5 cm. long, convex beneath, channelled above. *Inflorescence* a dense panicle, terminal or axillary, 5–8 cm. long; the ultimate heads corymbose. Male heads: *Involute* 5–6-seriate; bracts 0.5–2 mm. long, ovate to lanceolate or elliptic-lanceolate, obtuse, sometimes with membranous margins. *Heads* 1–3-flowered more or less elongated, about 3 mm. long and 1 mm. in diameter. *Corolla-tube* 2–3.5 mm. long, cylindric, sometimes subcampanulate above; lobes 1–2.5 mm. long, lanceolate, oblong-lanceolate or linear-lanceolate, obtuse or subacute. *Filaments* 1 mm. long, linear: anthers 1–1.75 mm. long, linear, acute, tailed at the base.



B. uniflora Harv.

Style 3.5–6 mm. long, cylindric; lobes 0.5 mm. long, ovate, obtuse or subobtus. *Pappus* 3.5 mm. long. Female heads: *Involucre* about 6-seriate; bracts 1.25–3 mm. long, about 1 mm. broad, ovate to elliptic, obtuse, with membranous margins. *Heads* 4-flowered, about 3.5 mm. long, and 1.5 mm. in diameter. *Corolla-tube* 2.5 mm. long, cylindric; lobes 0.5 mm. long, lanceolate, subacute. *Ovary* terete, pubescent; style 3 mm. long, cylindric; lobes 0.5 mm. long, ovate, subobtus. *Pappus* 3 mm. long.

NATAL PROVINCE.—Without precise locality: No collector, in *Natal Herb.*, 778!; *Gerrard*, 29!; *Gerrard and McKen*, 1866! and in *Natal Govt. Herb.*, 11006!. Port Shepstone distr.: Amanzimtoti, *Kotze*, 432! and in *Herb. Forest Dept.*, 6854!. Pinetown distr.: Durban, *Wood*, 12670!; Sydenham, *Wood*, 12287!; Dumisa, *Rudatis*, 653!, 1052!. Inanda distr.: Inanda, 1,800 ft., *Wood*, 585! and in *Natal Govt. Herb.*, 2826!. New Hanover distr.: On rocky hill, Great Noodsberg, *Wood*, 4129! and in *Natal Herb.*, 4731!. Kranskop distr.: Qudeni Forest, *Davis*, 82! and in *Natal Govt. Herb.*, 8816!.

A common large tree in the Hlatikulu Forest, Zululand.

A species which was only imperfectly known at the time Vol. III of the *Flora Capensis* was being compiled, but additional material collected since has enabled the authors of this paper to draw up the accompanying description of both male and female plants.

According to *Rudatis* this species reaches a height of up to 20 metres.

4. *B. huillensis* O., *Hoffm.*, in *Engl. Jahrb.*, XXXII, 149 (1902).

A tree. *Branches* striate and grooved, glabrous in age; the young parts densely minutely albo-tomentulose. *Leaves* petiolate; petiole 7–10 mm. long, channelled above, convex below, densely albo-tomentulose; lamina up to 7.5 cm. long and 2.0 cm. broad, oblanceolate, conspicuously mucronate, acute, cuneate towards the base, and towards the apex often somewhat undulate, glabrous, shiny and conspicuously veined above, densely albo-tomentulose and inconspicuously veined beneath. *Inflorescence* consisting of pendunculate glomerate capitula, about 15–20 mm. long; capitula at length sub-corymbose. *Male heads*: *Involucre* 3–4-seriate; bracts 1–2.5 mm. long, ovate to ovate-oblong, sub-acuminate or obtuse, densely albo-tomentulose. *Heads* 7–8-flowered, more or less globose, 3 mm. long and 2.5 mm. in diameter. *Corolla-tube* 2.0 mm. long, narrowly funnel-shaped, glabrous; lobes 2 mm. long, oblanceolate, acute or subobtus. *Filaments* 0.6 mm. long; anthers 1–1.75 mm. long, linear, acute, tailed. *Style* 3.5 mm. long, cylindric; style-branches 0.6 mm. long, subacuminate. *Pappus* setose; bristles 2.5–3 mm. long.

TRANSVAAL PROVINCE.—Zoutpansberg distr.: Punda Maria, Kruger National Park, *Lang s.n.*, in *Herb. Tol. Mus.*, 32343!.

The above gathering consists of a male specimen only, and thus strictly speaking cannot be compared with the type specimen of *B. huillensis* which is female. Our plant, however, resembles the latter in characters of foliage and habit so closely, that we do not hesitate in referring it to that species. *Leemann* 24 from the Blaauwberg, Pietersburg distr., which is in leaf only is probably this species.

The description given above was drawn up solely from the Transvaal specimen cited. This was done with a view to simplifying any questions regarding synonymy should our plant eventually (after the female has become known from the Transvaal) prove to be a species distinct from the Angolan *B. huillensis* O. Hoffm.

5. *B. ilicifolia* (Lam.) *Phillips et Schweickerdt*, comb. nov.

Syn.: *Baccharis ilicifolia* Lam., *Encycl. Method. bot.*, i, 345 (1783); Steud., *Nomencl.*, I, 98 (1821).

