I. A REVISION OF THE SOUTH AFRICAN SPECIES OF THE GENUS TEPHROSIA PERS.

II. THE SEGREGATION THEREFROM OF THE GENUS OPHRESTIA FORBES.

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I. THE GENUS TEPHROSIA.

Since the South African species of the genus Tephrosia were enumerated by Harvey in "Flora Capensis", Vol. 2 (1860-61), a number of new species has been described by different authors, and unnamed material has accumulated in herbaria. This revision, therefore, was undertaken with the object of collating all the previously published descriptions, and of naming and describing any new species found among the unnamed material.

The genus Tephrosia belongs to the subsection Papilionaceae of the family Leguminosae. It was founded by Persoon in 1807, but, as will be seen by the synonymy, Tephrosia was not the first name to be given to this group of plants. Murrill in 1910 stated that "according to the Vienna Botanical Conference, the retained and rejected names for this genus are as follows:--

<table>
<thead>
<tr>
<th>Retained Name</th>
<th>Rejected Names</th>
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<tbody>
<tr>
<td>Tephrosia Pers. (1807)</td>
<td>Cracca L. (1753);</td>
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<td></td>
<td>Colinel Adans. (1763);</td>
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<td></td>
<td>Needhamia Scop. (1777).</td>
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In Kew Bulletin, 1935, p. 416, there is the following note:--

"Cracca L. is a nomen rejiciendum Tephrosia Pers. being conserved against it. The two are essentially identical, Persoon having transferred to Tephrosia all the original species of Cracca. It would appear, therefore, that the latter cannot be used under the Rules, but still prevents the use of a later homonym."

The genus is not restricted to South Africa, but occurs throughout the whole of Africa, sub-tropical Australia, America, India and other tropical and semi-tropical parts of the world. It is an extremely variable group, its members ranging from small procumbent plants with tiny insignificant flowers to quite big shrubs with racemes of large mauve-purple flowers. Although the prevailing colour of the flowers varies from a pale pinkish-mauve to rosy or mauve-purple, a few species occur with pale yellow and orange to orange-red flowers. There is one constant and conspicuous character by which the genus may be readily recognised, namely, the close, distinct pinnerved venation of the leaflets.

Although it is a large and widely spread group, it is not, as yet, of any economic importance. Some 22 species have been recorded as fish-poison plants, and investigations have been carried out on some of these as to their possible use as insecticides. The principal chemical properties are rotenone, deguelin, tephrosin and toxicarol. Full reports on some of these investigations may be found in Kew Bulletin (1937 and 1940); Annals of Applied Biology (1925; 1932 and 1934); Nature (1936), and Malay Agricultural Journal (1937).

Numerous botanists and travellers have commented on the fish-poison properties of these plants. The four most widely known of these are T. piscatoria of India, T. toxicaria
of America, *T. Vogelii* of Africa and *T. macropoda* of South Africa. In the case of the first three species the crushed leaves and stems are mainly employed, but in *T. macropoda*, or "iLozane" as the Zulus call it, it is the crushed roots that are used. The method of employment, however, is the same. The crushed material is thrown into a quiet pool or pond, or a part of a river that has been dammed up, and in a short while the stupified fish rise to the surface of the water, and are thus easily collected. The flesh of the fish is not in any way affected and may be eaten with impunity. The fish, when they rise to the surface of the water, are not actually dead, but in a state of stupefaction or "intoxication", and if, at this stage, they are removed to a pool of fresh water, they will gradually recover. They die, however, if left too long in the treated pool. Writing of *T. Vogelii*, Fairchild stated that men who have waded in streams treated with this plant feel a "kind of deadness" in their legs.

In 1937, R. C. Roarke of the United States Department of Agriculture, published an interesting and comprehensive list of all the literature in which references occur about these plants, either as fish-poisons or insecticides, under the title of "Tephrosia as an Insecticide.—A Review of the Literature." This is not merely a list of publications, but consists of interesting citations from the books as well.

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**ABBREVIATIONS.**

The following are the abbreviations used when citing specimens deposited in the various herbaria:

- Albany Museum, Grahamstown ......................................................... A.M.
- Bolus Herbarium, Cape Town ............................................................ B.H.
- Botaniska Museet, Uppsala ............................................................... U.
- Botanisches Museum, Berlin-Dahlem ................................................ B.
- Botanisches Museum, Zurich ............................................................. Z.
- British Museum (Natural History), London ......................................... B.M.
- Conservatoire Botanique, Geneva ..................................................... G.
- Dinter's Private Collection ............................................................... D. Coll.
- Fielding Herbarium, Oxford ............................................................. O.
- Grey's University College, Bloemfontein .......................................... G.U.C.
- McGregor Museum, Kimberley .......................................................... Kim.
Undershrubs or herbs, stems erect, ascending or procumbent, simple or branched. Leaves simple, digitate or pinnate. Inflorescence racemose or 1–2 flowers in axils of leaves, racemes terminal, axillary or leaf-opposed; flowers small to large, pale yellow, orange to orange-red, rosy to deep mauve. Calyx teeth subequal or longer than the tube; the lower sometimes longer than the rest, linear-lanceolate to subulate; the two upper lobes connate. Petals unguiculate; vexillum generally suborbicular and more or less velvety pubescent without; alae obliquely obovate or oblong, adhering a little to the carina, incurved, obtuse or sub-acute. Stamens, upper stamen free to the base or middle; anthers iniform. Ovary sessile, usually multiovulate. Style upcurved, often flattened, naked or bearded; stigma terminal, naked or penicillate. Pod linear, flattened, straight or slightly falcate, or plicate or contorted, continuous or slightly septate within.

**KEY TO SECTIONS.**

| Leaves simple | Section 1 |
| Leaves palmate or digitate | Section 2 |
| Leaves pinnate; stipules setaceous, linear to subulate | Section 3 |
| Leaves pinnate; stipules broadly ovate or cordate | Section 4 |

**KEY TO SECTION 1.**

| Flowers in a terminal raceme | A |
| Flowers axillary | B |
| A. Peduncles 1–2-flowered. | 1. marginella. |
| Peduncles many-flowered. | 2. acaciaefolia. |
| C. Leaves subsessile, all simple. | D |
| Leaves petiolate, usually 1–2-jugate, lower occasionally simple | 31. grisola. |
| Plant canescent; leaflets oblong-lanceolate, 2–4 cm. long | 39. elongata. |
| Plant not canescent; leaflets linear-lanceolate, 4–7–9 cm. long |  
| B. Legumes 1-seeded. | E |
| Legumes more than 1-seeded. | 3. sphaerosperma. |
| E. Leaves obovate, up to 2 cm. long. | 4. pseudosphaerosperma. |
| Leaves ovate-lanceolate, up to 5 cm. long. |  

Tephrosia Pers.

1. **T. marginella** H. M. Forbes sp. nov. affinis *T. elongatae* E. Mey. habitu minore gracilioreque foliis simplicibus differt.

*Caulis* ascendentes, simplices vel paene ramosi, sparse appresse pubescentes, fere 33 cm. alti. *Folia* simplicia, lineari-oblonga, 1·5-10 cm. longa, 0·3-1·2 cm. lata, marginibus crassis; petioli striati, 1·6-3 cm. longi; stipulae lineari-subulatae, 4-5 mm. longae. *Pedunculi* terminales, 1-2-flori, 4-5-20 cm. longi. *Flores* usque ad 1 cm. longae; dentes calycis lineari-subulati tubo subaequilongi vel longiores; stylus glaber. *Fructus* linearis, 4-5 cm. longus, 3 mm. latus.

Type specimen, Flanagan 2271, in National Herbarium, Pretoria.

This species is similar to *T. elongata* E. Mey, but is a smaller and more slender plant, and the leaves are always simple.


Type: Welwitsch 2071, in Herbarium, Kew.

*Stems* erect, ascending, several usually arising from the rootstock, simple or laxly branched, densely grey or ferruginous downy. *Leaves* unifoliolate, linear to linear-lanceolate, subsessile, mucronate, apex obtuse, glabrous, grey-downy below and midrib usually ferruginous, 2·5-17·5 cm. long, 0·6-1·9 cm. broad. *Stipules* linear setaceous, 2·5 mm. long. *Peduncles* terminal, 7-36 cm. long, laxly flowered; flowers usually in pairs; pedicels short, downy; bracts setaceous, minute. *Flowers* 1-1·1 cm. long. *Calyx* densely silky without, tube 5-7 mm. in diam., 3 mm. long, lobes subulate, acuminate, shortly and thickly ciliolate, unequal, 1·5-3 mm. long. *Vexillum* suborbicular, densely silky without, 0·9-1·1 cm. long, 8-9 mm. broad; claw 2-3 mm. long. *Ovary* 7-7·5 mm. long, densely silky. *Style* 3 mm. long, somewhat flattened, especially near the base, penicillate at apex. *Legumes* 4-5·5 cm. long, 3 mm. broad, densely grey-silky along middle and dark brown along sutures.
Angola.—At sandy margins of forests between Bumba and Condo, Welwitsch 2071 (K., Pa., G., B.).

Transvaal.—Barberton district: Kaapsche Hoop, Rogers 20882 (B.M., P., W.); Rogers 20778 (T.M.); Lydenburg district: in grassland at Havelock, Liebenberg 4797 (K., B.M., Z.); Elands River and Drift, Bushveld, Rehmann 4927 (K., B.M., G., V., Z., B., T.M., A.M.); Rustenburg district: in collibus lapidosis graminisacco prope Potgietersrust, Leendertz (T.M., S.A.M., A.M.); Rooiplaat, Leendertz 759 (T.M., B.H.); Vygenboompoort, near Naboomspruit, van Dam (T.M.); sandveld, Mosdene, Naboomspruit, Galpin M. 86 (P.); Pietziburg district: Between Koedoes and Middel Letaba River, Junod 1554 (Z., G.).


Co-type specimens, Burke and Zeyher 368, in Herbarium, Kew.

A copiously branched diffuse undershrub. Stems numerous, rigid, branching, procumbent or suberect, flexuous, more or less densely grey-pubescent, about 30 cm. long. Leaves unifoliolate, obovate or orbicular, suborbiculate, often complicate, mucro recurved, both surfaces finely grey downy, veins prominent on lower surface, 0-5-12 cm. long, 0-4-1-6 cm. broad; petioles 2-4 mm. long. Flowers pale yellow, axillary, very shortly pedicellate, 1-3 together, 3-5-4 mm. long. Calyx pubescent, tube 3-3-5 mm. in diam., about 1-5 mm. long, lobes lanceolate, about 0-5-1 mm. long, lowest longest. Vexillum obovate, 2-3 mm. long, about 1-5 mm. broad. Ovary 2-5 mm. long, pubescent. Style about 1 mm. long, incurved, glabrous. Legume thinly pubescent, 1-seeded, tapering to the base, 5-8 mm. long, 2-5-3 mm. broad.

South West Africa.—Omahekenis ein bei Karibib, Dinter 6875 and Dinter 6975 (D. Coll.); Palmerswald, Dinter 2355 (B.); Giftkoppie, Dinter 1432 (Z., B.); Inachab, Dinter 1149 (Z., B.); and Dinter 1155 (Z., B.); Oshihoho, Schinz 545 (Z., B.H.); Okahandja, sandige Ufer 1300 m. Dinter 305 (K., B.M., Z., G., B., S.A.M., A.M.); am sandwege Grotfontein–Grosshuis, Dinter 7274 (K., D.Coll.); Namabexi, Karibib sandfelder zusehen den Dunen der Kalahari-hugel, Engler 6553 (B.); Sandboden in Sandverhaar, Schafer 279 (B.); sand dunes between Noachabeb and Grunddoorn, Pearson 7892 (K., B.M., N., A.M., B.H., P., Kim.); Damaraland, Een (B.M.); No definite locality, Dinter 5153 (D. Coll.); Dinter (D. Coll.); Seiner 96 (B.).

Cape.—In arenosis, Kuruman, Marloth 1048 (B., A.M.); near source of Kuruman River, Burchell 2514 (K.); Armoedts Vlakte, Vryburg, Moggy 8265 (P.); Griqualand West; between Asbestos Mountains and Wittewater, Burchell 1693 (K., B.).

Orange Free State.—Kroonstad district: common in grassveld, Bothaville, Goossens 1202 (P.).

Transvaal.—In collibus arenosis prope Crocodile and Aapies River, Zeyher 368 (K., B.M., Pa., S.A.M.); Vereening, Gilfillan (B.M.); near Pietersburg, Schlechter s.n. (B.) probably Pretoria district, Rutherford (K.).
Rhodesia.—Victoria Falls, Schwarz (B.H.).

South Africa.—No definite locality, Burke (K.); Chapman and Baines (K.); Lemue (G.).


Type specimen, Fleck 334a, in Botanisches Museum, Zurich.

Stems erect or ascending, several arising from the rootstock. Leaves simple, 2-6.5 cm. long, 1-1.5 cm. broad, elliptic to elliptic-lanceolate or elliptic-spathulate, wedge-shaped at base, mucro recurved, densely appressedly sericeous on both sides, petioles about 2-3 mm. long. Stipules subulate, 1-2 mm. long. Flowers axillary, 2-4 together, small; pedicels 1-2 mm. long. Calyx densely sericeous, tube 2-3 mm. long, lobes unequal, 1-2 mm. broad. Ovary 4 mm. long, densely sericeous. Style glabrous, 1-5 mm. long. Legume one-seeded, 0.5-1 cm. long, 2-4 mm. broad, sericeous.

South West Africa.—Omalhelhe bei Epasa, Seiner 352 (Z., B.); Karribib, Omalhekersmels, Dinter 6975 (P.).

Bechuanaland.—Uschi, Kalahari, Fleck 334a (Z.); Mochudi, Rogers 6591 (K., Z.); Harbor [Rogers 6336] (P.); Harbor [Rogers 6499] (B.H.).

5. T. Forbesii Baker in Oliv. Fl. Trop. Afr. 2.116 (1871) in nota; Die Veg. der Erde 9.3.589 (1915); Burtt Davy Fl. Tvaal. 1.2.379 (1932); (T. salicifolia Schinz, in part.).

Type specimen, Forbes s.n. in Herbarium, Kew.

Perennial. Stems ascending, slender, branching, with short grey or fulvous pubescent Leaves simple, subsessile, linear, mucronate, apex recurved, glabrous above, pilose below, 2.5-7 cm. long, 0.4-1.1 cm. broad. Stipules setaceous, 3-6 mm. long. Flowers 0.9-1.3 cm. long, pale mauve-pink, solitary or in pairs in the axils of the leaves; pedicels 0.4-1 cm. long. Calyx silky, tube 4-5 mm. in diam., 2 mm. long, lobes linear-subulate, all more or less the same length, 4-7 mm. long. Vexillum suborbicular, silky without, 0.8-1 cm. long, 5-9 mm. broad, claw short, 1-2 mm. long; carina 0.7-1 cm. long, 2-3 mm. broad; alae 0.9-1.1 cm. long, 2-3 mm. broad, with a short tail at the base of each lobe. Ovary 6-7 mm. long, silky. Style 2 mm. long, penicillate. Legume linear, thinly appressedly silky, 2.5-3.5 cm. long, 3-4 mm. broad.

Transvaal.—Waterberg district: in sandveld, Mosdene, Naboomspruit, Galpin 11667. (K., B.H., N., P.); and Galpin M 84 (P.).

Portuguese East Africa.—Ad sinum Delagoa Bay, Forbes 77 (P.); Delagoa Bay, Forbes s.n. (K.); Junod 168 (G., Z., B.); Rikatla, Lourenço Marques, Junod 546 (T.M.); Lourenço Marques, Schlechter 11519 (K., B.M., G., Pa., V., Z., B.); Howard 25 (B.H.); Borle 585 (P.); sandflats east of docks, Lourenço Marques, van Nouhuys (T.M.).