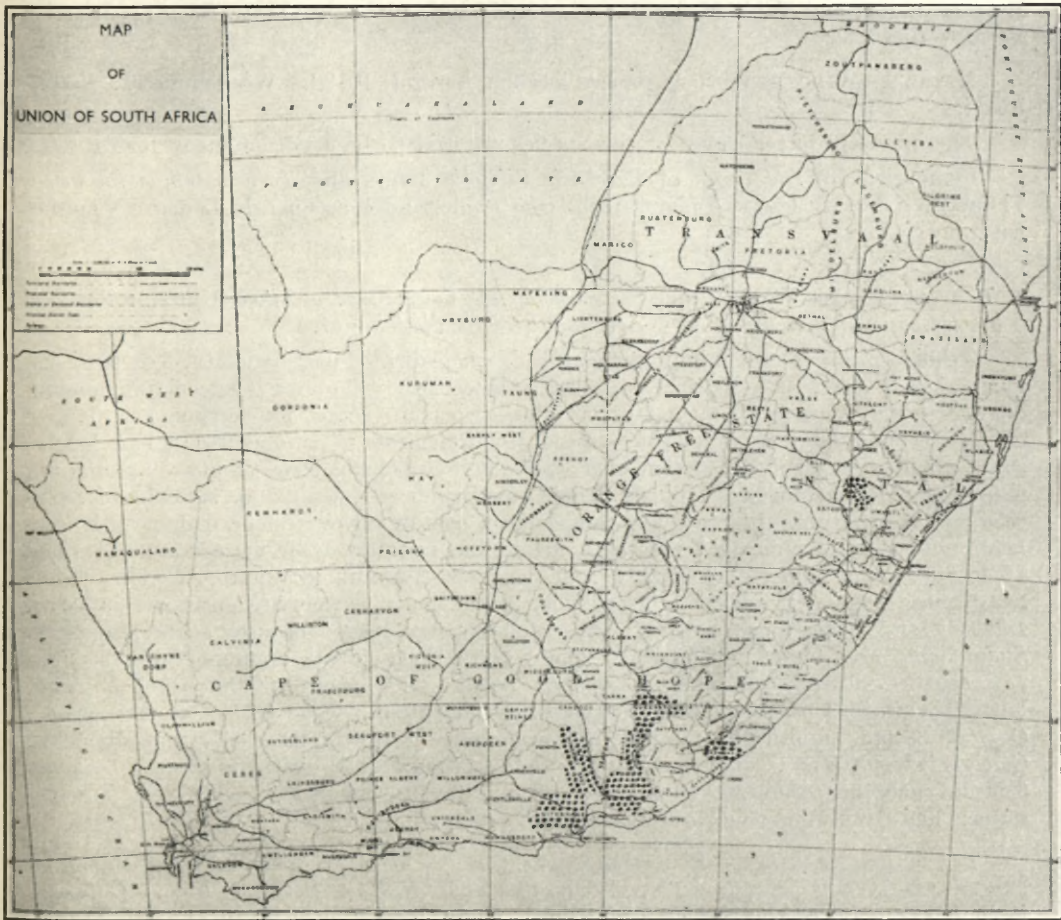
Tarchonanthus racemosus Thunb., *Prodr. Pl. Cap.*, 145 (1794); Thunb., *Fl. Cap. ed. Schultes*, 638 (1823); Sprengel, *Syst. Veg.*, III, 456 (1826), sub *T. ellipticus* Thunb.

Brachylaena racemosa (Thunb.) Less., Syn. Comp., 208 (1831); DC., Prodr. V, 430 (1836); Harvey, Fl. Cap., III, 116 (1865); Sim, Forest Fl. C.G.H., 246 (1907); Wood, Fl. Natal, 170 (1908); Juel, Plant Thunb., 381 (1918); Sim, Native Timb. S. Afr., 44 (1921); Bews, Flor. Nat. and Zulul., 215 (1921); Henkel, Woody Pl. Nat. and Zulul., 72 (1934).

Brachylaena elliptica DC., Prodr., V, 430 (1836), excl. syn., non Less. !; Drège, Zwei Pflzgeogr.—Doc., 47 et 137 (1843).

The type specimen is deposited in *Herb. Lamarck, Mus. Hist. Nat., Paris*.

Branches grooved, minutely tomentulose or glabrous. *Leaves* subsessile or shortly petioled, 1–4.5 cm. long, 0.25–1 cm. broad, oblong, oblong-obovate, oblong-lanceolate to linear, mucronate at the apex, rarely without a mucro, slightly narrowed to the base, with the mid-rib prominent or distinct but lateral veins hidden, usually entire, sometimes with a few teeth, glabrous above, albo-tomentose beneath; petiole up to 2 mm. long. *Inflorescence* axillary, few-headed, rarely of a solitary head, usually shorter than the leaves. *Male heads*: *Involute* about 5-seriate; bracts ovate, ciliate. *Heads* 9–11-flowered, more



B. ilicifolia (Lam.) Phill. and Schw.

or less globose, about 3·5 mm. long, about 4 mm. in diameter above. *Female heads*: *Involucre* 5–8-seriate; bracts 1·5–5 mm. long, ovate to linear-oblong, obtuse, ciliate. *Heads* 10-flowered, campanulate, 5·6 mm. long, 2·5 mm. in diameter above. *Corolla-tube* 4–5·5 mm. long, cylindric, glabrous; lobes 0·5–3 mm. long, linear or linear-lanceolate, obtuse. *Ovary* 2 mm. long, somewhat angled, pubescent; style 5 mm. long, cylindric; lobes 0·5 mm. long, linear, obtuse.

CAPE PROVINCE.—Without precise locality, de Mr. *Sonnerat* (*Herbier de Lamarck*); in *sylvula Kuka*, Dec., *Thunberg* (2 sheets)!. British Kaffraria: Without precise locality, *Cooper*, 408! and in *Natal Govt. Herb.*, 8336!. Uitenhage distr.: Uitenhage, moist shady places, *Prior*; near Uitenhage, *Burchell*, 4450!; woods by the Zwartkops River, *Ecklon* and *Zeyher*, 481!, 891!; Van Staden's River Mountains, 1,000–3,000 ft., *Wallich*!; at Uitenhage, *Bowie*!. Port Elizabeth distr.: Fish River, *Zeyher*, 819!; Redhouse, *Patterson*, 959!; Zwartkops, *Marloth*, 6110!. Albany distr.: Without precise locality, *Prior*!. Komgha distr.: Among shrubs, near Komgha, 1,800 ft., *Flanagan*, 406!. Fort Beaufort distr.: Kat River, 800–1,000 ft., *Baur*, 1077!. Somerset East distr.: By the Little Fish River, *Burchell*, 3267!; between Zuurberg Range and Klein Bruintjies Hoogte, 2,000–3,000 ft., *Drège*!; between Little Fish River and Commandagga, *Burchell*, 3276!. Queenstown distr.: Between Shiloh and Table Mountain, stony and rocky places, 4,000 ft., *Drège*!; Junction Farm, *Galpin*, 8126!.

NATAL PROVINCE.—Without precise locality, *Gerrard*, 1018!. Weenen distr.: *Sutherland*!.

The intensely bitter leaves of this species are said to be a good remedy for diabetes.

Comparison of the types of *Baccharis ilicifolia* Lam., and *Tarchonanthus racemosus* Thunb. has shown these two plants to be conspecific, and consequently Lamarck's epithet has priority.

6. *B. transvaalensis* Phillips and Schweickhardt, sp. nov.; *B. Hutchinsii* Hutch. *affinis*, sed bractes capituli masculi minoribus et multiseriatis distinguitur.

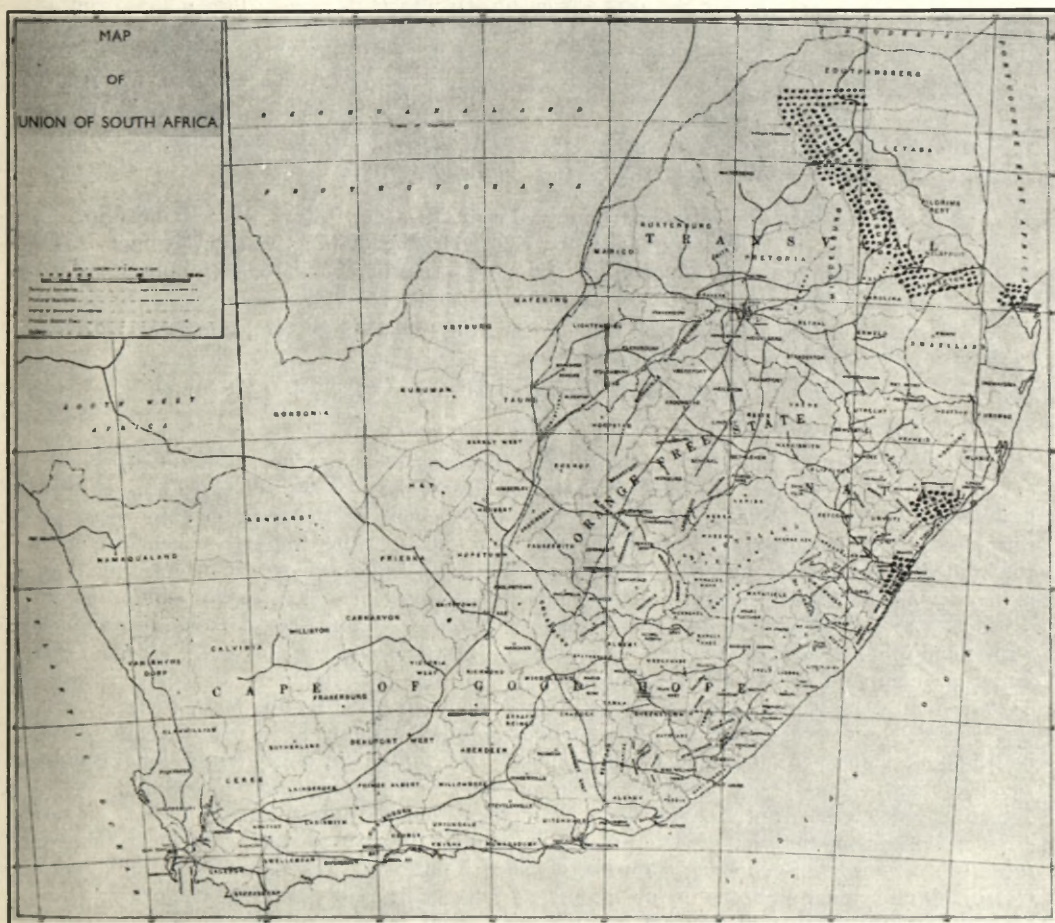
Arbor. *Rami* striati, minute tomentulosi, vel glabri. *Folia* petiolata, 3·5–16·5 cm. longa, 1·2–3·7 cm. lata, lanceolata, elliptico-lanceolata vel obovato-lanceolata, nonnunquam breviter acuminata, rotundata vel obtusa, perraro acuta, integerrima vel margine dentata et undulata, supra glabra, subtus albo-tomentosa; petiolus 1–1·2 cm. longus, supra canaliculatus, subtus convexus. *Inflorescentia* e paniculis terminalibus vel axillaribus sistens, 4·5–16 cm. longa; capitula deinde subcorymbosa. *Capitulum masculinum*: *Involucrum* 4–6-seriatum; bractee 1–2 mm. longae, ovatae vel ovato-lanceolatae vel lanceolatae, obtusae, plus minusve tomentosae, marginibus membranaceae vel ciliatae. *Capitula* 11–16-flora, plus minusve globosa, 2 mm. longa et 2·5 mm. diametro. *Corollae* tubus 3–3·5 mm. longus, cylindricus, glaber; lobi 2 mm. longi, lanceolati, obtusi vel subacuti. *Filamenta* 0·5–1 mm. longa, linearia; antherae 1·5–2 mm. longae, lineares, acutae, caudatae. *Stylus* 5·5–6 mm. longus, cylindricus; lobi 0·5 mm. longi, ovati, nonnunquam subacuminati, acuti et obtusi. *Capitulum foemineum*: *Involucrum* 6-seriatum; bractee 1·5–4 mm. longae, ovatae vel ovato-ellipticae, obtusae vel subacutae, glabrae vel sparse tomentosae. *Capitula* 8-flora, ambitu plus minusve obovata, circiter 3·5 mm. longa et 3 mm. diametro. *Corollae* tubus 3·5 mm. longus, angulatus; lobi 0·5 mm. longi, ovati, sub-acuti. *Ovarium* 3·5 mm. longum, pubescens, teres; stylus 5 mm. longus, cylindricus, basin versus incrassatus; lobi 0·75 mm. longi, ovati-lanceolati, subobtusii.