Suffruticosus. Caules novelli tenuiter appresse albo-pubescente, caules senices lignei, subnigri. Folia simplicia, lineari-lanceolata, 1.5-2.5 cm. longa, usque ad 2 mm. lata, mucronata, retusa, parva, supra glabrescentia, subtus appresse pubescentia; stipulae angusto-lineari-subulatae, usque ad 1 mm. longae. Flores axillares, geminati, 4 mm. longi; pedicelli graciles, usque ad 4 mm. longi; lobi calyces pilosi, tubo aequilongi; stylus pilosus. Fructus linearis, complanatus appresse pubescens, 1.5 cm. longus, 3 mm. latus.
Type specimen, Pole Evans s.n., in National Herbarium, Pretoria, and Natal Herbarium, Durban.

Small, somewhat shrubby plant. Stems when young, slender, appressedly albo-pubescent, when old, woody and almost black in colour. Leaves simple, sessile or subsessile, linear-lanceolate, mucro retuse, small, glabrous above, appressedly pubescent below, 1·5-2·5 cm. long, up to 2 mm. broad. Stipules narrow, linear-subulate, up to 1 mm. long. Flowers axillary, in pairs, 4 mm. long. Pedicels slender, 4 mm. long. Calyx softly pilose, lobes equaling the tube, ciliate. Vexillum 4 mm. long, 3 mm. broad; carina eared at base. Style bearded. Legume linear, flattened, thinly appressedly pubescent, 1·5 cm. long, 3 mm. broad, 2-4 seeded.

Transvaal.—Greenswald 615, nr. Mapungubwe, Pole-Evans (P., N.).

One gathering only of this plant has been seen. The dark woody stems, apparently arising from a woody rootstock, bearing the young leaf- and flowering-stems, make this species quite distinct from any other. The greyish-green leaves and very small pink-mauve flowers tend to make the plant inconspicuous. From its appearance this plant probably grows in very arid regions.


Type specimen, Fleck 836, in Botanisches Museum, Zurich.

Stems erect, slender, densely appressedly argenteo-sericeous. Leaves shortly petiolate, unifoliolate, oblong-elliptic, mucronulate, glabrous above, sericeous below, 1·5-5·5 cm. long, 3-8 mm. broad; petioles 4-6 mm. long. Stipules up to 2 mm. long. Flowers solitary, axillary, on pedicels up to 2 cm. long. Calyx-tube 3 mm. long, 5 mm. in diam., two upper lobes short, connate, lateral and lowest lobes approximately 2 mm. long. Vexillum 1·1-2 cm. long, 4-5 mm. broad. Ovary 5 mm. long, pilose. Style 1-1·5 mm. long, glabrous. Legumes up to 4 cm. long, 4 mm. broad, slightly falcate, appressedly argenteo-sericeous.

South West Africa.—Rehoboth, Fleck 836 (Z.); Hereroland, Fleck 436 (Z.); Sandibenen bei Inachab, Dinter 1158 (Z.); Usakos, Dinter 5927 and Dinter s.n. (D. Coll.); Karibib, Dinter 778 (O. Coll.); Grosser Kalkber, Dinter 7703 (B., D. Coll.).


Caulis gracilis, ascendens, simplicem vel parce ramosus. Folia simplicia, linear-lanceolata, 2·8-7 cm. longa, 3-7 mm. lata; mucronata, mucrone retuso, supra glabrescentia, subtus appresse pilosa; petioli gracies, 0·3-1·2 cm. longi; stipulae angusto-subulateae, 2-5 mm. longae, pubescentes. Flores axillares, solitarii vel terni, purpurei, 0-9-1·2 cm. longi; pedicelli 4·5-5·5 mm. longi; lobi calycis linearisubulati, pilosi, ciliati, tubo aequilongi vel breviore; stylus glaber. Fructus 2·3 cm. longus, 3 mm. latus, leviter falcatus, pubescens.

Natal.—Lady Smith district: near Pieters, 3-4000 ft., 1900, Wool in Natal Herb. 8888, Type.
towards base of lobe; carina 6-5-7-5 mm. long, 2 mm. broad. **Staminal-tube** 5-5 mm. long, vexillary stamen attached. **Ovary** silky, 5 mm. long. **Style** 2 mm. long, glabrous. **Legume** slightly falcate, pubescent, 2-3 cm. long, 3 mm. broad.


**Caules** gracies, ascendentes. **Folia** simplicia, lineari-lanceolata, 2-3-3-9 cm. longa, 2-5-5 mm. lata, subitus appresse pilosa, supra glabrascentia, apice retusa, mucrone parvo; petioli 2-5-6 mm. longi; stipulae setosae, 2-3-5 mm. longae. **Flores** axillares, solitarii, flavii; pedicelli 5-5 mm. longi; dentes calycis tubo breviore; stylus glaber. **Fructus** non visus.

**NATAL.**—Entabeni district: Gingindhlovu, 1933, Gerstner in Natal Herb. 23083, Type.

**KEY TO SECTION 2.**

Leaves palmate, 4-7-lobed. .......................................................... 10. *lupinifolia*.  
Leaves digitate, 3-lobed. .......................................................... A.  

A. Pods flat; leaves generally 2-3-tubeate.  
   Pods not flat; leaves always 3-lobed. ........................................ B.  

B. Pods twisted into loose spiral. ............................................ 12. *contorta*.  
   Pods plicately folded. ...................................................... 11. *pliata*.


**Type specimen,** Burchell 2488, in Herbarium, Kew.

Suffruticose. **Stems** diffuse, with stems, petioles, peduncles and young leaves roughly fulvo-hirsute. **Leaves** 4–5 foliolate, palmate; leaflets 1.5–8.5 cm. long, 0.4–1.8 cm. broad, oblong-lanceolate, mucronate, apex recurved, margin thickened, glabrous or sparsely hirsute above, fulvo-hirsute beneath; petioles 1–8.5 cm. long. **Stipules** short, broadly subulate, ribbed, 2–5 mm. long. **Peduncles** terminal and axillary, 9–26 cm. long, laxly flowered. **Flowers** small, 5–7 mm. long, in fascicles of 2–3; pedicels 3–7 mm. long. **Calyx**
2.5-5 mm. long, pilose, lobes subequal, lanceolate, acuminate, 1.5-3 mm. long. Vexillum sericeous without, subrotund, about twice as long as the calyx. Ovary appressed villous. Style glabrous. Legume linear, flat, pubescent, 2.5-3.5 cm. long, 3-5 mm. broad.

**South West Africa.**—Between Kunene River and Eunda, Barnard 780 (S.A.M.); Bushveld, Grasslippe uber Lehm, Dinter 2327 (B.); Okandjose, Dinter 528 (Z.); Amboland, Onamakunde, Rautanen 20 (B.); Omulsonga, Schinz 2086 (Z.); Oshindeke, Schinz 2087 (Z.); Otyvaronga district, Quickborn, Okohandja, Brandfield 359 (P., T.M.); Damara land: Oluconda, Rautanen 512 (Z.); Ondonga, Oluconda, Rautanen 514 (Z., G.); Rautanen 517 (Z.); No definite locality, Rautanen 513 (K., Z., V., G.).

**Cape.**—Little Klobbokhonni near Harnapery, Burchell 2488 (K., G.); Harbor 6498 in Herb. Rogers (B.H.). Kuruman district: in arenosis, Marmosis, Kuruman, Marloth 1047 (P.); Vryburg district: Grasfort, Vryburg, Mogg 8333 (P.); Bieszjesvlakte, Vryburg, Henrici 104 (P.); Vryburg, Burt Davy 11111 (P.); East Griqualand in arenosis pr. Botsabelo, Schlchter 4101 (Z., G.H.).

**Orange Free State.**—Bothaville, Kroonstad, Goossens 1165 (P.).

**Transvaal.**—Potchefstroom district: Vaal and Mooi Rivers, Burke and Zeyher 343 (K., B.M., S.A.M.); Vereening district: Vereening, Gilfillan (P.); Witwatersrand district: grass veld, Canada, near Johannesburg, Moss 13603 (W.); Lichtenburg district: Lichtenburg, Jenkins (T.M.); townlands, Klipveld, Lichtenburg, Liebenberg 69 (P.); Bar berdon district: Research Station, Nelspruit, Liebenberg 2447 (P.); Carolina district: Waterval Boven, Rogers [T.M. 14875] (T.M.); Rogers 18408 (Z.); Middelburg district: Witbank, Rand 142 (B.M.); Pretoria district: T.U.C. Farm, Pretoria, Moss 8489 (B.M., W.).

**Transvaal.**—Between station and level crossing, Wonderboom, Smith 6243 (P.); Wonderboompoort, Rehmann 4607 (Z.); Magaliesberg near Wonderboom, Burt Davy 2659 (P., B.H.); between Bronkhorspruit and Middelburg, Wilms 361 (B.M., G., B.); Middelkop near Piennars River, Smith 2155 (P.); near Koedoespoort, Smith 1534 (P.); Bushveld near Eland River and Klippan, Rehmann 5032 (K., B.M., Z.); Aapies and Vaal Rivers, Burchell 2270 (K.P.); Burke 343 (Z.); Vaal River, Burke (Pa.); Waterberg district: Strydpoort, Makapansberge, Rehmann 5550 (Z., B.); Mosdene, Naboomspruit, Galpin M. 81 (P., Z.M.); Rustenburg district: Rustenburg, McClelland (G.U.C.); Marico district: Zeerust, Burt Davy 7191 (P.); district unknown: in arenosis pr. Mordiniobole, Schlchter 4262 (K., B.M., G., V., Z., B., T.M., A.M.); Zandrivierspoort, Rogers 24961 (Z., T.M.); Kalahari Region, Maclea 6074 (B.H.).

**Southern Rhodesia.**—Bulawayo district: Matapos, Rogers 5682 (T.M., S.A.M., B.H.); Eyles 1154 (Pa., Z., S.A.M.); Victoria Falls, Rogers 5605 (Z.); Fries 20 (Z.); Flanagan 3127 (B.H.); south bank of Zambesi, Victoria Falls, Rogers 5716 (K., B.H.).

**Northern Rhodesia.**—Barotseland, Watt and Brandwyk 286 (P.).

**Angola.**—Welwitsch 2076 (P., G.); Welwitsch 2077 (G., B.); Gossweiler 365 (B.).  

**South Africa.**—No definite localities, Zeyher 457 (B.M.); Cape (?) 1850, Zeyher 458a (K., B.M., Pa., G., Z., B., S.A.M.); Drège 458 (V.); Burt Davy 2527 (K.); 1846 Lemue (G.).

This plant is known as "namiyati" to certain native tribes, and a preparation of the root is used by them for procuring abortion and for committing suicide.

11. *T. pilcata* Oliv. in Hook. Ic. Pl. t. 1445 (1883); Wood Fl. of Natal 342 (1907); Wood in Trans. S.A. Phil. Soc. 18.2. 147 (1908); Burt Davy and Pott in Ann. Tvl. Mus. 3.146 (1912); Bews Fl. Natal and Zululand 111 (1921); Bot. Survey S.A. Mem. 12.68 (1928); Burt Davy Fl. Tvaal. 1.7.378 (1932).

Type specimen, Rehmann 4922, in Herbarium, Kew.

Suffruticose, 15-30 cm. high. Stems rigid, diffusely hirt-tomentellous, procumbent or ascending. Leaves trifoliolate, shortly petiolate; leaflets rigid, narrow oblanceolate, apex mucronate, recurved, glabrous above, pubescent below, 0.9-4 cm. long, 0.2-1 cm. broad; petioles 2-7 mm. long. Stipules subulate, 1-3 mm. long. Flowers minute, 6 mm. long, axillary, subpetiolate, often geminate. Calyx tube 2 mm. long, 3-5 mm. in diam., lobes about 2 mm. long, lanceolate, acute. Vexillum obovate, subpanduriform, retuse, unequilicate, appressedly pubescent without, 6 mm. long, 3 mm. broad; alae ciliate round lower part of lobe. Ovary pilose, 3-4 mm. long. Style about 1 mm. long, glabrous. Legume 0.9-1.3 cm. long, 5 mm. broad, abruptly transversely 3-5 plicate.

Zululand.—No definite locality, Gerrard 1087 (K.).

Transvaal.—Barberton district: Berea, Barberton, Thornicroft 111 (K., P.); Thornicroft 884 (N., V.); Rogers 18544 (P.); Pott 5349 (T.M.); Kaapmuiden, Rogers 25075 (G., Z., T.M.); Pretoria district: Elands River and Drift, Bushveld, Rehmann 4922 (K., Z.); Rehmann 5181 (Z., B.); in graminosis pr. Pienaars River Bridge, Schlechter 4212 (K., Z., V., G., B., B.H., A.M., T.M.); Onderstepoort, Theiler (T.M.); near Cheop Pyramid, Mogg 1241 (P.); Rooikop, Bushveld, Smuts and Gillett 2125 (P.); Rust der Winter, Pole-Evans 3879 (P.); Waterberg district: Sandveld, Mosdene, Naboomspruit, Galpin M.90 (P.); Sandrivierspoort, Rogers 24976 (B.M., P.); Pietersburg district: Sand River, Murray 610 (P.); Zoutpansberg district: Mara, Rogers 22271 (P., T.M.).


12. T. contorta N.E. Br. in Kew Bull. 103 (1909); Engl. in Engl. and Drude Veg. der Erde 9.3.1. 568 (1915).


Type specimen, Lugard 132, in Herbarium, Kew.

A shrub with straight twig-like branches, whole plant densely albo-tomentose. Leaves trifoliolate, petiolate; leaflets 1.5-4 cm. long, 0.6-1.2 cm. broad, cuneate-oblong, obtuse, mucro recurved, glabrous above, pubescent beneath with adpressed silky white hairs, medial leaflet longest. Stipules 2-4 mm. long. Flowers axillary, small, fasciculate, 3-4 together, 7-8 mm. long. Calyx villous, tube 4 mm. in diam., 2 mm. long, teeth subulate, three equal in length to the tube, two upper shorter and slightly connate. Vexillum 6-7 mm. long, 2-3 mm. broad, pubescent on the back. Ovary densely villous-tomentose, 2.5-4 mm. long. Style slender, glabrous. Mature legumes twisted into a loose spiral, densely villous-tomentose with white hairs.

BechuanaLand.—Ngamiland, Kwebe, Lugard 132 (K.).

Transvaal.—Zoutpansberg district: Messina, Rogers 20042 (K., G., P., Z.); Rogers 20812 (N., P., W.); Pole-Evans 1718 (P.); between Saltpan and Waterpoort, Zoutpansberg, Obermeyer, Schweickardt and Verdoorn 267 (P.); near Catophractes belt, Zoutpan, Schweickardt and Verdoorn 508 (P.); Zooekmaakar, Pietersburg, Rogers 22598 (Z., P.); Lydenburg district: Ohrigstad—Branddraai Road, Young A583 (T. M.); Sandrivier, Schlechter 4592 (B., B.H.).

This plant is very closely allied to T. plicata Oliv., but the legumes are spirally twisted instead of plicately folded.

Baker f. Leg. Trop. Afr. p. 168 suggests that Fig. 290 in Engl. Veg. der Erde is T. contorta N.E. Br., but in my opinion this figure is typical Sylitra contorta E. Mey. Engler's sug-
gestion that *T. contorta* N.E. Br. perhaps belongs to the genus *Sylitra* is also incorrect. One of the main differences between the two genera (*Tephrosia* and *Sylitra*) is the pod, which in the latter genus is of a thin papery texture. In *T. contorta* the pods are of a much firmer texture and are also much more contorted than those of *Sylitra*.

**KEY TO SECTION 3.**

Stems erect......................................................... A.
Stems procumbent, spreading or ascending. .......... B.

A. Stipules subulate........................................ C.
    Stipules linear, setaceous or lanceolate........ D.

C. Whole plant densely silvery canescent............ E.
    Whole plant not densely silvery canescent......... E.

E. Flowers in axils of upper leaves, or few on short terminal peduncles up to 2.5 cm. long. . F.
    Flowers on terminal, axillary or leaf-opposed peduncles....................................................... F.

F. Pubescence on stems, etc., yellow or brown..... G.
    Pubescence on stems, etc., greyish............... H.

G. Stems, etc., with close or spreading yellowish pubescence. . I.
    Stems, etc., with short ascending brown hairs...... I.

H. Peduncles terminal and leaf-opposed............... J.
    Peduncles terminal and axillary................... J.

I. Leaves 2–4-jugate, leaflets linear-lanceolate; pods pale yellow-green. . K.

    Leaves 3–8-jugate; pods not pale yellow-green... K.

K. Leaflets cuneate-oblong, dark green above, pale green below; pods linear, velvety. . L.
    Leaflets oblongate; pods slightly falcate, thinly pubescent... L.

J. Leaves 1–6-jugate; leaflets more or less densely canescent below. . M.
    Leaves not–canescent below......................... N.

M. Style glabrous.............................................. O.
    Style bearded or penicilliate at apex............... O.

O. Leaves 2–6-jugate; leaflets up to 3 cm. long, cano-pubescent on both sides. . P.
    Leaves 5–9-jugate; leaflets up to 1.8 cm. long, glabrous and pale green above, densely canescent below... P.

P. Pubescence grey........................................... Q.
    Pubescence yellow or brown.......................... R.

Q. Leaves 6–12-jugate; leaflets complicate; peduncles laxly many flowered. . S.
    Leaves 3–5-jugate; leaflets not complicate; peduncles sparsely flowered. . S.

R. Leaves 5–17-jugate; stipules 4–6 mm. long. . T.
    Leaves 5–9-jugate; stipules up to 1 cm. long. . T.

N. Style penicilliate at apex............................... U.
    Style bearded........................................... U.

S. Veining on lower surface of leaflets dark brown. . V.
    Veining on lower surface of leaflets not dark..... V.

U. Peduncles densely many flowered.................. W.
    Peduncles laxly flowered............................ W.

V. Leaves 1–2-jugate, sometimes simple............... X.
    Leaves 3–17-jugate, never simple.................. X.

W. Leaves 7–17-jugate; leaflets up to 2 cm. broad. . Y.
    Leaves 3–9-jugate; leaflets rarely 1 cm. broad.... Y.

X. Leaves 6–9-jugate; leaflets up to 9 mm. broad, oblongate. . Z.
    Leaves 3–8-jugate; leaflets up to 6 mm. broad, narrow oblongate... Z.

Y. Leaves 6–12-jugate; leaflets up to 3 cm. long, cano-pubescent on both sides. . A.
    Leaves 5–9-jugate; leaflets up to 1.8 cm. long, glabrous and pale green above, densely canescent below... A.

A. Stems erect......................................................... A.
Stems procumbent, spreading or ascending. .......... B.

Type specimen, Drège s.n. in Botanisches Museum, Berlin-Dahlem.

Suffruticose, erect, whole plant densely silky and silvery canescent, 60–95 cm. high. **Stems** slender, flexuous, terete, branching a little. **Leaves** 4–8 jugate, 3–5×10–5 cm. long, petiolate; leaflets petiolulate, 0.9–3 cm. long, 0.35–1.3 cm. broad, obovate-oblong, obtuse or emarginate, densely canescent on both sides. **Stipules** 1–2 mm. long, subulate. **Peduncles** 2–15 cm. long, racemes many-flowered, leaf-opposed. **Flowers** 0.9–1 cm. long, pink-mauve; pedicels 3–6 mm. long. **Calyx** canescent, tube 6–7 mm. in diam., 2 mm. long. **Ovary** 5–6 mm. long, silky canescent. **Style** glabrous, 2.5–3 mm. long. **Legume** 4–5 cm. long, 5–6 mm. broad, 4–6 seeded, canescent.

**Natal.—Durban, Cooper 2200 (K.); Wilms 1952 (K., B.M.); Wood 11836 (Z., P., N., W.); Moss 5307 (B.M., W.); open dune scrub, Moss 5306 (W.); Wood 8753 (N.); Rehmann 8692 (Z.); in frutice ad oram pr. Durban, Wood 6270 (B.M., B., Pa., B.H., P., T.M.); Wood 8046 (B.); Snell Parade, Beach, Durban, van Nouhuys (N., T.M.); sandy places near Omsamculo, Drège (B.); no definite locality, Drège (K., B.M., V.); Gerrard
and McKen 5 (N.); sand dunes, Beach Terminus, 1913, Thode (S.); and 1914 Thode (B., S.); Zululand Umlalaas, Gerstner (N.); no definite locality, Gerrard and McKen 222 (K., B.M., Pa., V.).

Portuguese East Africa.—Delagoa Bay, Forbes (K., Pa.); in dunes, Schlechter 11987 (K., B.M., B., A., V., G.); Wilmer 306 (B.); Lourenço Marques, Rogers 11819 (K., B.M., Z., W., A.M.); Rogers 2247 (P., W., T.M.); Junod 215 (T.M.); Borle 423 (P.); near sea, Catemba, Lourenço Marques, Borle 450 (P.); Muir 478 (N.); Beira, Dummer 669 (K.); Rogers 4567 (B. M., Z., B.H., T.M.).

This small shrub occurs on the sand dunes along the Natal coast, extending to Zululand and up the East Coast to Beira. It is an attractive plant, especially when in bloom, for the bright pinky-mauve flowers contrast well with the silvery-white leaves and stems.


Type specimen, Ecklon and Zeyher 1630, is deposited in the Thunberg Herbarium, Upsala.

Suffruticose. Stems erect, branching, terete, clothed with cinereous tomentum. Leaves subsessile, 2–6-jugate. Leaflets 0.7–1.3 cm. long, 3.5 mm. broad, oblong or cuneate, mucronate, mucro recurved, glabrous above, pubescent below. Stipules 4–6 mm. long, subulate. Flowers few, almost sessile in axils of upper leaves, or occasionally a few borne on a short peduncle about 2.5 cm long. Pods 2–7–4 cm. long, 4 mm. broad, velvety when young, at length glabrescent.

Cape.—Swellendam district: on plains of George and Swellendam, Bowie 5 (B.M.); Riversdale district: Burchell 6728 (K.); George district: on the plains of Outeniqua, Bowie 3 (B.M.); Uitenhage district: inter frutices (alt. 111) collum prope Van Stadens rivier and in Olifantshoek, Ecklon and Zeyher 1630 (K., Pa., G., V., B., U., S.A.M.). No definite locality: Dereaux (G.); Cape 1772, Oldenburg 1103 (B.M.); Masson (B.M.).


Type specimen, Drège s.n. (5462 in Herb. E. Meyer), in Museum, Berlin-Dahlem.

Suffruticose, erect. Stems slender, straight, angular, rib-striate, clothed with close or spreading yellowish pubescence. Leaves shortly petioled, 3–9-jugate, 3.8–5 cm. long; leaflets cuneate-oblong, mucronate, flat or complicate, thinly pubescent above, more densely below, 0.7–3 cm. long, 3.5–9 mm. broad. Stipules subulate, 0.5–1 cm. long. Peduncles terminal and axillary, laxly racemose and many-flowered, up to 27 cm. long. Flowers 1–1.2 cm. long; pedicels 4–6 mm. long. Calyx-tube 3 mm. long, lobes ovate-acuminate, slightly shorter or equalling or exceeding the tube in length. Vexillum 1–1.1 cm.
long and broad, densely hairy without. **Ovary** densely long hairy. **Style** glabrous. **Legumes** narrow, linear or slightly curved, pubescent, 3.5-4 cm. long, 3 mm. broad.


**Var. longidens** H. M. Forbes var. nov.

Lobis calycis multo longioribus et anguste lanceolatis valde distincta.

Type specimen, *Flanagan 631*, in National Herbarium, Pretoria.


This variety of *T. polystachya* is very similar in appearance to the variety *hirta*, but it is easily distinguished by the long narrow lanceolate calyx lobes. It is an erect shrubby plant, 2-4 feet high, with numerous pink or pale mauve flowers. The flowering period is from January to March.

**Var. hirta** Harv. in Harv. and Sond. Fl. Cap. 2.206 (1861–62).

Type specimen, *Sutherland s.n.*, in Herbarium, Kew.

Stems, branches and inflorescence roughly rusty-pubescent, racemes shorter and more densely flowered than usual, and legumes more hairy.


B.H., P., A.M.); Inanda district: Inanda, Wood 793 (K., B.M., N., B.H., Z., S.A.M.); Kearsney, Milner (N.); Tugela district: Nonoti, Wood 9188 (B.); Zululand, Gerrard 1106 (K., B.M., Pa., V.); Mtunzini, Mogg 4275 and 4374 (P.); Farm 273, Curson (P., S.); Farm 191 (P.); Bank of Pongola River, W. of Leboinbo Mtns., Mkuzi, Galpin 13647 (Pa.); North Zululand, Baker [Evans 562] (N.).

**Orange Free State.**—No definite locality, Cooper 1042 (K., B.M., V., Z., B.H.).

**Transvaal.**—Pretoria district: Wonderboompoort, Leendertz 458 (T.M.); Smith 5062 (K., Pa., V., P.); Barberton district: Kaapmuiden, Rogers 23786 (W.); Rogers 25032 (Z., S.); Komatipoort, Rogers 21027 (K.); Rogers 12877 (W., A.M.); Lydenburg district: between Pilgrims Rest and Sabie, Rogers 24754 (Z.); Waterberg district: Messina, Rogers 19897 (K., W.); Moss and Rogers 99 (Z.); Turner 12 (P.); Potgietersrust, Rogers 1311 (Z.); Warmbaths, Puttrill 589 (P.); Pietersburg district: Makapanzinkerke, Strydpoort, Rehmann 5536 (Z.); Houtbosch, Rehmann 6226 (Z.); Macoustic River, Farm Balloon, Breyer (T.M.).

**Portuguese East Africa.**—Lourenço Marques, Moss 11856 (W.); Incanhine, Schlechter 12036 (K., Pa., G., Z., B., P., B.H., S.A.M., A.M.); Delagoa Bay, Junod No. M (Z., G.).

Var. latifolia Harv. in Harv. and Sond. Fl. Cap. 2.206 (1861-62); Burtt Davy Fl. Tvaal. 1.2.378 (1932).

**Type specimen,** Gueinzius 616 in Herbarium, Kew.

**Leaves** 5-8 jugate; leaflets oblong, uncial, retuse, 1-1.3 cm. long, 0.5-1.3 cm. broad; longer, broader, thinner and less hairy than *T. polystachya.*

**Cape.**—Eastern Province: Engcobo Mtn., Breyer 8875 (B.H.); Insizwa, Krook [Penther 2641] (B., V.); near streams in thorns, Scottspoor, Thode (B., S.); Port St. Johns, Moss 2742 (W.).

**Natal.**—At Port Natal, Gueinzius 616 (K., V.); Richmond district: Bush, Deepdale, Evans 102 (N.); Utrecht district: Klipspruit, Breyer (T.M.).

**Transvaal.**—Barberton district: in damp valleys or margins of woods, Brown’s Creek, Galpin 809 (K., P., B.H., S.A.M.); Barberton, Thorncroft 1907 (B.H.); Thorncroft [in Herb. F. A. Rogers 14217] (P.); Lydenburg district: Spitzkop Goldmines, Lydenburg, Wilms 351 (B.M., B.); Pietersburg district: Shiluvane, Junod 2376 (B.); Houtbosch, Rehmann 6237 (K., B.M., B.H.); in montibus saxosis, Houtbosch, Bolus 10997 (K., N., A.M., B.H.); Schlechter 4380 (B., B.H., T.M., A.M.); in bush on hills, New Agatha, McCallum 137 (Pa., G., P.); in collibus lapidosus graminosisque prope Potgietersrust, Bolus 11072 (B.H.); Vallon du Masetane, Junod 1124 (K., B., Z., G., P.); Spelonken, Junod 54 (T.M.); Zoutpansberg district: edge of wood, The Downs, Junod 4352 (P., T.M.); Magoebas Kloof, Pole-Evans 3951 (K., P.); Minastone, Louis Trichardt, Breyer (T.M.); Hanglip, Louis Trichardt, McCallum 389 (Pa., G., P.).

**Swaziland.**—Mbabane, Rogers 11476 (B.H.); Hlatikulu, Stewart 93 (K., S.A.M., T.M.).

**Portuguese East Africa.**—Lourenço Marques, Quintas 4 (B.).

An erect shrubby plant bearing a profusion of white, pink or pale mauve flowers. Galpin has a note on his specimen No. 809 that both pink and white flowers were borne on the same peduncle.


Suffruticose. *Stems* diffusely branched, densely silky-pilose with short ascending brown hairs, particularly on the young parts. *Leaves* 5-8-jugate, 7–10 cm. long, subsessile; leaflets narrowly oblanceolate, apex rounded and mucronate, glabrous above, appressedly silky beneath, 1.5–3.5 cm. long, 3–5 mm. broad. *Stipules* linear-subulate, 8–9 mm. long. *Peduncles* terminal and occasionally leaf-opposed, 8.5–25.5 cm. long; racemes laxly flowered; pedicels 3–5 mm. long; bracts lanceolate, short. *Calyx* densely ferruginous-silky, tube 2 mm. long, four upper teeth deltoid, 1.5 mm. long, lowest lobe 2–5 mm. long. *Vexillum* 1.2–2.1 cm. long, 6 mm. broad, slightly falcate, densely silky-villous with brown hairs.

**Transvaal.**—Barberton district: Komatipoort, Schlechter 11809 (K., B.M., Pa., G., Z., V., B.); Moss and Rogers 505 (W., B.H.); Barberton, Thorncroft [Herb. Rogers 22661] (Z., B.H.).

**Southern Rhodesia.**—On banks of Umzimgwani River, Doddieburn Ranch, Davison 12 (P.) and Davison 51 (B.M., P.).

This species also occurs up the East Coast as far as Zanzibar.


Type specimen, *Drège* s.n., in Botanisches Museum, Berlin-Dahlem.

Suffruticose, branching from the base. *Stems* woody at base, rigid, striate, thinly appressedly hairy. *Leaves* 1.3–8 cm. long, 2–4-jugate, petiolate; leaflets linear-lanceolate, pale green above, thinly appressedly pubescent beneath, 0.8–8.5 cm. long, 1–8 mm. broad. *Stipules* 2–8 mm. long, narrow subulate, acuminate. *Peduncles* 3.5–38 cm. long, leaf-opposed and terminal, laxly flowered. *Flowers* small, 5–6 mm. long; pedicels 3–7 mm. long. *Calyx* thinly appressedly hairy, two upper lobes very small, three other lobes about equal (1.5–2 mm. long) and about equal to the length of the calyx-tube. *Vexillum* orbicular, 5 mm. long and broad, thinly hairy without; carina and alae 4.5–5 mm. long, 1.5–2 mm. broad. *Ovary* 3 mm. long, pubescent. *Style* 2 mm. long, glabrous. *Pod* curved, 3–4 seeded, 1.5–3 cm. long, 3–4 mm. broad, sub-glabrous, pale yellowish-green.