TRANSVAAL PROVINCE.—Pietersburg distr.: Forest between Woodbush and Haenertsburg, 4,000–6,000 ft., *Hutchins* (type! deposited in *Herb. Bot. Reg. Kew*); *O'Connor* in *Herb. Forest Dept.*, 1471!, 3559!; Woodbush, *Hoffman*, 79!; no collector in *Herb. Transv. Mus.*, 9703!; Tzaneen, Pigeon Hole Farm, *McCallum*, 1532!; Woodbush, *Grenfell* in *Col. Herb.*, 1105!; *Botha* in *Herb. Forest Dept.*, 3559!, 5286!; no collector, in *Herb. Forest Dept.*,

4974!; Middelkop Plantation, *Keet*, 1189!. Lydenburg distr.: On farm Hebron, *Kotze in Herb. Forest Dept.*, 2835!. Pilgrims Rest distr.: Sabihoek, *Oranje*, 2!; Lothian, *Keet*, 1130!; Graskop, *Evans in Herb. Forest Dept.*, 5398!; Joubert in *Herb. Forest Dept.*, 8724!. Barber-ton distr.: Wooded ravines, Rimer's Creek, 3,000–4,000 ft., *Galpin*, 451!; *Thorncroft in Herb. Transv. Mus.*, 11174!, 2773!; Stentor, *Munro*, P.S. 35!.

NATAL PROVINCE.—Pinetown distr.: Stella Bush, near Durban, *Tyrrell in Natal Herb.*, 21310!; Amanzimtoti, *Gerstner in Natal Herb.*, 22079!. Zululand: Ngomi Forest, *Tustin in Herb. Forest Dept.*, 3555!, 3556!; N'Kanghla Forest, *Forbes*, 766!; Hlatikulu Forest, *Boocock*, 26! and in *Herb. Forest Dept.*, 5323!.

P.E. AFRICA.—Lourenco Marques, on beach, *Munro*, P.S. 166!; Maputaland, *Maputa-land Exped.*, in *Herb. Transv. Mus.*, 14354!.



B. transvaalensis Phill. and Schw.

A specimen (*Hubbard in Herb. Forest Dept.*, 3668 and in *Nat. Herb.*, 21083) collected on Meintjies Kop, Pretoria, is stated by the collector to be probably a cultivated specimen from the northern Transvaal. *Burt Davy*, 1521, Sabie Hoek Forest, Lydenburg distr.;

Burt Davy, 1171, Potato Bush, Zoutpansberg distr.; *Burt Davy*, 1413, near Pilgrim's Rest; *Burt Davy*, 2692, Madjadjes Mountains, Zoutpansberg distr., all without flowers are probably water shoots of this species.

A large tree up to 70 ft. high and a bole up to 3 ft. in diameter but seldom sound when so large. Wood used a great deal by natives for making assegai handles. Found throughout the Ngomi Forest, Zululand, up to 4,000 ft. altitude. In the Transvaal found associated with dense forest at all elevations from 3,000 ft. upwards. Mostly a crooked much-branched tree growing along the edge of the forest but frequently inside when it makes a fine straight bole. Timber strong elastic and durable in the ground. Common name "Vaalbos"; Sesuto name is "M'pata."

[*Obermeyer*, *Schweickerdt* and *Verdoorn* 349 from the southern slopes of the Zoutpansberg is probably a female plant of the above species, but since no female specimens have been seen in the Kew Herbarium, there is some uncertainty with regard to the identity of this sheet.] The specific epithet was given by Dr. J. Hutchinson but no description published.

7. **B. elliptica** (Thunb.) Less., Syn. Comp., 208 (1832); *Harvey*, Fl. Cap., III, 116 (1865); *Sim*, Forest Flor. C.G.H., 246 t. 92 (1907); *Wood*, Pl. Natal, 169 (1908); *Juel*, Plant. Thunb., 381 (1918); *Sim*, Native Timb. S. Afr., 44 (1921); *Bews*, Flor. Nat. and Zulul., 215, (1921); *Henkel*, Woody Pl. Nat. and Zulul., 72 (1934).

Syn.: *Tarchonanthus ellipticus* Thunb., Prodr. Pl. Cap., 145 (1794); Willd., Sp. Pl., III, iii, 1793 (1804); Pers., Syn., II, 405 (1807); Steud., Nomencl., II, 826 (1821); Thunb., Fl. Cap. ed. Schult., 638 (1823); Spreng., Syst. Veg., III, 456 (1826), excl. syn.

Brachylaena dentata DC., Prodr., V, 430 (1836), incl. syn., non Less.; Drège, Zwei Pflzgeogr.—Docum., 169 (1843).