**South West Africa.**—Otavi, *Dinter* 5486 (D. Coll.); Inachab, *Dinter* 1154 (Z., B.) [type of *T. Dinteri* Schinz]; Koes-Riedmond, *PfieL* 138 (B.); between Ausis and Khuias, Schenck 62 (Z.); Lichtenstein, *Dinter* 4247 (D. Coll.); Utschoa, *Prayer* 61 (B.); granite slopes at Welwitsch, March, Pearson 4417 (K.); Welwitsch, Galpin and Pearson 7620 (K., S.A.M., P.); and Galpin and Pearson 7628 (K.); on rocky mts. at Natamas, Lindner (Z.); Damarabeizirk Namib Kan-Tal Sandige Keiststeppe, Engler 6056 (B.); Haikamchab, Galpin and Pearson 7613 (K., S.A.M., P.); near Hykamhab, Marloth 1210 (K., S.A.M., P., B.H.); Wustennusaale ca. 50 Km. ostl. Swakopmund, *Dinter* 6699 (D. Coll.); Rossing, Boss A104 (T.M.); Langer Heirricher Granitberge, *Boss* A89 (T.M.); Okahandja-Otjisani, *Dinter* 4567 (D. Coll.); *Dinter* s.n. (B.); Quickborn, Okahandja, Bradfield 398 (P.); Okahandja, *Dinter* 568 (B.); Windhoek, *Gillman* 123 (S.A.M.); *Pearson* 9775 (K., B.H.); *Fermer* 28 (B.); Rehoboth, *Fleck* 683 (Z.); Naukluft Mts., river bed between Nautzurus Noab and Gous Koichas, *Pearson* 9078 (K.); between Gelwater and Gt. Fish River, *Pearson* 9222 (K., S.A.M., B.H.); Gt. Karas Mtn., E. of Holoog, *Pearson* 9757 (K., B.H.); Gt.
Karasberg Ravine on Kleiap River 5 miles S.E. of Wasserfall, Pearson 7891 (K., B.M., A.M., N., B.H., S.A.M.); near Garub Zu Kriszes, 1400 m., Dinter 3705 (D. Coll.); Garub, Range 261 (B.); Kuibus-Klippauchs River, Engler 6735 (B.); Keetmanshoop, Fenchel 1921 (Z.); Fleck 682 (Z.); Kalkfontein, Schafer 45 (B.); In arenosis prope Aiais, Marloth 4773 (B., P., S.); Aiais, Prager 621 (B.); sand south of Warmbad, Pearson 5031 (K., B.H.); Klein Karas, Ortendahl 224 (P.); Gariep, Ramie 261 (B.); Kuibus-Klippdachs River, Etigler 6735 (B.); Keetmanshoop, Fenchel 1921 (Z.); near Grundoornd, Pearson 4576 (K., B.H.); dry shale banks, Ct. Fish River, Pearson 9263 (K., B.H.);

Cape.—Little Namaqualaud.—dry sandy bed of Oorlap River, Richtersveld, Herre (S.); 11867 (S.); sides of dry bed of Koodas River, Pillans 5530 (B.H.); dry water courses between hills S.E. of Wasserfall, Pillans 5098 (B.H.); dry sandy bed of river at Anisfontein, Pillans 5500 (B.H.); sandy flats near Viol's Drift, Orange River, Thorne (S.A.M.); sandy soil S. of Viool's Drift, Taylor 1178 (B.H.); sandy flats near Viol's Drift, Orange River, Pillans 6410 (B.H.); near Ramans Drift, Pearson 4521 (K.); near Gariep ditiones, Beaufort, Drege (K., B.M., Pa., G., B.); Great Bushmenland; common in dry river beds near Pella, Pearson 3556 (K.); Herbert district: Honeynest Kloof Kop tiear Station, Victor (Herb. No. 1474) (Kim., K., T.M.); on koppie among stones, Honeynest Kloof Station, Victor 983 (Kim.); the berg above the Kloof, Campbell, Wilman 1473 (Kim.); The Koppen, Rooipoort, Wilman 2267 (A.M., Kim.); Barkly West district: on the hills, Newlands, Wilman 3222 (Kim., B.H.); Hay district: Klipfontein, Wilman (B.H.); Bushmans district: Bushmans Fountain, Wilman (B.H.); Prieska district: Prieska, Bryant 361 (P.); Gathand around Prieska, Bryant 1086 (K.); Prince Albert district: Prince Albert Road, Thoday and Delf 102 (S.); No definite locality: Drège 413 (V.); Hennegart 92 (Pa.).

18. T. pallens (Ait.) Pers. Syn. 2.329 (1807); DC. Prodr. 2.254 (1825); Spreng. Syst. Veg. 3.235 (1826); Ecklon and Zeyher Enum. Pl. Afr. Aust. Extratrop. 247 (1835); Steudel Nomen. Bot. 666 (1840); Harvey in Harv. and Sond. Fl. Cap. 2.205 (1861-62); O. Kuntze Rev. Gen. Pl. 7.2 (1891); Wood Fl. of Natal 42 (1907); Wood in Trans. S.A. Phil. Soc. 18.2.147 (1908); Bews Fl. Natal and Zululaud 111 (1921).

Type specimen, Thunberg s.n., in Thunberg's Herbarium, Upsasa, Sweden.

Suffruticose. Stems erect or ascending, angularly bent, rib-striate, pubescent. Leaves short-petiolate, 4-8-jugate, 2-6 cm. long; leaflets narrow, cuneate-oblong, mucro recurved, striolate and thinly pubescent, dark green above, silky and pale green below, 0-8-2-5 cm. long; 0-2-0-7 cm. broad. Stipules subulate, 3-6 mm. long. Peduncles terminal and leaf-opposed, angular, furrowed, 6-19 cm. long. Flowers about 1 cm. long. Calyx subequally 5-toothed. Vexillum subrotund, sericeous or pubescent without. Style glabrous. Legume 3-5 cm. long, 0-3 cm. broad, linear, flat, velvety pubescent.

Cape.—Graaff Reinet district: on Snowewberg, Wallich (B.M., G.); Somerset East district: Somerset, Bowker (K.); Uitenhage district: near Olifantshoek, Ecklon and Zeyher 5728 (B.); Zeyher s.n. (S.A.M.); near Olifantshoek and Bushman's River, Ecklon and Zeyher (K., B.M., O., Pa., Z., V., G., B., P., S.A.M.); Albany district: on plains of Albany, Bowie 10 (B.M.); Albany, Alexander 194 (K.); Howisonspoort pone Grahamstown, Zeyher 2708 (Pa., S.A.M.); Grahamstown, Robertson (P.); Longmore Forest Reserve, Long 1036 (K.); in lapidosis ad ped. Bothasberg, MacOwan 478 (K., B., Pa., N.A.M.); Alexandria, Galpin 10813 (K., P., B.H.); Galpin 10638 (K., P., B.H.); Burtt Davy 12104 (P.); Kleinemon, White 967 (Z., A.M.); Bathurst district: Bathurst, Rogers (A.M.); Port Alfred, Kowie, Tyson (P., T.M., S.). No definite locality, Drique 2708 and 407 (V.); Thunberg (U.); Banks (V.); Drège in Herb. Meyer 6697 (B.).
19. T. delagoensis H.M. Forbes sp. nov., affinis T. Dregeanae E. Mey., sed foliolis brevioribus, fructibus differt

*Suffrutex* erectus. *Caules* ramosi. *Folia* 3-8-jugata, 2-5·5 cm. longa; foliola oblongo-lata, 0·8-1·8 cm. longa, 2·5 mm. lata, retusa, mucronata, supra glabra, subtus appresse pubescentia; stipulae subulatae, 3-4 mm. longae, nervatae. *Flores* circiter 1 cm. longi; pedicelli 3-4 mm. longi; dentes calycis tubo longiores. *Fructus* angustus, planus, 3-4·5 cm. longus, 3 mm. latus, apice leviter falcatus, parce pubescent. 

Type specimen, *Schlechter* 11521 in National Herbarium, Pretoria.

*Suffruticos*ea. *Stems* erect, branching, woody. *Leaves* 3-8-jugate, 2-5-5·5 mm. long, shortly petiolate; leaflets oblongo-latae, mucronatae, retuse, puberulous above, appressedly pubescent below, 0·8-1·8 cm. long, 2·5 mm. broad. *Stipules* subulate, 3-4 mm. long. *Calyx*-tube about 3 mm. long, lobes 3·4-5 mm. long. *Vexillum* 1 cm. long, 6 mm. broad, pubescent without. *Ovary* pubescent, 4 mm. long. *Style* 2-5 mm. long, flattened, glabrous. *Legume* narrow, apex slightly falcatus, 3-4·5 cm. long, 3 mm. broad, thinly pubescent. 


Type specimen, *Drège*, in Botanisches Museum, Berlin-Dahlem.

*Fruticos*ea. *Stems* erect, branching, branches very slender, subfastigate. *Leaves* shortly petiolate, 7-9-jugate, subrecurved-patulate, 2·5-6 cm. long; leaflets 2-5 mm. broad, up to 1·5 cm. long, cuneate-linear, obtuse, subtruncate or mucro-recurved, glabrous above, appressedly hirsute below. *Stipules* subulate, 3-6 mm. long. *Peduncles* terminal and leaf-opposed, laxly flowered; bracts short, linear; pedicels 3-4 mm. long. *Calyx*-tube about 3 mm. long, lobes 3·4-5 mm. long. *Vexillum* silky without, about 7·5 mm. long and broad. *Ovary* silky, 4 mm. long. *Style* glabrous, 3 mm. long. *Legumes* narrow, pubescent or glabrescent.

Cape.—Queenstown district: Queenstown, *Page* (B.H.); Pondoland district: grassy fields above Ngogwane Falls, Lusikisiki, *Galpin* 9531 (K., P.); Omsamcaba, *Drège* (B.); Pondoland, *Drège* (K., V.).


South Africa.—No definite locality, *Drège* 408 (D.V.); *Drège* 5466 (B.).


*Suffrutex* caulibus erectis glabris vel parce pubescentibus. *Folia* 4-8-jugata, 3-7 cm. longa; foliola cuneato-oblonga, 1·2-5 cm. longa, retusa, mucronata, utrinque glabra vel subtus parce pubescentia; pedunculi terminales axillaresque, usque 9 cm. longi; bracteae ovato-acuminatae, caducae, 5 mm. longae. *Flores* 1·5 cm. longi; dentes calycis tubo excedentes; stylus pilosus.

Type specimen, *Wood* 5984, in Natal Herbarium, Durban.
Suffruticose. **Stems** erect, branching, glabrous or very sparsely pubescent. **Leaves** 4-8-jugate, shortly petioloed, 3-7 cm. long; leaflets cuneate-oblong, retuse, mucronate, glabrous on both sides or very sparsely pubescent below, 1-2.5 cm. long, 0.5-0.8 cm. broad; petiolules about 1.5 mm. long, more or less densely pubescent. **Stipules** subulate-acuminate, 0.5-1 cm. long. **Peduncles** terminal and axillary, up to 9 cm. long, few-flowered at apex. **Bracts** ovate-acuminate, 5 mm. long, soon caducous. **Calyx** teeth linear-lanceolate, longer than the tube, longest. **Style** bearded. **Legumes** not seen.

**Natal.**—Krantzkop district: near Greytown, Wood 5984 (N.).

This is, apparently, a slender shrubby plant. The stems, petioles, stipules and bracts are a dark reddish colour and the veining on the lower surface of the leaflets is also a dark brown. The flowers are pink.

This plant has been named in honour of the late Dr. Medley Wood, one of the great pioneer botanists of Natal.


Type specimen, Drège s.n., in Botanisches Museum, Berlin-Dahlem.

Suffruticose. **Stems** erect, slender, virgate, angular, rib-striate, canescent. **Leaves** 1-6-jugate, shortly petioloate, 1-3 cm. long; leaflets linear, subobtuse, margins thickened, mucro recurved, glabrous and green above, more or less densely canescent beneath, 1.2-3.5 cm. long, 1.3-5 mm. broad. **Stipules** subulate, 3-6 mm. long, pedicels 3 mm. long. **Calyx** silky, tube 5 mm. in diam., 2.5-3 mm. long; lobes narrow, acuminate, unequal, 2.5-4.5 mm. long. **Vexillum** 1 cm. long, 6 mm. broad. **Ovary** 5-5 mm. long, densely silky. **Style** 3.5 mm. long, glabrous. **Legumes** 5-5 cm. long, 3-4 mm. broad, narrow-linear, fulvous-pubescent, many-seeded; seeds small, dark brown.

**Natal.**—Grassy places near Port Natal, Drège (K., Pa., O., G., B., P.); Gueinzius (K., B.M., P.); Natal, Gerrard 756 (K., P.); Durban Flat, Wood (N.); Wood 3127 (K.); near Durban, Wood 5586 (G.); Wood 6373 (P.); Wood 9565 (B., S.A.M.); no definite locality, Drège 414 (V.); Gerrard and McKen 419 (N.).

**Portuguese East Africa.**—Delagoa Bay, Junod 179 (G., Z.).


Type specimen, Obermeyer, Schweickerdt and Verdoorn 73, in National Herbarium, Pretoria.

Small suffrutex more or less 30 cm. high, many-branched, erect or branches decumbent. Branches cano-pubescent, glabrescent. **Leaves** imparipinnate, 2-6-jugate; leaflets oblanceolate-oblong or oblong, 0.9-3 cm. long, 3.9 mm. broad, cano-pubescent on both sides, upper at length glabrescent, apex minutely mucronate or retuse, petioloate, petiolules 3 mm. long, densely cano-pubescent. **Stipules** lanceolate, acute, 3.5 mm. long, cano-pubescent, 3-nerved. **Racemes** 3.5-11.5 cm. long, terminal, longer than the leaves, laxy flowered, lower flowers sometimes in axils of upper leaves. **Flowers** 1.5-2 cm. long, reddish, 1-3 together, pedicels 3.5 mm. long; bracts lanceolate, acute, cano-pubescent, 3-4 mm. long, 1.5 mm. broad. **Calyx** cano-pubescent, tube 6 mm. in diam., 2 mm. long, lobes triangular, narrow, acute, unequal, 1.5-3.5 mm. long. **Vexillum** appressedly pubescent without, suborbicular, 1.5-2 cm. long and broad, with two small swollen appendages at apex of claw. **Ovary** 5 mm. long, densely pubescent. **Style** glabrous. **Legumes** linear, appressedly cano-pubescent, 3-3.5 cm. long, 3 mm. broad.
Transvaal. —Zoutpansberg district: rocky slope, N.W. slopes, Zoutpansberg, Obermeyer, Schweickerdt and Verdoorn 73 (P., T.M.); among rocks, lower slopes of Zoutpansberg, Schweickerdt and Verdoorn 529 (B.M., P.); Messina, Young [14565 in Herb. Moss] (W.); Young [14566 in Herb. Moss] (B.M., W.); Rogers 23664 (P., W.); Waterval Boven, Mason (K.); no definite locality, Rogers 15651 (B.H.).

This is very distinct from all the known Transvaal species of Tephrosia. The silvery-grey colour of the bush and the pinkish-red flowers suggested the specific name. It is somewhat like T. noctiflora but has much larger flowers. The flowers of each raceme develop at different intervals and one finds several large open flowers while the buds above are still very immature. [Verdoorn in Bothalia 3.2.239 (1937).]


Suffrutex caulibus erectis canescentibus. Folia 5-9-jugata, 7-13-5 cm. longa; foliola oblanceolata, mucronulata, 0.8-1.8 cm. longa, 0.4-0.5 cm. lata, subitus canescentia supra pallida glabraque, marginibus involutis; stipulae linear-sulcatae, 3-4 mm. longae; pedunculus 18-35 cm. longus, laxiflorae; bractae lineares; stylus glaber. Fructus 4-5 cm. longus, 0.4-0.5 cm. latus, apice leviter falcatus, parissime pubescens.

South West Africa. —Stingbank, legit E. G. R. Erdnile, Com. Rogers 15386 in Herb-arium Kew, Type.

Suffrutex. Stems erect, branching, striate, densely canescent. Leaves 5-9-jugate, long petiolated, 7-13-5 cm. long, petiole 1.5-2.5 cm. long before first pair of leaves, internodes between leaflets 1-1.5 cm.; leaflets oblanceolate, shortly mucronate, mucro recurved, margins involute, densely canescent below, pale and glabrous above, 0.8-1.8 cm. long, 4-5 mm. broad; petiolules 1-2 mm. long. Stipules linear-lanceolate, 3-4 mm. long. Peduncles terminal, 18-35 cm. long, laxly flowered, flowers 2-3-nate. Calyx canescent, lobes longer than tube. Style glabrous; ovary densely canescent. Legume 4-5 cm. long, 4-5 mm. broad, linear, slightly falcate towards apex, thinly pubescent, 7-8-seeded.

Only one specimen of this plant was seen. It appears to be a fairly tall shrubby plant, densely canescent in all parts.

25. T. Kraussiana Meisn. in Hook. Lond. Journ. Bot. 2.87 (1834); Cape Plants, Krauss and Engler 54 (1846); Harvey in Harv. and Sond. Fl. Cap. 2.206 (1861-62); O. Kuntze Rev. Gen. Pl. 1.175 (1891); Wood and Evans Natal Plants 3. pl. 249 (1901); Wood Fl. of Natal 42 (1907); Wood in Trans. S.A. Phil. Soc. 2.147 (1908); Bews Fl. Natal and Zululand 111 (1921); Watt and Breyer-Brandwijk Med. and Pois. Pl. S.A. 74 (1932).

Type specimen, Krauss 40, in Herbarium, Kew.

Fruticose, branches straight, erect, sulcate or angular, especially at the extremity, densely leafy. Leaves shortly petiolate, 2.5-3.8 cm. long, 6-12-jugate; leaflets 0.8-3.6 cm. long, 2-6 mm. broad, linear, usually complicate, very shortly mucronate, mucro recurved, glabrous or very thinly pubescent above, more densely pubescent below. Stipules linear-setaceous, longer than the petiole, pubescent, 0.5-1.3 cm. long. Peduncles terminal and in axils of upper leaves, simple or branching, laxly racemose, 5-14 cm. long. Flowers 0.7-1 cm. long, 2-3 together in axils of setaceous bracts, pedicellate. Calyx-tube 6-7 mm. in diam., 2-3 mm. long, lobes lanceolate, acuminate, unequal, 1-4 mm. long, whole calyx pubescent. Vexillum pubescent without, 0.75-1 cm. long, 6-8.5 mm. broad. Ovary 4.5-6 mm. long, densely silky. Style glabrous. Legumes narrow, linear, thinly canescent, 3-3.5 cm. long, 4 mm. broad.

Natal.—Port Shepstone district: Margate, Rump (N.); sandy grassy places, Terminus, Thode (B., S.); fxopo district: farm Friedenau, Dumisa, Rattray 297 (A.M.); hillside near Kentani River Mouth, Galpin 6549 (A.M., P.); Komgha district: grassy hills near Kei Mouth, Flanagan 48 (P., B.H., A.M., S.A.M.); Pondoland: no definite locality, Bachmann 614 (K., B.M., Z., B.).

Swaziland.—Kubuta Estate, Hlatikulu, Pierce 14 (P.).

The Zulus know this plant as "iNsangwana" or "isiPhungo" and they make a warm infusion of the root as a remedy for a troublesome night cough.


Stems erect or ascending, pubescent. Leaves 3-5-jugate, 2-5-4-5 cm. longa; foliola oblonga-cuneata, mucronata, 0-8-2-5 cm. longa, 0-5-1-3 cm. lata, utrinque appresse pubescentia; stipulae setaceae, 4 mm. longae; pedunculi 8-16 cm. longi; bracteae setaceae, 2 mm. longae. Flores pauci, 5 mm. longi; dentes calycis tubo aequilongi; stylus glaber.

Fructus linearis, 3-3-5 cm. longus, 0-4 cm. latus, parce breviterque appresse pubescens, apice leviter falcatus.

Type specimen, Repton 1614, in National Herbarium, Pretoria.

Suffruticos. Stems erect, branching, pubescent. Leaves 3-5-jugate, 2-5-4-5 cm. long, very shortly peltiole; leaflets oblong-cuneate, mucronate; appressedly pubescent on both sides, 0-8-2-5 cm. long, 0-5-1-3 cm. broad. Stipulae setaceous, 4 mm. long. Pedunculi 8-16 cm. long, terminal and leaf-opposed, very laxly flowered, flowers 1-2 together. Bracts setaceous, 2 mm. long. Flowers 5 mm. long, "pinkish". Calyx teeth subequal to tube. Style glabrous. Legumes linear, 3-3-5 cm. long, 0-4 cm. broad, slightly and shortly appressedly pubescent, apex slightly falcate.

Transvaal.—Pretoria district: Wonderboom Reserve, S. side of Magaliesberg, Repton 1614 (P., N.); Marico district: Zeerust, Thode A. 1392 (P., N.).

Bechuanaland.—Vryburg, Mogg 4902 (P.).


Type specimen, Teague 14, in Herbarium, Kew.

Suffruticos. Stems branching, often rufo-tomentose above. Leaves 5-17-jugate; leaflets 1-5-3 cm. long, 0-5-1-2 cm. broad, oblong or elliptic, apex shortly mucronulate, mucro recurved, glabrous or thinly appressedly pubescent above, more or less densely pubescent below, pubescence white or tawny. Stipulae 4-6 mm. long, linear. Pedunculi 6-30 cm. long, laxly racemose. Flowers 0-8-1-5 cm. long, 3-4 together, lowest flowers sometimes in axils of upper leaves; pedicels 3-5 mm. long; bracts linear. Calyx densely long pilose, lobes linear-lanceolate, much longer than the tube. Style glabrous. Legumes 3-3-8 cm. long, 3-4 mm. broad, falcate, densely tawny pubescent.
Transvaal.—Pretoria district: Derdepoort, Rehmann 4778 (K., B.M.); Rietfontein, Venter (Pa., P.); Pretoria, Fouche (P.); Silkaats Nek, van Dam (T.M.); Saltpan, Leeman (T.M.); Wonderboompoort, Schlechter, 4164 (K., B.M., Pa., G., B.H., V., A.M.); Leendertz 703 (B.H., T.M.); Thode A 408 (K., P., N.); Smith 1656 (P.); 1932, Smith 6202 (K., P., N.); 1932, Smith 6203 (P., V.); Barberton district: Pyramid Estate near Potgietersrust, Galpin 8958 (P.); Griffin Mine, Breyer (T.M.); Kaapfiche Hoop, Rogers 20834 (K., Pa., P., T.M.); Nelspruit, Breyer (T.M.); Liebenberg 2466 (P.); Pietersburg district; Houtbosch, Rehmann 6238 (K., B.M., Z.); Schlechter 4400 (B., B.H., A.M., T.M.); Pietersburg, Rogers 14644 (K.); in graminosis prope pagum Pietersburg, Bulus 10912 (K., B.H., A.M.); Gravelotte, van Dam in Tvl. Mus. 25040 and 25041 (T.M.); Rooikop, Pole Evans 1261 (K., P.).

Rhodesia.—Umtali Div.—Marico district: Odanzi River Valley, Teague 14 (K., B.H., P.); Salisbury, Eyles 2050 (Pa., P., S.A.M.); Ses-Heke, Barotseland, Borle (P.); Mazabuka, Rogers 26147 (T.M.).


**Stems** erect, branching, yellow-villous. **Leaves** 9–10 cm. long, 5–9-jugulate; leaflets 2–3·7 cm. long, 0·6–1·2 cm. broad, narrow oblong, apex obtuse or emarginate, mucronate, upper surface thinly, lower surface densely pubescent. **Stipules** linear, 0·5–1 cm. long. **Peduncles** terminal and lateral, 11–18 cm. long, laxly-flowered, lower flowers 3–4 together. **Flowers** shortly pedicellate, about 1–1·2 cm. long. **Calyx** densely silky, tube 7–8 mm. broad, 2·5–3·3 mm. long, lobes more or less sub-equal, linear-subulate, 4–6 mm. long. **Vexillum** ovate or suborbicular, 1·1–2 cm. broad, 1·1–1·3 cm. long, densely silky on the back. **Ovary** densely silky, 6·6–5·5 mm. long. **Style** glabrous 4–5 mm. long. **Pod** pubescent, falcate, 4 cm. long, 0·5 cm. broad.

South West Africa.—Grootfontein, Schoenfelder 948 (D. Coll); Gaub Gneissburg, Dinter (B.); Okahandja, Dinter 4608 (D. Coll.); auf sandalluv in Okahandja River, Dinter 1113 (B.); Karibib Landsternhuzel, Dinter 6915 (D. Coll.); Karibib am Damm von Roseman's farm Okongawa, Dinter 6808 (D. Coll.); Amerb. Gramtbanke, Dinter 6852 (D. Coll.); Uaobos in zu Kuimfulsu, Dinter 1413 (B.); Omburo Platze am Rivier, Dinter 1409 (B.); Kaross, Thorne (S.A.M.).

Transvaal.—S.A. Gold Fields, Baines (K.); Waterberg district: Messina, Rogers 19242 (K., P.); Rogers 20813 (T.M.); Rogers 20884 (Wits., Z.); Rooikop, Pole-Evans 1261 (Pa.); Palala River, Breyer (T.M.).

Rhodesia.—Mazabuka, Rogers 26147 (T.M.); Deka River, Wankie, Eyles 7962 (K.); Victoria Falls, Rogers 5558 (K., B.H.); Bulawayo, Eyles 1062 (K., A.M.) [Type of *T. rhodesica* Bak. f.]; Borle 162 (K., Z., P.); Odanzi River Valley, Umtali, Teague 435 (K., B.H., S.); Que Que, Mcleod 52 (K., Pa.).

This species also occurs in Angola, Portuguese East Africa and Tanganyika.
Tephrosia villosa (L.) Pers. and T. incana Graham are Indian species which, in their typical form, do not occur in Africa. African material placed under the above species by various authors, i.e., are referable to the Tropical African T. Ehrenbergiana Schweinf. T. rhodesica Bak. f. exhibits no striking differences from T. Ehrenbergiana Schweinf. except in the colour of the indumentum. This, however, appears to be variable, for Schweinfurth, i.e., 19, states the pubescence of the specimens he examined to be silvery white and in parts, as a result of drying, somewhat brownish.

T. villosa (L.) Pers. is based on Galega villosa L., which in turn is based on a figure in Burm. Thes. Zeyl. 73 t. 33 (1737). Unfortunately, there is no specimen of Galega villosa L. in the Linnean Herbarium. Burmann’s figure represents a species which is more slender and smaller in most parts than the African material usually incorrectly identified with this species. Modern gatherings of the true Indian plant in the Herbarium, Kew, confirm this statement.

T. incana Graham has already been stated by Baker, i.e., not to occur in Africa.

T. Apollinea (Del.) DC. is an Egyptian plant which apparently does not occur in Southern Africa. It is likewise a more slender species with smaller and far less densely pubescent vegetative and reproductive parts than typical T. Ehrenbergiana. The plants referred to T. Apollinea by Klotzsch i.e. and Eyles i.e., should be placed under T. Ehrenbergiana.


Type specimen, Welwitsch 2104, in Herbarium, Kew.

An erect shrub, 3–4 ft. high, branching freely; stems argenteo-canescent. Leaves 8·5–15·5 cm. long, 5–10-jugate (13–19-jugate in Fl. Trop. Afr.); leaflets 1–3·5 cm. long, 0·5–2 cm. broad, obovate-oblong, coriaceous, mucronate, canescent on both surfaces, densely when young, more thinly and sparsely when older, veining on lower surface tawny, distinct and slightly raised. Stipules linear, rigid, 2–7 mm. long. Peduncles axillary and terminal, laxly flowered, 12–27·5 cm. long. Flowers approximately 1·5 cm. long. Pedicels 2–5 mm. long, longer than the linear bracts. Calyx-tube 3 mm. long, 7 mm. in diam., lobes unequal, two upper deltoid-cuspidate, about 1·5 mm. long, lower lanceolate, about equalling the tube in length. Vexillum silky without, 1·5 cm. long and broad. Ovary silky, 7 mm. long. Style glabrous, 4·5 mm. long, flattened, penicillate at apex. Pods curved, 4·5–6 cm. long, glabrescent.

Angola.—Welwitsch 2104 (K., Pa., B.); river bed in open at Kuf on the Mossamedes Railway, Pearson 2393 (K., B.H., B.); Mossamedes, Welwitsch 21110 (K.).

South West Africa.—Damaraland: in arenosis Otyimbinque, Marloth 1382 (B., S.A.M., P., B.H.); between Kaiientes and Kaross, Thorne (S.A.M.); Kaurasib River west of Otavi, Barnard (S.A.M.); Wilhelmshal, Okahambia, Dinter 563 (B.); Toles River, Dinter 2085 (B.); Namaqualand: Namib bei Klawami, Belek 54 B (B.); no definite locality, Dinter 1410 (B.).

30. T. zoutpansbergensis Bremekamp in Ann. Tvaal. Mus. 15.2.242 (1933); Bothalia 3.2.239 (1937).

Type specimen, Bremekamp and Schweickerdt 279, in Herbarium, Transvaal Museum, Pretoria.

Suffruticose, stems erect, densely sericeo-pubescent. Leaves 2–4-jugate, petiolate, petioles 1·5–2 cm. long; terminal leaflet shortly petiolate, petiole 3 mm. long; leaflets broadly lanceolate or oblanceolate, 1·5–4·5 cm. long, 0·5–1·5 cm. broad, base acute, apex obtuse, mucro minute, recurved, sericeous when young, sparsely pubescent when older;
common petiole 2-4.5 cm. long, stout. *Stipules* filiform, pubescent, 2-4 mm. long. *Racemes* terminal, densely many-flowered, flowers binate, lower in axils of reduced leaves (1-2-jugate or simple), others in axils of deciduous filiform bracts, both rhachis and calyces densely sericeous-villous. *Flowers* 1-5 cm. long, shortly pedicellate, pedicels with minute bracteoles. *Calyx*—tube campanulate, 1 cm. in diam., 3 mm. long, lobes subulate to subulate-ovate, unequal, 1-7-8 mm. long. *Vexillum* unguiculate, reniform, pubescent without, 1-1.4 cm. broad. *Ovary* sericeo-villous, 8 mm. long. *Style* dorsiventrally flattened, inconspicuously glandulose, 4-4.5 mm. long, stigma penicillate. *Legume* ovoid or oblong, 1-2-1.5 cm. long, 6-7 mm. broad, obliquely apiculate, densely pubescent.

**Transvaal.**—Zoutpansberg district: Zoutpan, Zoutpansberg, Brenekamp and Schweickerdt 279 (P., T.M.); lower slopes of Zoutpansberg, Obermeyer, Schweickerdt and Verdoorn 174 (K., P., T.M.); Waterpoort, Rogers (T.M.).


* Suffrutex *cirrifer 13-23 cm. altus, canescens. *Folia* 1-2-jugata, nonnumquam unifoliata; foliola oblancoante, mucronata, 2-4 cm. longa, 0.6-1 cm. lata, supra glabrescentia, subtus canescentia; stipulae lineares, 2-5 mm. longae. *Pedunculi* laxiflorae, 6-5-10-5 cm. longi; bracteae 3 mm. longae; pedicelli 4-5 mm. longi. *Flores* 1-5 cm. longi; dentes calycis tubo excendentes, subulato-acuminati; ovarium 1 cm. longum, pilosum;styles 5 mm. longus, complanatus, penicillatus.

**South West Africa.**—Cayimaeis, Thorne (S.A.M. 31721) Type in South African Museum Herbarium.

Suffruticose, about 13-23 cm. high, whole plant more or less canescent. *Leaves* 1-2-jugate or sometimes simple, rhachis of pinnate leaves 1.5-2.5 cm. long, 0.9-1.5 cm. long before first pair of leaflets, petiole of simple leaves 5-6 mm. long; leaflets glabrous and pale green above, thinly canescent below, oblancoante, mucronate, 2-4 cm. long, 0.6-1 cm. broad. *Stipules* linear, 2-5 mm. long. *Peduncles* 6-5-10-5 cm. long, laxly flowered, 1-2 flowers together at intervals of 2.5-3 cm., 1-2 flowers together in axils of upper leaves; bracts 3 mm. long; pedicels 4-5 mm. long. *Flores* 1-5 cm. long. *Calyx* pubescent, tube 3 mm. long, lobes subulate, acuminate, 4 mm. long. *Vexillum* orbicular, 1.5 cm. long and broad. *Ovary* 1 cm. long, pilose. *Style* 5 mm. long, complanate, penicillate at apex. *Legumes* immature, densely pubescent.

32. *T. purpurea* (L.)Pers. Syn. Pl. 2.329 (1807); DC. Prod. 2.251 (1825); G. Don. Syst. Nat. 2.230 (1832); Bak. in Oliv. Fl. Trop. Afr. 2.124 (1871); Bak. in Hook. f. Fl. Brit. Ind. 2.112 (1876); Ficalho and Hiern. in Linn. Soc. Ser. 2.2.19 (1881); Mildbraed in von Mickenberg Deuts. in Afr. Exp. 1507-8 2.254 (1911); Fries in von Kosen Schwed. Rhod. Congo Exp. 1911-12 1.84 (1914); De Willd. in Bull. Soc. Bot. Belg. 57.2.124 (1925); Bothalia 3.2.239 (1937).