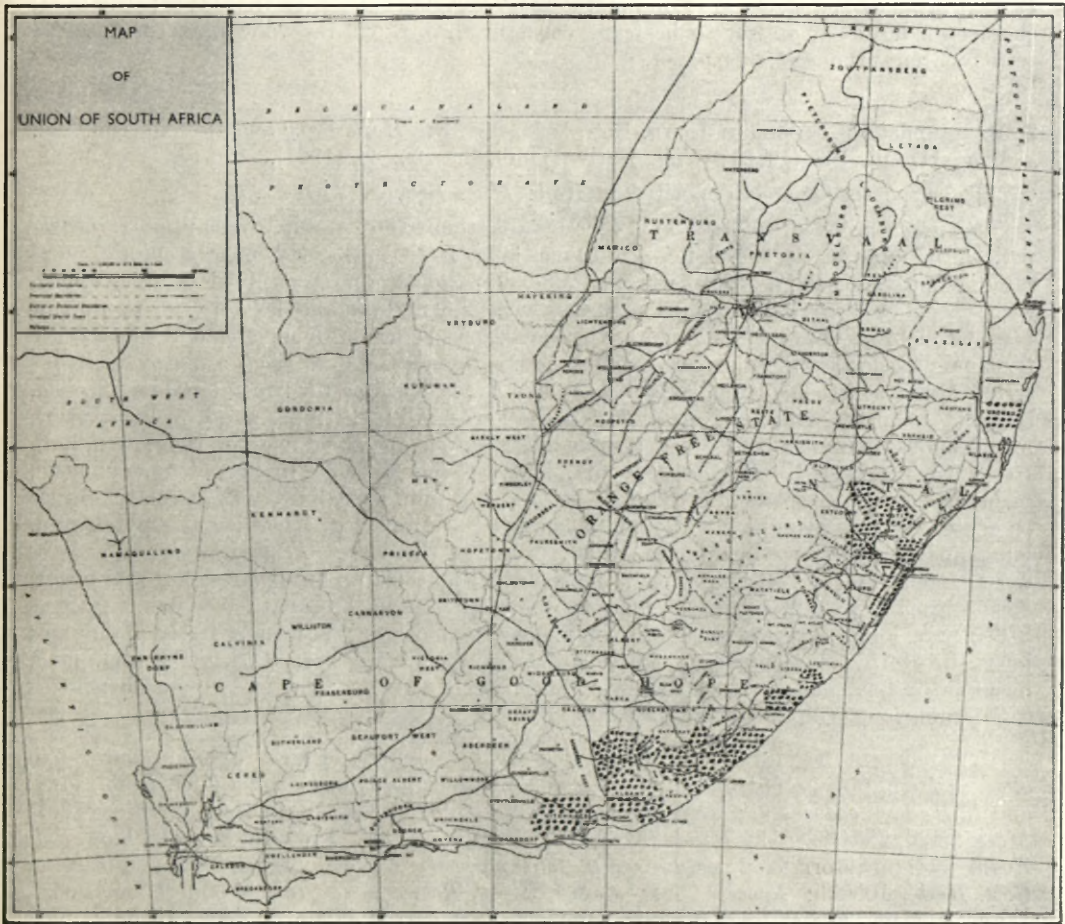
Brachylaena dentata var. *β salicina* DC., Prodr., V, 430 (1836).

Type specimen deposited in *Herb. Thunberg, Uppsala*.

Branches grooved minutely tomentulose. *Leaves* sessile or shortly petioled, 1.5–10 cm. long, 0.5–3 cm. broad, linear, linear-lanceolate, lanceolate, oblanceolate, elliptic-lanceolate or obovate, obtuse, narrowed at the base, entire or the margins somewhat serrate, toothed or irregularly lobed above, glabrous above, white tomentose beneath, with the mid-rib and lateral veins prominent or distinct. *Inflorescence* a dense terminal or axillary panicle or raceme, leafy, mostly compact but sometimes each axillary inflorescence distinct. *Male heads*: *Involucre* 2–5-seriate; bracts 1–3 mm. long, ovate, sometimes with membranous margins, sometimes ciliate or margins shortly lacerate. *Heads* 7–11-flowered, campanulate, about 1.5 mm. long, 1.5 mm. in diameter above. *Filaments* 0.75–1.5 mm. long, rarely 3 mm. long, linear; anthers 1–2.5 mm. long, linear, acute, tailed at the base. *Style* 3–7 mm. long, cylindric, lobes 0.5 mm. long, ovate or lanceolate, usually acuminate, acute or subacute. *Pappus* 1.75–3 mm. long, rarely 4 mm. long, usually rough, sometimes barbellate near the tips. *Female head*: *Involucre* 3–5-seriate; bracts 1–2 mm. long, ovate, obtuse, usually with membranous margins, usually ciliate. *Heads* 4–7-flowered, campanulate, about 2.5–3 mm. long, 2 mm. in diameter above. *Corollatube* 2.35–3 mm. long, cylindric, glabrous; lobes 0.5 mm. long, oblong or linear, subobtuse. *Ovary* 2.5 mm. long, glabrous or pubescent. *Achenes* 4 mm. long, obscurely angled, pubescent. *Pappus* 3–3.5 mm. long.

CAPE PROVINCE.—Without locality, *Watt* and *Brandwyk*, 1808!. Uitenhage distr.; Without precise locality, *MacOwan*!; between Enon and Zuurberg Range, Hoffmanns Kloof, 1,000–2,000 ft. *Drege*!; Zuurberg Pass, 1,800 ft., *Lucy*, 707!. Bathurst distr.: Kowie West, on bush slopes, *Tyson* in *Herb. Transv. Mus.*, 1725! and in *Herb. Mus. Austro-Afric.*, 13364! and in *Govt. Herb.*, 12625! and in *Herb. Marloth*, 8876!; Bell's Beach, Kowie,