A copiously branched perennial 1-2 ft. high. *Stems* slender, firm, subglabrous. *Leaves* 7-9-jugate or 13-17-jugate, 5-9 cm. long; leaflets 1-8-2.5 cm. long, 0.5-2 cm. broad, oblancoante, apex blunt, mucronate, sub-coriaceous, both sides grey-green, upper glabrous, lower pubescent or nearly glabrous. *Stipules* linear to linear-subulate, 4-8 mm. long. *Peduncles* terminal and leaf-opposed, 7.5-15 cm. long, laxly 6-20 flowered. *Flores* up to 8 mm. long, pedicellate, red-purple. *Bracteae* linear 2-4 mm. long. *Calyx* silky, teeth lanceo
late-acuminate, exceeding the tube in length. *Style* glabrous, penicillate at apex. *Legumes* linear, slightly recurved, glabrous or softly pubescent, 1·8-2·5 cm. long, 0·4-0·5 cm. broad, 6-10 seeded.

**South West Africa.**—Namakunde, *Rautanen* 511 (Pa., V., Z., B.); Olukonda, *Schinz* 563 (B.); Otavi, *Dinter* 5771 (D. Coll.); Tsumeb, *Dinter* 7466 (D. Coll.).

**Transvaal.**—Zoutpansberg district: Zoutpansberg, *Schweickerdt* and *Verdoorn* 543 (P., T.M.); *Messina*, *Rogers* 20988 (Z.).

*T. purpurea* is a very widely distributed species occurring in all parts of the tropics. In Africa it extends throughout tropical and central Africa, South West Africa, Rhodesia and the northern Transvaal. From the material seen it appears to be a very variable plant. The specimen, "Sheet No. 7" in the Linnean Herbarium, which is said to be the type, does not agree with the early descriptions, as it appears to be a much smaller plant.

The following is an extract from Wight and Arnott *Prod. Fl. Pen. Ind. Or.* 1.213 (1834):—

"The supposed type of this species has the whole plant, especially the stems and legumes, almost glabrous, but we have observed so many transitions between that state and those in which the stems might almost be called villous, and the legumes decidedly pubescent, and forms as variable as the soil in which this species is found, that we have been induced to neglect the pubescence as a character insufficient to mark a variety."

References are also made to the more or less pubescent forms and to the densely pubescent or slightly villous forms which had been cited under different species. In India the plant is used medicinally by Indian doctors.


Type specimen *Pole-Evans* H. 16853, in Herbarium, Kew.

An erect slender branching plant. *Stems* softly pubescent with greyish hairs. *Leaves* 6-9-jugate, 4·5-10 cm. long; leaflets oblanceolate, thinly pubescent above, more densely pubescent below, mucronate, 1-3 cm. long, 4-9 mm. broad. *Stipules* linear-lanceolate, 5-6 mm. long. *Peduncles* terminal, 17-25 cm. long, more or less laxly racemously flowered. *Flowers* 2-4 together, often in the axils of the upper leaves. *Calyx*-tube 3 mm. long, 6-9 mm. in diam., lobes triangular-subulate, 3-5 mm. long. *Vexillum* 1·1 cm. long, 0·9-1 cm. broad, pubescent without. *Style* 3-4 mm. long, glabrous, penicillate at apex. *Legumes* 3-4 cm. long, 3-4 mm. broad, slightly falcate, densely and softly tomentose.


Type specimen, *Schlechter* in Herbarium, Kew.

Suffruticose. *Stems* erect, densely pilose-pubescent. *Leaves* 3-8-jugate, 4·6-5 cm. long; leaflets 2·4-5 cm. long, 3-6 mm. broad, narrow-oblong or oblanceolate, mucro short, recurved, glabrous above, softly appressedly cinereo-pilose below. *Stipules* narrow, 5-7 mm. long, 3-nerved. *Peduncles* 8-14 cm. long, terminal and leaf-opposed, laxly racemose, flowers usually in pairs. *Flowers* 7-8 mm. long; bracts 2·5 mm. long, narrow. *Calyx*-tube 2 mm. long, 5 mm. in diam., lobes 2·5 mm. long, narrow triangular-subulate, pilose
without. *Style* 3–4 mm. long, glabrous, flattened, penicillate at apex. *Ovary* 4 mm. long, pubescent. *Legumes* 4 cm. long, 4 mm. broad, flat, apex slightly falcate, thinly and shortly pubescent.

**BECHUANALAND PROTECTORATE.**—Mochudi, *Harbor* [Rogers 6881] (Z.).


35. **T. inandensis** H. M. Forbes sp. nov., affinis *T. (grandiflorae* (Ait.) Pers., sed stipulifloris subulatis differt. Suffrutex caulibus erectis. *Caules*, pedunculi, petiolique dense pubescentes demum glabrascentes. *Folia* 6–7-jugata, 6–11 cm. longa; foliola cuneato-oblonga, retusa, mucronulata, 2–5–4 cm. longa, 1–1.5 cm. lata, supra glabra, subitus pubescentia; stipulæ subulato-acuminatae, usque ad 1 cm. longae; pedunculi usque ad 7 cm. longi, terminales vel axillares; bracteæ ovato-acuminatae, mox caducae; pedicelli usque ad 1 cm. longi, pubescentes. *Flores* 2 cm. longi; calyx pubescent, dentes calycis lanceolato-acuminati tubo aequilongi sed uno longiore; stylus pilosus.

**NATAL.**—Inanda district: Wood 289, Inanda, Type in Natal Herbarium, Durban.

Suffruticose. *Stems* erect, with stems, peduncles and petioles densely pubescent, but becoming glabrous at length. *Leaves* petioloed, 6–7-jugate, 6–11 cm. long; leaflets cuneato-oblong, retuse, mucronulate, glabrous above, pubescent below, 2.5–4 cm. long, 1–1.5 cm. broad. *Stipules* subulate, acuminatae, up to 1 cm. long. *Peduncles* terminal and axillary, up to 7 cm. long. *Bracts* ovato-acuminatae, soon caducous. *Flowers* 2 cm. long, “rosy”; pedicelli usque ad 1 cm. long, pubescent. *Calyx* pubescent, four lobes equaling the tube in length, longest much longer. *Ovary* shortly and densely pubescent along margins. *Style* bearded. *Legumes* not seen.

Only one specimen of this plant is in the Natal Herbarium. It appears to be an erect shrubby plant.


Type specimen, *Dinter* 5747, in Dinter’s Private Herbarium.

A perennial, many-stemmed, woody, erect shrub up to 70 cm. high. *Stems* terete, thinly appressedly pubescent, branches long. *Leaves* petioloed, 3–6 cm. long, petioles about 7 mm. long, 3–6-jugate; leaflets 2.5–7 cm. long, 0.5–1.2 cm. broad, oblong, shortly mucronate, midrib prominent, glabrous above and closely appressedly grey-hairy below; petiolules about 1.5 mm. long, very hairy, rotund, with a round glabrous gland on the under-surface. *Stipules* subulate, 2-nerved. *Peduncles* about 15 cm. long, angular, grooved; inflorescence rigid, laxly flowered, about 10 cm. long. *Flowers* single or two together, pale mauve; pedicels 2.5 mm. long, shortly and densely hisrate; bracts stiffly erect, awl-shaped. *Calyx* broadly campanulate, tube 9 mm. in diam., 3.5 cm. long, two upper lobes 2 mm long, three lobes 3 mm. long, all lobes 1–1.5 mm. broad, whole calyx thickly hairy with short brownish hairs. *Vexillum* hairy without, 1.8 cm. long, 1.4 cm. broad. *Ovary* 1–3 cm. long, densely silky. *Style* 4 mm. long, bearded. *Legume* linear, 13–15 seeded, 5–5–8 cm. long, 5–5.5 mm. broad, densely white hisrate.


Type specimen, *Rautanen* 530, in Botanisches Museum, Zurich.

Suffrutiaco, branches cinereo-holosericeous. *Leaves* 7–14-jugate, 6–14 cm. long; leaflets 1.2–2.5 cm. long, 0.4–0.8 cm. broad, oblong-ovate, apex rotund or emarginate,
mucronate, base cuneate acute, glabrous above, lacto- or cinereo-holosericeous below. 
*Stipules* 2-5 mm. long. *Peduncles* terminal, 8-30 cm. long, many-flowered. *Flowers* pedicellate, about 1·45 cm. long. *Calyx* holosericeous, tube about 3 mm. long, lobes triangular, lanceolate, 3-5 mm. long. *Vexillum* 1·4 cm. long, silky without. *Style* bearded. *Legumes* 4-5·5 cm. long, 4-5 mm. broad, sericeous.

**South West Africa.**—Hereroiland: Epaho, in sandigen Boden, Halbkraut, *Rautanen* 530 (Z.); Luderitz 1 (Z.); Namaqualand: Sendlingsgrab, Rehboth, *Fleck* 631 a (Z.); Namieb bei Khoianii, *Belek* 54 b (Z.).

38. *T. tzaneenensis* H. M. Forbes sp. nov., affinis *T. elongatae* E. Mey., sed foliis sessilibus vel breviter petiolatis differt.

*Suffrutex* caulibus erectis vel ascendentibus glabris vel parce pubescentibus; foliola 1-4-juga, linearia vel oblongo-linearia, 2-9 cm. longa, 0·5-2 cm. lata, subtus glabra vel parce pubescentia; stipulae linear-subulate. *Pedunculus* 7·5-32 cm. longus; racemi laxiflorae. *Flores* 1-3 cm. longi; pedicels 1 cm. long, pubescent.

Type specimen, *Pole-Evans* 4024, in National Herbarium, Pretoria.


This species is similar in appearance to *T. elongata* but is readily distinguished by the sessile or very shortly petiolate leaves.

39. *T. elongata* E. Mey. Comm. Pl. Afr. Austr. 111 (1835); Sond. in Linn. 23.30 (1850); Harv. in Harv. and Sond. Fl. Cap. 2.208 (1861-62); *Wood* Fl. Natal 42 (1907); *Wood* in Trans. S. A. Phil. Soc. 18.2.147 (1903); Ann. Tvl. Mus. 3.3.147 (1912); *Bews* Fl. Natal and Zululand 111 (1921); *Burtt Davy* Fl. Tvaal. 1.2.378 (1932).


Type specimen, *Drège* s.n., in Botanisches Museum, Berlin-Dahlem.

*Suffrutice*. *Stem* ascending from the base, erect, subangular, flexuous, glabrous or pubescent, up to 60 cm. long. *Leaves* 1-2-jugate, lower occasionally simple, common petiole 1·1-5·5 cm. long; leaflets linear-lanceolate, glabrous or pubescent, mucronate, 4-7-9 cm. long, 0·6-1·2 cm. broad. *Stipules* subulate-acuminate, 4-8 mm. long. *Peduncles* 6-20 cm long, laxly racemously flowered. *Flowers* up to 1·3 cm. long; pedicels 2-4 mm. long. *Calyx*-lobes about equaling the tube in length. *Ovary* 6·5 mm. long, pubescent. *Style* glabrous. *Legumes* 5-6 cm. long, 0·3-0·4 mm. broad, pubescent or glabrescent.


Var. *pubescens* E. Mey. Leaflets, stems and legumes pubescent.


In "Annals of the Transvaal Museum", 14.4.398 (1932), Mr. R. G. N. Young described a new species, *T. aurantiaca*. I have examined his material and can find no grounds for removing it from *T. elongata*. The colour of the flowers, which he gives as a "deep orange-brown", is not a reliable character on which to separate it, as in *T. elongata* the colour of the flowers, according to collectors' notes, varies from vermilion-red to deep orange-red.

Should further collections prove Mr. Young's plant to be worthy of specific rank, another specific name will have to be given it, the name "aurantiaca" being invalid, as it has already been used by Harms for a *Tephrosia* described by him in Engl. Jahrb. XXVIII. 402.


Type specimen, *Marloth* 1086, in Botanisches Museum, Berlin-Dahlem.

*Stems* elongate, ascending, slender; stems and lower surface of leaves appressedly sericeo-pilose. *Leaves* 2-3-jugate, 2-6.5 cm. long, petiole 2-4.5 cm. long before first pair of leaflets; leaflets narrow linear-lanceolate, margins cartilaginous, apex acute, 2-5 cm. long, 0.2-0.3 cm. broad. *Stipules* linear-subulate, brown, 4-5 mm. long. *Peduncles* terminal, 8-20 cm. long, densely flowered above; bracts 4-6 mm. long, subulate, brown; pedicels 3-5 mm. long; flowers 1-3 cm. long. *Calyx* densely pilose, teeth deltoid, subequal in length to tube. *Style* bearded. *Legume* narrow linear, flat, apiculate, 5-6 cm. long, 3 mm. broad, many seeded.


Engler remarks: "It is near *T. lurida*, which, however, has longer leaflets and fewer flowers."

Apparently this plant has only been collected once. Further collectings may prove that it is merely a form of *T. lurida*.


Type specimen, *Zeyher* 456, in Herbarium, Kew.

Suffruticose. *Stems* erect, branches ascending from the base, angular, hispid. *Leaves* 1-4-jugate, very rarely simple leaves present, up to 13 cm. long, length of petiole before first pair of leaflets 1-7.5 cm. long; leaflets elongate-linear, mucronate, glabrous above, appressedly pubescent below, midrib prominent, lutescent, 2-12 cm. long, 1-9 mm. broad. *Stipules* setaceo-subulate, 0.8-1.3 cm. long. *Peduncles* up to 30 cm. long, few flowered towards the apex. *Flowers* 1.5 cm. long. *Calyx* sericeous without, lobes acuminate, longer than the tube. *Vexillum* sericeous without. *Style* flattened, bearded. *Legume* linear, compressed, lurido-tomentose, many seeded, 7-8 cm. long.

**Transvaal.**—Potchefstroom district: Potchefstroom, *Goossens* 1460 (B.); Ventersdorp, *Sutton* 576 (P.); Marico district: Zeerust, *Leendertz* (T.M.); *Jenkins* (S.A.M.); *Thode* A 1393 (P., N.); Lichtenburg district: Lichtenburg, *Jenkins* (T.M.); *Grasfontein*, *Sutton* 299 (P.); *Klipveld, Liebenberg* 79 (P.); Heidelberg district: Heidelberg, *Thode* A 1308 (P.); *Leendertz* 2455 (T.M.); Witwatersrand district: Natal Spruit, Johannesburg, *Bryant* D 81 (P.); Observatory Ridge, *Burtt Davy* 18896 (K.); Jeppestown, *Galpin* 1379.
Rhodesia.—Matopos, Bulawayo, Rogers 5682 (B.H., S.A.M., T.M.); Bulawayo, Eyles 1206 (P., S.A.M., B.); Salisbury, Eyles 2170 (P., S.A.M.); Mazoe, Eyles 265 (B.H.).

The Zulu name for this species is “iShoba-lehashi”. A cold infusion of the root is mixed with an infusion of Dianthus crenatus and the froth is used for washing the face so as to attract the attention of the opposite sex. As a further measure, some of the liquid is also drunk.

42. T. longipes Meisn. Hook. Lond. Journ. Bot. 2.87 (1843); Cape Plants, Krauss and Engler, 54 (1846); Walpers Rep. Bot. Syst. 5.515 (1846); Harvey in Harv. and Sond. 2.208 (1861–62); Baker in Oliv. Fl. Trop. Afr. 2.120 (1871); Grant and Oliv. in Trans. Linn. Soc. Lond. 29.56 (1872); Ficalho and Hiern. in Trans. Linn. Soc. Bot. Ser. 2.2.19 (1881); O. Kuntze Rev. Gen. Pl. 1.175 (1891); Wood Fl. Natal 42 (1907); Wood in Trans. S.A. Phil. Soc. 18.2.147 (1908); Burtt Davy and Pott in Ann. Tvl. Mus. 3. 3.146 (1912); Bews Fl. Natal and Zululand 111 (1912); Baker f. in Leg. Tvl. Mus. 14.4.398 (1932); Burtt Davy Fl. Taal. 1.2 (1932).


Type specimen, Krauss 20, in Herbarium, Kew.