Britten, 2095!; Port Alfred, *Rogers*, 16601!. Albany distr.: Grahamstown, *Schlechter*, 2652! and in *Herb. Transv. Mus.*, 21396!; Broekhuizen's Poort, *South*, 670!, *Cooper*, 1563! and in *Natal Govt. Herb.*, 8293!; *Zeyher*, 2736!; *MacOwen*, 244! and in *Natal Govt. Herb.*, 252!, 11005!; Brakkloof, *White*, 1172!; near Riebeeck East, between Zwartwaterpoort and the Zwartwaterberg, *Burchell*, 3456!; Zwartwaterpoort, *Burchell*, 3375!, 3361!, 3400!; near Grahamstown, *Dyer*, 1340!. Bedford distr.: Kagaberg, *Scott-Elliott in Herb. Galpin*, 101!. Adelaide distr.: Without precise locality, *Marloth*, 5356!; *Watt* and *Brandwyk*, 1286!; summit Mungo Mountain, *Galpin*, 11544!. Kingwilliamstown distr.: Evelyn Valley, Perie Mountains, *Scott-Elliott*, 995!. Stockenstroem distr.: Katberg, *Stayner*, 99!. Stutterheim distr.: Fort Cunningham, 3,500 ft., *Sim*, 2107!. East London distr.: East London, *Ratray*, 70!; *Watt* and *Brandwyk in Nat. Herb.*, 6059!; *Dowling*, 16!; *Munro in Nat. Herb.*, 3333!. Komgha distr.: Near Kei mouth, *Flanagan*, 194!, 241!. Kentani distr.: In woods near Kentani, *Pegler*, 997!, 1521!. Mqanduli distr.: Banks of Umtata River, *Drège*. Port St. John's distr.: Between Umtata River and St. John's River, *Drège*!; Pungwane Forest, *Boshoff in Herb. Forest Dept.*, 3474!; Mtambalala Ridge, *Fegen in Herb. Forest Dept.*, 3340!.



B. elliptica (Thunb.) Less.

NATAL PROVINCE.—Without precise locality, *Cooper*, 1141!. Umzinto distr.: Near Umzumbi, *Wood*, 3052! and in *Natal Govt. Herb.*, 252!; sunny slopes Ifafa Valley, *Rudatis*, 981!; Umkomaas, *Wood*, 4609! and in *Natal Govt. Herb.*, 6411!; Impambantoni Valley, *King*, 97!. Pietermaritzburg distr.: Without precise locality, *Rehmann*, 7595!; Thorny-bush Junction, *Marriott in Natal Herb.*, 24335!. Pinetown distr.: Near Durban, *Wood*, 10977!. Inanda distr.: Umgeni, *Wood*, 8434! and in *Natal Govt. Herb.*, 9133!; Verulam, *Wood*, 936!. Umvoti distr.: Near Greytown, *Wood in Natal Govt. Herb.*, 8893!. Weenen distr.: Hills above Weenen, *Wood*, 4445! and in *Natal Govt. Herb.*, 5160!. Lion's River distr.: Howick, *Mogg in Nat. Herb.*, 21078!. Ubombo distr.: Zululand, Mfongosi River, *Watt and Brandwyk*, 1014!, 1209!.

A specimen, *Zeyher* 271 labelled as from the Kat River, near Philipstown is evidently incorrect as no species of *Brachylaena* occurs so far inland.

Shrub 8 ft. high or a small tree found in the Karroid-scrub veld of the Albany district; eaten by stock (R. A. Dyer). Bush up to 15 ft. high in Natal. Native name "Isiduliwe-hlati."

According to various authors and collectors this species is a shrub or small tree up to 12 ft. high. In leaf-shape it is one of the most variable species of the genus; the floral characters, however, appear to be fairly constant throughout the wide range of material seen by the authors of this paper.

8. B. rotundata *S. Moore*, in *Journ. Bot.*, 1903, p. 131; *Burt Davy and Pott*, in *Ann. Tvl. Mus.*, III, iii, 168 (1912); *Sim*, *Native Timb. S. Afr.*, 44 (1921).

The type specimen is deposited in *Herb. Mus. Brit.*

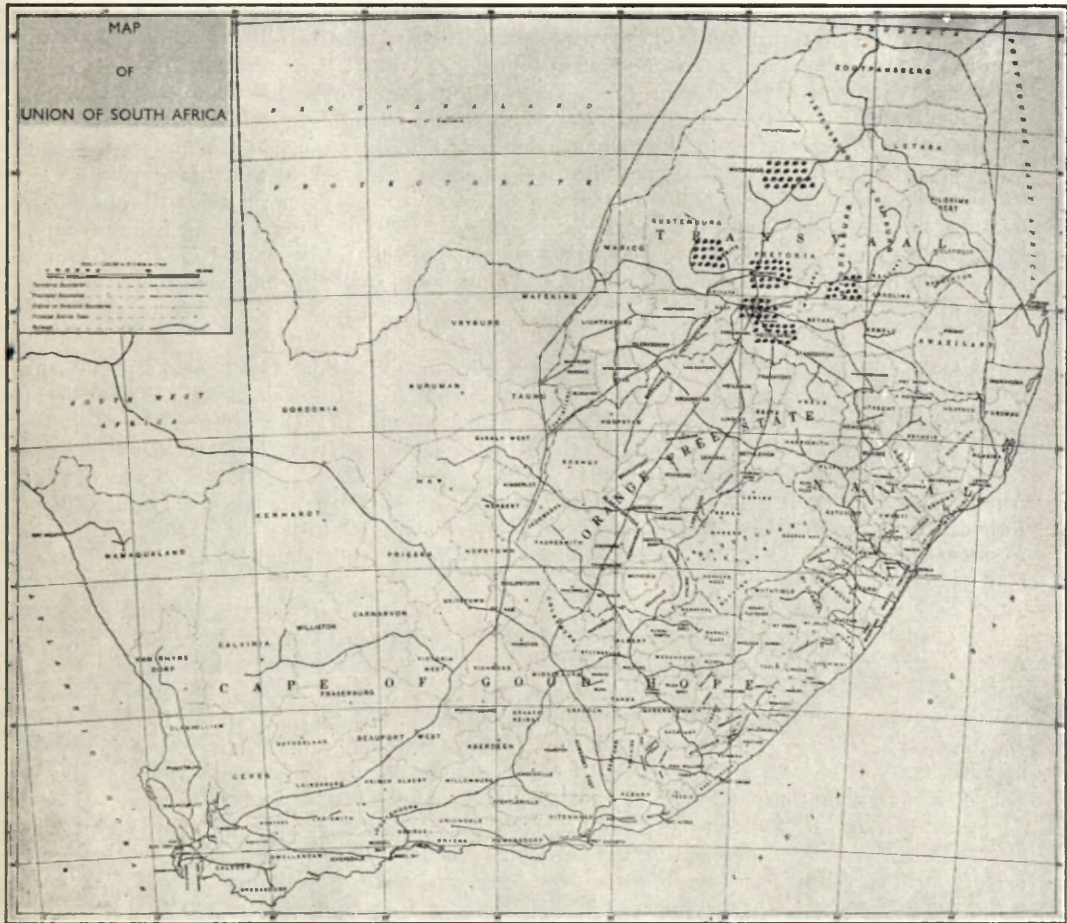
Branches grooved, shortly but densely albo-tomentose, rarely tomentulose. *Leaves* petioled or more rarely sessile, 2.5–10 cm. long, 1–5.2 cm. broad, mostly elliptic, more rarely elliptic-lanceolate, obtuse, usually rounded at the base, more rarely slightly narrowed, with entire or irregularly-toothed margins, with the mid-rib and lateral veins prominent beneath, glabrous above, albo-tomentose beneath; petiole 5 mm. long. *Inflorescence* a dense terminal panicle with the ultimate heads sometimes cymose. *Male heads*: *Involucre* 4–10-seriate; bracts 1.5–5.5 mm. long; the outer ovate, obtuse, with membranous margins, sometimes shortly ciliate and glandular on the lower half; the inner ovate to linear, with membranous margins, sometimes acuminate, glabrous or glandular on the lower half. *Heads* 13–31-flowered. *Pappus* 4–5 mm. long. *Corolla-tube* 3–4.5 mm. long, cylindric, glabrous, sometimes sparsely glandular; lobes 0.5–3 mm. long, linear or lanceolate, obtuse or acute, sparsely glandular without. *Filaments* 1–3 mm. long, linear; anthers 1–3 mm. long, linear, sometimes acuminate, acute, tailed at the base. *Female heads*: *Involucre* 6–7-seriate; bracts 2–5 mm. long, ovate, ovate-lanceolate, linear-lanceolate to linear, obtuse, usually with membranous margins and often glandular on the lower half. *Pappus* 5–6.5 mm. long. *Corolla-tube* 4–5.5 mm. long, cylindric, sometimes sparsely glandular; lobes 0.5–0.75 mm. long, ovate-lanceolate to lanceolate, obtuse. *Ovary* 2–4 mm. long, linear in outline, pubescent or shortly villous; style 4.5–5.5 mm. long, cylindric; lobes 0.5–1 mm. long, elliptic to lanceolate, obtuse.

TRANSVAAL PROVINCE.—Witwatersrand distr.: Jeppe's Ridge, Johannesburg, *Gillallan in Herb. Galpin*, 6018!, 6019!; near Johannesburg, *Adlam in Natal Govt. Herb.*, 7181! and in *Herb. Wood*, 5633!; Johannesburg, *Conrath*, 359!; *Gillfillan in Herb. Galpin*, 6125!; *Moss*, 2505!, 2554!, 2261!; *Rand*, 738! (type). Pretoria distr.: Pretoria, Meintjes Kop, *Pole Evans*, 474!; Pretoria Koppies, *Leendertz*, 235! and in *Herb. Transv. Mus.*, 8702! and in *Natal Govt. Herb.*, 10507!; *Rogers*, 232!; Aapies Poort, *Rehmann*, 4075!; Wonderboom Poort, *Mogg in Herb. Forest Dept.*, 1669!; Onderstepoort, *Mogg in Govt. Herb.*, 15688!; near Pretoria, *Goossens*, 81!; *Mogg*, 15165!, 15309!, 15222!, 15170!, 15088!; *Smith*, 5!; *Verdoorn*, 456!; *Repton*, 18!; *Munro in Nat. Herb.*, 3331!, 1747!; *Pole Evans*, 150!; Hartebeestpoort,

Keet, 1270!. Magaliesberg, *Leemann in Nat. Herb.*, 21116!. Heidelberg distr.: *Bonsma in Herb. Transv. Mus.*, 13139!. Rustenburg distr.: Rustenburg, *Collins in Herb. Transv. Mus.*, 11966!; *Leendertz in Herb. Transv. Mus.*, 9898!; Buffels Poort, *Turner*, 35!. Potgietersrust distr.: Potgietersrust, Pyramid Estate, *Galpin*, 8818!; near Potgietersrust, *Burt Davy*, 2273!. Middelburg distr.: Near Mission Station, Botsabelo, on Little Olifants River, *Marloth*, 11743!, 11755!.

Also occurs in Rhodesia.

NOTE.—*Burt Davy*, 2273 from near Potgietersrust; *Burt Davy*, 2448 and *Mogg*, 15048 from Pretoria; *Murray*, 672 from Heidelberg probably belong to this species.