Suffruticose. Stems erect, branching, angular, subcanescent. Leaves 2–8-jugate, 5–13 cm. long, length of petiole before first pair of leaves 1–4 cm.; leaflets 1.5–11 cm. long, 2–7 mm. broad, narrow linear, usually complicate, mucronulate, glabrous above, argenteous beneath. Stipules setaceo-subulate, 0.4–1 cm. long. Peduncles terminal, up to 50 cm. long. Flowers about 1.7 cm. long, few in remote fasicles; pedicels and bracts 3–5 mm. long. Calyx fulvo-pilose without, tube 7–8 mm. in diam., 2.5 mm. long, lobes narrow, acuminate, unequal, 1–4 mm. long. Vexillum densely fulvo-pilose without, 1.6 cm. long, 1.2 cm. broad. Ovary densely silky. Style bearded. Legumes flat, linear, 3.5–7.5 cm. long, .4 mm. broad.
Natal.—Durban district: Port Natal, Krauss 20 (K., G., O.); Gueinzius 308 (K., V.); Krauss s.n. (V.); Zeyher (Z.); near Durban, Wood 9565 (B., S.A.M.); Umzinyathi Falls, Wood 1202 (K., B.M., N., B.H., S.A.M.); Umlaas, Evans 327 (N.); Lower Tugela district: Ntondweni, Wood 9214 (P.); near Tugela River, Wood (S.A.M., G., B.); no definite locality, Gerrand (P.).


A note on the specimen collected by Mrs. Monteiro states: “The Kaffirs steep the leaves of this plant and rub them on the body to keep them in health when going a journey.”

Var. uncinata Harv.

Leaflets obtuse, recurvo-mucronulate.

Type Specimen of the variety, Zeyher 455, in Herbarium, Kew.

Transvaal.—Carolina district: Carolina, Moss and Rogers 1075 (Z.); Potchefstroom district: Holwater, Christiana, Bloemhof, Burtt Davy 11239 (P.); Pretoria district: in nemorosis ad Aapies R., Zeyher 455 (K., B.M., Pa., G., Z., A.M., S.A.M.); Aapies and Orange Rivers, Burke (K.); in campis ad Magaliesberg and Vaal River, Zeyher 373 (S.A.M.); Magaliesberg, Burke (K.); colles supra Aapies R., Rehmann 4393 (K., B.M., Z.); Pretoria, Leendertz [T.M. 104] (T.M.); McIntjies Kop Range, Pretoria, Smith 3447 (P.); Wonderboompoort, Smith 6190 (K.); Barberton district: Lows Creek, Thorncroft 1154 (P.); Barberton, Rogers 29406 (Z.); Pietersburg district: Modjadjes, Pietersburg, Rogers 18129 (K.); Waterberg district: Kaalfontein, Galpin 13382 (P.); Nooitgedacht farm near Ypres Halt, Galpin 11518 (Pa., B.H.); Moddene, Naboomspruit, Galpin M 85 (P.); Houtbosch, Rehmann 6224 (Z.); Zoutpansberg district: Zoutpansberg Range, Smuts (P.); no definite locality, Rehmann 4928 (Z.); Drège 455 (V.); Junod 1573 (G., Z.); Holland (Z.).


Type specimens, Moss 7473 and Young 676, in Herb. Young in Witwatersrand University, Johannesburg.

Suffruticose. Stems ascending, 1–2 ft. high; branches slender, flexuous, sulcate, angular, sparsely patent or appressedly clothed with reddish hairs, or glabrescent. Leaves 2.5–5.5 cm. long, petiole long, 3–10–jugate; leaflets 0.7–2 cm. long, 1.5–4.5 mm. broad, narrow oblong-elliptic, acuminate, mucronate, glabrous above, thinly pubescent below, veining below usually dark reddish-brown. Stipules 2–7.5 mm. long, linear, setaceous. Peduncles 15–16 cm. long, usually laxly flowered. Flowers 7–8 mm. long, 1–3 together. Calyx-tube 3.5–5 mm. broad, 1.5–2 mm. long, lobes 0.5–2 mm. long, deltoid acuminate. Vexillum 6.5–7.5 mm. long and broad, subrotund, canescence without. Style 2–3 mm. long, glabrous, penicillate at apex. Legumes 3.5 cm. long, 3 mm. broad, linear subfalcate, appressedly pubescent.

Cape.—Eastern Province, Transkei: rocky slopes, Kongha, Flanagan 1139 (Z., A.M., B.H.); Kei River, Dridge (K.) [Type of T. Woodii B. Davy]; Fakus’ Territory, Sutherland (K.); East Griqualand: ad rivos pr. “Clydesdale” ad flumen Unzimkulu, Tyson 2775 (K., Z., V., G., B., S.A.M.).

4477 (K., N.); Klip River district: Pieters pr. Ladysmith, Wood 6671 (K., Pa., N., P., S.A.M.); no definite locality, Gerrard 1073 (K., B.M., Pa., V., N.); Zululand: Entumeni, Wylie (N.).

**Orange Free State.**—Bloemfontein district: Bloemfontein, Kuntze (B., K.); Kopje facing Tempe farm, Potts 2936 (K., P.); no definite locality, Cooper 2211 (K., Z.).

**Transvaal.**—Standerton district: Standerton, Leendertz 4113b (T.M.); Potchefstroom district: Potchefstroom, Leendertz (T.M.); Klerksdorp, Convent 90 (A.M.); Maqassi Route, Liebenberg 3412 (K., P.); no definite locality, Cooper 2211 (K., Z.).

South Africa. — No definite locality, Junod 162 (P.); Schlechter 3240 (Z.); Krook [Herb. Penther 2544] (V.); Thode (B.).

**44. T. semiglabra** Sond. in Linnaea 23.29 (1805); Harvey in Harv. and Sond. Fl. Cap. 2.205 (1861-62); O. Kuntze Rev. Gen. Pl. 1.175 (1891); Burtt Davy and Pott in Ann. Tvl. Mus. 3.3.146 (1912); Ann. Bolus Herb. 3.1.20 (1920); Bot. Survey S.A. Mem. 12.68 (1928); Young in Ann. Tvl. Mus. 14. 4. 404 (1932); Burtt Davy Fl. Tvaal. 1.2.378 (1932); Watt and Breyer-Brandwyk in Med. and Pois. Pl. S.A. 74 (1932).


**Type specimen,** Zeyher 459, in Herbarium, British Museum (Natural History), London.

**Stems** decumbent, arising from the base, up to 3 feet long, flexuous, clothed with rufous tomentum, angular. **Leaves** 3-6-jugate, 1-5-6 cm. long, shortly petiolate; leaflets oblong-lanceolate, recurved-mucronate, glabrous above, rufo-tomentose below, 1-2-5 cm. long, 0-5-1 cm. broad. **Stipules** subulate acuminate, 4-6 mm. long. **Peduncles** 7-15-20 cm. long. **Flowers** 0-9-2-3 cm. long, pedicels 0-4-1-2 cm. long. **Calyx** rufo-tomentose, tube 0-6-1-2 cm. diam., 2-5-4 mm. long, lobes lanceolate-acuminate, unequal, 1-3 mm. long. **Vexillum** 0-9-2-3 cm. long and broad, pubescent without. **Ovary** pubescent, 5-6 mm. long. **Style** glabrous. **Legumes** shortly pubescent, 3-5-4-5 cm. long, 3-4 mm. broad.


**Natal.**—Pinetown district: Drummond, Franks (N.); Maritzburg district: near Maritzburg, Wood 3162 (K.); Newcastle, Wood 7191 (K., P., N.).

ORANGE FREE STATE.—Kroonstad district: Pont 328 (Z., P., G.U.C.); Viljoen’s Drift, Rogers 4806 (B.M.); Rogers (T.M.); Bethlehem district: Dunelm Farm, Foursieburg, Potts (K.); on slopes of hill near Little Caledon river, “Wyndford”, Foursieburg, Gemmell (G.U.C.); no definite locality, Cooper 2226 (K., Z.).

Transvaal.—Vereeniging district: Vereeniging, Bruyn 163 (P.); Witwatersrand district: Jeppesown Ridge, Johannesburg, Gilflnan [Herb. Galpin 6100] (P., A.M.); Holden (T.M.); Moss 61715 bis (W.); grass-veld, Milner Park, Moss 6250 (B.M., W.); Mulder’s Drift, Moss 13596 (W.); Klipriviersberg Range, Rand 1116 (B.M.); Observatory, Weeks 357 (W.); Modderfontein, Conraoth 230 (Z., B.); on veld near Geduld Dam, Witwatersrand, Murray (P.); grass-veld, Rietfontein, Moss 16428 (W.); Kualfontein, Pole-Evans H 13531 (K.); Pretoria district: in collibus lapidosis Aapies River pr. Pretoria, Bolus 10834 (K., B.H.); Irene near Pretoria, Obermeyer (T.M.); in grass near the Fountains Stn., Fountains Valley, Repton 195 (P.); Pretoria, Smith 1588 (P.); Commonage, Arcadia, Smith 16772 (P.); Riviera, Smith 1800 (Z., P.); Meintjies Kop, Smith 2305 (P.); in lapidosis ad ped. mont. Magaliesberg, Zeyher 459 (B.M., O., S.A.M.); Silverton, Leendertz 565 (T.M.); Hatherley, Collins (T.M.); Middelburg district: near Witbank, Gilflnan (P., A.M.); Carolina district: Leewpoort, Carolina, Burtt Davy 7436 (P.); Farm Nooitgedacht, Ermelo, Henrici 1383 (P.); Dasal, Ermelo, Hoffe 9 (P.); Barberton district: Bushveld, Warmbaths, Moss 16584 (W.); Waterval Boven, Mason 34 (K.); Waterval Onder, Jenkins (T.M.); Saddleback Mtn., Barberton, Galpin 678 (Z., A.M., B.H., N., P.); Nelspruit, Liebenberg 2714 (P.); ridge to Pretorius Kop from White River, Lydenburg district: Gillett 1049 (P.); Farm Zwagershoek, Lydenburg district, Obermeyer 193 (T.M.); bei der Stadt, Lydenburg, Wilms 362 (B.M., G., V., B., T.M., B.H.); Mbabane, Swaziland, Rogers 11447a (B.H.).

PORTUGUESE EAST AFRICA.—In solo arenoso in colle pone Lourenço Marques, Bolus 7725 (B.H.).


The Suto name for T. semiglabra is “Pelo-di-marobaya-thaba”. A decoction of the roots of this plant together with the roots of Haplocarpha scaposa is used in the treatment of chest colds.

45. T. Burchellii Burtt Davy in Kew Bull. 50 (1921); Burtt Davy Fl. Tvaal. 1.2.378 (1932).

Type specimen, Burchell 1932, in Herbarium, Kew.

Slender prostrate herb. Stems annual, arising from a perennial root-stock, 20-30 cm. long, flexuous, branching from the base. Leaves shortly petiolate, 5-8-jugate, 4-4-5 cm. long, rhachis hirsute with long hairs; leaflets 0·8-1·4 cm. long, 4-8 mm. broad, obovate, retuse, mucronulate, glaucous, ciliate, glabrous above, lower surface sparsely hirsute, chiefly along the veins. Stipules linear, 3-5 mm. long. Peduncles axillary, slender, 5-12·5 cm. long, laxly flowered. Flowers about 6 mm. long, 2-3 together. Calyx hirsute with long white hairs, tube about 1-1·5 mm. long, lobes narrow subulate, about 3 mm. long. Vexillum pubescent on the back. Style glabrous. Legumes 3-4 cm. long, 3-3·5 mm. broad, slightly falcate, appressedly puberulous.

South West Africa.—Ondonga, Amboland, Rautanen 644 (K., Z., V., G.); Okahandja, Dinter s.n. (D. Coll.); Farm Quickborn, Okahandja, Bradfield 60 (T.M.); Dinter 419 (B.); Omahahehe, Dinter 25636 (B.); Leutteim, Dinter s.n. (B.); in river bed between Hoffnungsfelde and Hans, Pearson 9528 (K.).

Bechuanaland Protectorate.—Gorua, East Bamangwato Territory, Holub (K.); Batlapin Territory, Holub (K.); Mochudi, Rogers 6070 (K.); Harbor [Rogers 6590] (Z., P.); Harbor 985 (Kim.); Harbor s.n. (T.M.); Harbor [Rogers 6501] (P.); Harbor [Rogers 6500] (B.H.); Harbor [Rogers 6878] (P.).
Cape Province.—British Bechuanaland: Vryburg district: Armoeds Vlakte, Mogg 8686 (P.); Sharpe (P.); Sheppards Gift, Burtt Davy 13749 and 13771 (P.); Experimental Farm, Vryburg, Going 7199 (P.); Takoon, Burtt Davy 13965 (P.); Litaken, Burtt Davy 13915 (P.); Griqualand West: Barkly West district: Daniels Kuil, Wilman (B.H.); Hardeveld, Priel, Acocks 1578 (Kim.); Hay district: Wildealsput, Auchamp 982 (Kim.); Griquatown, Burchell (K., Pa.); Bemolli, Wilman (K.); Kimberley district: Kimberley, Wilman 1366 (K., B.H., A.M., T.M.); in loose red sand, Kimberley, Wilman 1366 bis (K., P., A.M., S.A.M., B.H.); Bushman's Fountain, Wilman (B.H.); Magersfontein, Wilman (T.M.); Reit Pan, Reinhardt 980 (Kim.) and Wilman (P.); Newlands, Wilman 3063 (Kim.); Herbert district: St. Clair, Douglas, Orpen 132 A (K.) and Orpen 133 (S.A.M.); Prieska district: Niekerk's Hoop, Wilman (P., T.M., A.M., B.H.); Krantzkop near Niekerk's Hoop, Bryant 1138 (P.).

Orange Free State.—Boshof district: Karree Pan, Wilman 3327 (Kim.); Smitskraal, Burtt Davy 10161, 11283, 11322, 11360, 12905 (P.).

Transvaal.—Bloemhof district: Christiana, Burtt Davy 11378, 12818, 14487 (P.); Wolmaransstad district: Wolmaransstad, Rogers 18470 (K.); Lichtenburg district: grass veld, Coligny, Blenkiron (W.); Potchefstroom district: Vereeniging, Leendertz 3747 (T.M.); Pretoria district: Hebron, Dehuke (T.M.); foot of south slope, Meintjies Kop, Smith 2312 (P.); Barberton district: Komatiport, Moss and Rogers 618 (K., P.); Rustenburg district: Rustenburg, Nation 164 (K.) and Nation 246 (K.); Pietersburg district: in plantibus graminosis prope pagum Pietersburg, Bolus 11073 (B.H.); Mosdene, Naboomspruit, Galpin M 83 (P.); Klippan, Bushveld, Rehmann 5191 (K., B.M.); Zoutpansberg district: Valdezia, Obermeyer 1155 (T.M.).

Portuguese East Africa.—Lourenco Marques, Moss and Rogers 742 (K., Z., W.).


Type specimen, Bolus 7724, in Herbarium, Kew.

Stems flexuous, procumbent, erect or ascending, branching from the base and above, glabrous or slightly pubescent, dark brown. Leaves subsessile or very shortly petiolate, 3.5–7 cm. long, 3–7-jugate; leaflets 0.8–2 cm. long, 3.5–7 mm. broad, oblong-oblanceolate, apices very much retuse, mucronulate, glabrous above, glabrescent or very sparsely pubescent below. Stipules subulate, 4–6 mm. long. Peduncles terminal or leaf-opposed, laxly flowered, 3.5–15 cm. long. Flower 1.7 cm. long, pedicels 3.5–5 mm. long; bracts lanceolate, narrow, about equalling the pedicels. Calyx thinly and shortly pubescent, tube 7 mm. in diam., 3 mm. long, lobes triangular-subulate, two upper lobes connate, very short, others 2–3 mm. long. Vexillum thinly pubescent on back, 1.7 cm. long, 1–8 mm. broad. Ovary thinly pubescent. Style bearded. Legumes linear, very thin and shortly pubescent, light brownish-yellow, 4.5–5 cm. long, 4.5–5 mm. broad.

Transvaal.—Middelburg district: Middelburg, Rogers 24827 (K., G., Z., P.); Barberton district: juxta Kaap River prope Barberton, Bolus 7724 (K., B.H.); Kopje, Kaap Valley, Barberton, Galpin 1180 (K., P., N., S.A.M., A.M.); Barberton, Pott 5326 (T.M.); Lydenburg district: Schagen, Nelspruit, Liebenberg 3317 (K., Pa., P.); Pietersburg district: in clivibus Mt. Elandspruitbergen, Schlechter 3837 (B.H.); Shiluwane, Junod 1125 (K., Z.).