B. rotundata Sp. Moore.

9. *B. discolor* DC., Prodr., V, 430 (1836); *Drège*, Zwei Pflzgeogr.—Docum., 155 and 157 (1843); *Harv.*, Fl. Cap., III, 117 (1865); *Wood and Evans*, Natal Pl., I, t. 23 and 24 (1898); *Sim*, Forest Flor. C.G.H., 247 (1907); *Wood*, Flor. Natal, 169 (1908); *Sim*, Forest Flor. Portug. E. Afr., t. 73 (1909); *Sim*, Native Timb. S. Afr., 44 (1921); *Bews*, Flor. Nat. and Zulul., 215 (1921); *Henkel*, Woody Pl. Nat. and Zulul., 72 (1934).

Syn.: *Brachylaena natalensis* Sch. Bip., in Walp. Rep., II, 972 (1843); Krauss, in Flora, 1844, p. 671; Harvey, in Fl. Cap., III, 117 (1865).

Branches grooved, minutely tomentulose or subglabrous. *Leaves* petioled, 2.5–18 cm. long (but usually 6–10 cm. long), 1–7 cm. broad, elliptic-oblong, obovate-lanceolate or oblong-lanceolate, obtuse, narrowed at the base into the petiole, entire or remotely toothed, with the mid-rib and lateral veins prominent beneath, glabrous above, white tomentose beneath; petiole about 1 cm. long, convex beneath, scarcely channelled above. *Inflorescence* an axillary or terminal raceme or panicle, with the ultimate heads sometimes cymose. *Male heads*: *Involucre* 5–9-seriate; bracts 1–4.5 mm. long, ovate, obtuse, ciliate, sometimes woolly; the inner ovate, lanceolate to linear, usually woolly-ciliate. *Heads* 11–50-flowered. *Corolla-tube* 3–5 mm. long, cylindric, sometimes gradually narrowing from the base upwards, glabrous; lobes 2 mm. long, lanceolate to linear, usually obtuse, sometimes subacuminate and subacute. *Filaments* 1–2.5 mm. long, linear; anthers 1.5–2.5 mm. long, linear, acute, tailed at the base. *Style* 4.5–8.5 mm. long, cylindric; lobes 0.5–1 mm. long, ovate to lanceolate, subacute. *Pappus* 4–5 mm. long. *Female heads*: *Involucre* 7–10-seriate. *Bracts* 3–5 mm. long, ovate, obtuse, usually woolly; the inner long and lanceolate to linear. *Heads* 11–26-flowered. *Corolla-tube* 5–7.5 mm. long, cylindric, usually widened at the base and sometimes 5-angled or with 5 veins; lobes 0.5 mm. long, ovate to linear, obtuse, more rarely subacute. *Pappus* 7–8 mm. long. *Ovary* 2.5–4.5 mm. long, linear in outline, grooved or sometimes angled, sparsely pubescent, style 6.5–10 mm. long, cylindric, swollen at the base; lobes 0.5 mm. long, ovate to linear, obtuse. *Young fruits* glabrescent.

CAPE PROVINCE.—Without precise locality, *Ecklon*, 269!. Somerset East distr.: Without precise locality, *Bowker*!. Bathurst distr.: Port Alfred, *Burchell*, 2823!; *Tyson*, 54!; *Marloth*, 11998!; *Schonland*, 3304!; *Tyson in Govt. Herb.*, 12571! and in *Herb. Marloth*, 8575!; *Britten*, 773!, 1837!; at the mouth of the Great Fish River, *Burchell*, 3751!. East London distr.: East London, *Gane*, 304!; *Munro in Nat. Herb.*, 3332!. Komgha distr.: Among shrubs near Kei Mouth, *Flanagan*, 860!. Ngqeleni distr.: Bush on sand dunes, *Fegen in Herb. Forest Dept.*, 2060!. Port St. John's distr.: Port St. John's, *Doran in Herb. Forest Dept.*, 1980!. Bizana distr.: Between Umtentu and Umzimkulu River, under 500 ft., *Drege*.

NATAL PROVINCE.—Without precise locality, *Gerrard* and *McKen*, 348!, 1017! and in *Natal Govt. Herb.*, 251!, 802!; *Cooper*, 1240! and in *Natal Govt. Herb.*, 8311!. Port Shepstone distr.: Port Shepstone, Shelly Beach, *Letty*, 222!; *Burt Davy*, 2392!. Pinetown distr.: Salisbury Island, Durban, *Forbes*, 230!; Durban, *Wood*, 5!, 4907!, 12670! and in *Herb. Transv. Mus.*, 15417!; *Krauss*, 243!; in coastal bush, *Schlechter*, 2886!; on dunes, *Rudatis*, 1089!; in dune scrub, *Moss*, 2502!, 1503!; *Marloth*, 4174!; Umbogintwini, *Salter*, 382/7!; Illovo Beach, *Hubbard in Herb. Forest Dept.*, 6103!; north end of Berea Ridge, *Galpin*, 12114!; Amanzimtoti, *Kotze*, 450! and in *Herb. Forest Dept.*, 6873!; Isipingo, *Forbes* and *Obermeyer*, 28!; *Hutchinson*, *Forbes* and *McClellan*, 6!. Umzinto distr.: Without precise locality, *Rudatis*, 673!. Zululand: Dukuduku Forest, *Kotze in Herb. Forest Dept.*, 6533!; *Fair in Herb. Forest Dept.*, 8134!; northern Zululand, *Kotze in Herb. Forest Dept.*, 3516!. Mtunzini distr.: No locality, *Thode*, A1532!.

P.E. AFRICA.—Lourenco Marques, in coastal bush, *Bolus*, 1173!; *Monteiro*, 36!; *Forbes*!; *Borle*, 6!; Inyack Island, *Breyer in Herb. Transv. Mus.*, 20442!.

NOTE.—The record given by Burt Davy and Pott (*Ann. Transv. Mus.*, vol. 3, p. 168) is an error. It is most probably *B. rotundata* Sp. Moore.

Common in coastal bush round Durban. At the Blue Lagoon it is grown as a hedge (Phillips).



B. discolor DC.

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