Swaziland.—In graminosis in terra "Middel Veld" dicta pr. pagum Bremersdorp, Bolus 11821 (K., B., B.H.).

Fl. Cap. 2.207 (1861-62); Bolus and Weyler Dvd in Trans. S.A. Phil. Soc. 14.3.237 (1903); Zühlbr. Ann. K. K. Naturhist. Hofmus. 20.3.24 (1905); Wood Fl. Natal 42 (1907); Wood in Trans. S.A. Phil. Soc. 18.2.147 (1908); Burtt Davy and Pott in Ann. Tvl. Mus.3.3.146 (1912); Die Veg. der Erde 9.3.590 (1915); Phillips in Ann. S.A. Mus. 16.1.82 (1917); Bot. Survey S.A. Mem. 1.64 (1919); Bews Fl. Natal and Zululand 110 (1921); Bot. Survey S.A. Mem. 12.68 (1928); Bot. Survey S.A. Mem. 13.35.38 (1929); Levyns Guide to Flora of Cape Peninsula (1929); Burtt Davy Fl. Tvaal. 1.2.378 (1912); Watt and Breyer-Brandwyk Med. and Pios. Pl. S.A. 74 (1932); Bothalia 3.2.239 (1937).


Suffrutescous. Stems procumbent, several from a woody root-stock, pubescence variable, branches slender. Leaves long petiolate, 2-4-jugate, 1-3 cm. long; leaflets sub-cuneate oblong or lanceolate, obtuse or acute, glabrescent above, glabrous or hirsute below, veining usually dark reddish-brown on lower surface, 1-3 cm. long, 0.5-1.4 cm. broad. Stipules subulate, 3-5 mm. long. Peduncles opposite leaves, slender, 7-15 cm. long, interruptedly few-flowered. Flower 0.65-1 cm. long; pedicels 3-5 mm. long. Calyx-teeth equalling or longer than the tube. Ovary 4-5 mm. long, silky. Style glabrous, Legume linear, narrow, 3-5 cm. long, 0.3 cm. broad, pubescent, thinly puberulous or glabrescent, about 8-seeded.

Cape.—Capetown district: Cape Town, *Prior* (K.); *Alexander* 109 (K.); *Rogers* 17800 (G.); Camps Bay, *Prior* (K.); *Young* (T.M.); Hillside above Bantry Bay, Sea Point, *Smith* 2938 (P.); W. slopes, Lions Head, *Levyns* (S.A.C.); steinige stelten am westlichen Abhang des Kasteel Berg, *Zeyher* 4824 (B.H.S.); Kasteels Poort, Table Mtn., *Thorne* (S.A.M.); in fruticetis inter lapides alt. 2 mont. tab., *Ecklon* 817 (K.); Contour Path, N. slopes of Table Mtn., *Moss* 7803 (W.); Devils Peak, *Wolley Dod* 16 (B.H.) and 585 (K.); in Monte Diaboli, *Rehmann* 1096 (B.M., Z.); and 1097 (Z.); W. slopes of Apostles, *Pillans* 3472 (P.); in ericetis, Rondesbosch, *Zeyher* (S.A.M.); Kirstenbosch, *Adamson* (S.A.M.); Wynberg Hill, *Guthrie* 256 (S.A.C.); slopes behind Wynberg Park, *Kensit* (B.H., T.M.); Wynberg Hill, *Bolus* 3895 (B.H., A.M.); Simonstown, *Salter* (B.M.); Simons Bay, *Wright* (P.); Caledon district: *Hermanus*, *Rogers* 2644 (T.M.); *Gulpin* 12902 (P.); *Gillett* 644 (B.H.); Swellendam district: on plains of George and Swellendam, *Bowie* 4 (B.M.); Riversdale district: Riversdale, *Schlechter* 1863 (1) (W.); *Levyns* 3155 (S.A.C.); *Rust* 217 and 305 (B.); Mossel Bay district: Mossel Bay, *Moran* (Kim., T.M.); George district: *George*, *Moss* 6099 (W.); Knysna district: *Knyssna*, *Koet* 678 (P.); *Rosenbrock* 1159 (B.); Humansdorp district: The Glen, Humansdorp, *Burtt Davy* (P.); *Kouja R.*, near drift on road from Zuur Anys, *Fourcade* 3092 (K.); Uitenhage district: on fields by Zwartzkop R. and on hills of Adow, *Zeyher* 59 (K., B.H., A.M.); Uitenhage, *Penther* 2462 (V., B.); *Zeyher* 282 (Pa., G., B.); *Prior* (K.); *Thode* A 641 (P.); Zuurberg Sanatorium, *Long* 262 (K., P.); Enon near Zuurberg, *Thode* A 2638 (P., N.); Aloes, *Drege* 3065 (P., A.M.); Port Elizabeth district: near Port Elizabeth, *Baur* (K.); *Emerald Hill*, *Paterson* 2342 (P., B.H., A.M.); Somerset East district: common along Sky Parlour Level, *Scott Eliot* 498 (B.); Graaff Reinet district: summit of Cave Mtn. near Graaff Reinet, *Bolus* 247 (K., B.H.); Queenstown district: Fincham’s Nek. Queenstown, *Young* (W.); Plains, Queenstown, *Gulpin* 1679 (B., P.); Cathcart district: Cathcart, *Kuntze* (K.); Albany district: Fish River Heights, *Hutton* (P.); Bathurst district: road to Three Sisters, *Britten* 718 (A.M.); East London district: East London, *Otley* 2523 (W.); *Nahoon R. Valley*, *Smith* 3763 (P.); Buffalo River, *Rogers* (T.M.); Komga district: grassy hills, Komgha, *Flanagan* 132 (A.M., P., S.A.M.); British Kaffraria, *Cooper* 540 (B.M., Z., V.); Franklin district: near Newmarket, *Krook* (B.).
Natal.—Port Natal, Guinezius 332 (V.); Guinezius 625 (V.); Guinezius 312 (Pa., V.); Mayville, Wood (N.); Inanda district: Umhlanga, Wood 572 (B.M.); Umhlanga, Wood 1000 (N.); Pinetown district: New Germany, Indian Collector (N.); Dundee district: The Dam, Talana, Dundee, Truscott 58 (P.); Vryheid district: Vryheid, Pole-Evans 3896 (P.); Weenen district: among rocks, South Downs, Weenen Cty, Evans 478 (N.); Newcastle district: Boscobello, Jenkins (T.M.); no definite locality, Wood 779 (K., B.H.); Zululand, Gerrard and McKen (B.M., Pa.).


Orange Free State.—Harrismith district: Harrismith, Sankey 55 (K.); Bethlehem district: Foulisburg, Potts 4911 (K., G.U.C.); Heilbron district: Leeuw Spruit and Vredenort, Barrett-Hamilton (B.M.); Bloemfontein district: E. side of Grants Hill, Bloemfontein, Potts (K., P., G.U.C.); Top of Grants Hill, Bloemfontein, Potts 2364 (P.).

Transvaal.—Standerton district: Standerton, Leendertz 4113a (T.M.); Heidelberg district: Bolton Wold, Vereeniging, Burtt Davy 15083 (P.); grass veld, Doornkloof Kloof, Moss 14249 (W.); Benoni Bradfield, 127 (P.); Middelburg district: Pan, Middelburg, Burtt Davy 13236 and 13237 (P.); Pretoria district: in graminosis pr. Aapies River, Schlechter 3665 (B., T.M., B.H.); Skimmers Court, Pretoria, Burtt Davy (P.); Meintjies Kop, Pretoria, Smith 1417 (Z., P.); Wonderboompoort, Rehmann 4593 (B.M., Z.); Barberton district: Komatiopioort, Moss and Rogers 619 (Z.); Marico district: Sandy Hill, Marico, Oberholzer s. 32 (B.); Waterberg district: Potgietersrust, Cawley (P., T.M.); road between Pietersburg and Louis Trichardt, Pole-Evans and Van Nouhuyys 1941 (P.); Zoutpansberg, Junod 4372 (P., T.M.); on lower slopes of Zoutpansberg, Schweickerdt and Verdoorn 531 (P.). No definite locality, Vaal River, Zeyher (B., S.A.M.); Bushveld inter Elands R. and Klippan, Rehmann 5046 (Z.); Ecklon and Zeyher 2398 (V.).

South Africa.—No definite locality: Burchell 92 (G.); Burchell 6146 (Pa.); Krauss (V.); Krebs (G., B.); Bayer (B.); Rehmann 1098 (Z.); Harvey 733 (K.); Engler 47 (B.); Bergius (B.); Lehmann (Pa.); Lichtenstein 50 (B.); Moricand (G.); Mund and Maire (V., B.); Mund (K.); Ecklon and Zeyher 1629 (V.); Vaillour (Pa.).

Var. a hirsuta Harv. Leaflets more or less densely pubescent or hirsute below; oblong, obtuse or acute.

Cape.—Riversdale district: Zandhoogte, Muir 86 (P.); in graminosis pr. Riversdale, Schlechter 1863 (B.M., G., Pa., Z., B., P., A.M.); George district: pone Georgetown, Zeyher (S.A.M.); George, Moss 6995 (W.); Rogers 26469 (K.); Wilman 823 (S.A.M.); in montibus Long Kloof, Montagu Pass, Fr. de Castelnau 97 (Pa.); Outeniqua Mtns., Montagu Pass, Rehmann 12 and 13 (Z.); Knysna district: Poort Hills, Fourcade 589 (Z., A.M.); Knysna, Schonland 3474 (A.M., Pa.); Breyer (T.M.); Karatara Village, Keet 1149 (A.M.); Voetzie, Knysna, Keet 678 (A.M.); on hillsides, E. Head, Knysna, Williamson 106 (A.M.); Hackerville-Knysna, Breyer (T.M.); Plettenberg Bay, Zeyher (S.A.M.); Rogers 27942 and 28391 (P.); Rogers 28392 (K.); Uniondale district: on edge of road, De Vlucht, Keet 593 (A.M.); along the Avontuur Line, Britten 1035 (P.); Humansdorp district: mixed Duine veld at Sluiskop River, Humansdorp, Phillips 3418 (K., P.); Uitenhage district: Aloe, Drige 3157 (P.); Uitenhage, Thode A 641 (N., P.); near road from Uitenhage to Van Stadens, Schonland 3271 (P., A.M.); in lapidosis ad van Stadens Mtns., Zeyher 2396 (S.A.M.); Van Stadens, Paterson (T.M.); grassy hills, van Stadens R. near Mine Road, Bolus (B.H.); Port Elizabeth district: bushige Felder, Port Elizabeth, Rosenbrock 87 (B.); Humewood, Holland 3724 (B.H.); Mill Park, Port Elizabeth, Moorshead (W.); Moss 15417 (W.); Alexandria district: Zuurberg, Paterson 33 (A.M.); Sandflats, Hillary, Burtt Davy (P.); Grahamstown district: Grahamstown, Daly and Cherry 925 (T.M.); Burtt Davy 11543 (P.); Burtt Davy 12166 (P.); Rogers 27329 (K., Z., P.); near Grahamstown, Gillett 2494 (B.H.); Zeyher (S.A.M.); dry slopes, Gowies Kloof, Oatlands, Rennie 186 (S.A.C.); flats, Hofman’s Bosch, Britten 1035 (A.M.); in lapidosis clivis, Bothas Hill, MacOwan 478 (K.);
Bothas Hill, Dyer 1426 (B., P., A.M.); Peddie Road, Dyer 1360 (A.M.); Albany, Parry (A.M.); Britten 718 (P.); Gwel (P.); Bathurst district: Port Alfred, Potts 221 (A.M.); Kingwilliamstown district: Kingwilliamstown, Hilner 110 (A.M.); Stockenstroom district: grassy ridges, Willisdale Commonage, Stockenstroom, Scully 228 (S.A.M.); Queenstown district: grassy plains, Queenstown, Galpin 1679 (A.M.); Aliwal North district: on rocky mountain sides, Elands Hoek, near Aliwal North, Bolus 293 (B.H.); East London district: grass plains, Shelley Beach, Galpin 7344 (A.M., P.); Cambridge, Wormald 9 (A.M.); Coldstream, Schonland 1512 (P., A.M.); Komgha district: grassy hills near Komgha, Flanagan 617 (P., A.M., S.A.M.); Umtata district: near Umtata, Flanagan 2854 (B.H.); Cafferland, Gill (K., Z.); Bathurst district: Port Alfred, Potts 221 (A.M.); Kingwilliamstown district: Kingwilliamstown, Hilner 110 (A.M.); Aliwal North district: on rocky mountain sides, Elands Hoek, near Aliwal North, Bolus 293 (B.H.); East London district: grass plains, Shelley Beach, Galpin 7344 (A.M., P.); Cambridge, Wormald 9 (A.M.); Coldstream, Scully 228 (S.A.M.); Komgha district: grassy hills near Komgha, Flanagan 617 (P., A.M., S.A.M.).

Basutoland.—Leribe, Phillips 522 (S.A.M.).

Natal.—Heavetree Farm, Ralfe (P.).

Orange Free State.—Bethlehem district: Witzies Hoek, Jodde (B.H.): Bloemfontein district: in collibus lapidosis prope Bloemfontein, Bolus 10802 (B.H.); Winburg district: Houtenbek near Brandfort, Burtt Davy 14700 and 14694 (P.); Kroonstad district: Kroonstad, Pont 443 (P.).

Transvaal.—Pochefstroom district: on veld preservation experiment plots, Pochefstroom, Liebenberg 915 (P.); Johannesburg district: Thorntree Kloof, Moss 6903 and 10533 (W.); Modderfontein, Conradt 231 A (Z., B.); Pretoria district: Pretoria, Leendertz 3987 (B., B.H.); in arenosis prope Crocodile River, Schlechter 3987 (B., B.H.); Lydenburg district: bei der Stadt, Lydenburg, Wilms 365 (K., B.M., P., G., Z., B.).

Var. p. angustifolia Harv. Leaflets very narrow, lanceolate, complicate, mucro recurved, slightly hirsute below.

Cape.—Swellendam district: in collibus graminosis ad Buffelsjagts River, Swellendam, Zeyher (S.A.M.); Mossel Bay district: Vrigers Berg, Muir 2046 (P.); Uniondale district: rocky hill N. of Joubertina, Fourcade 2935 (K.); Humansdorp district: Loerie Plantation, Humansdorp, Dix 119 (B.H.); Uitenhage district: in montibus ad Elandsriver, Uitenhage, Zeyher (S.A.M.); Bolus (B.H.); Burchell (K.); ad flumen Zwartkopsrivier, Zeyher 2397 (S.A.M.); Albany district: Redhouse, Paterson 296 (A.M.); Grahamstown, Rogers 27426 (A.M., P.); Penrich Farm, Botha’s Ridge, Dyer 1165 (A.M., P.); Assegai Bosch, Breyer (T.M.); Graaff Reinet district: Cave Mt. near Graaff Reinet, Bolus 11822 (B.H.); Cradock district: in lapidosis aridis prope Mortimer in Distione Cradock, Kenyon (B.H.); Cathcart district: Drège (K.).

Natal.—No definite locality, Cooper 2221 and 2222 (K.).

Var. y. longipetiolata H. M. Forbes var. nov.

A typo petiolis longioribus differet. Leaves 1–3-jugate, 3–10 cm. long, petiole before first pair of leaflets 2·5–9 cm. long; leaflets 1·9–3·5 cm. long, 4–7 cm. broad.

Cape.—Grahamstown district: Trapps Valley, Anstey 4 (A.M.); Bothas Hill, MacOwan (B.H.); East London district: East London, Breyer (T.M.); Kentani district: prostrate among grasses, Coast, Pegler 1295 (T.M., P.).

T. ternatifolia R. G. N. Young in Ann. Tvl. Mus. 14.4.406 (1932). I have examined all the material of this species cited by Young and can find no legitimate reason for separating it from T. capensis. The distinguishing character used by Young in his key is “terminal leaflets equalling the petiole,” but this feature is not constant, as in speci-
mens written up and cited by Young, the terminal leaflets not only equalled the petioles, but exceeded them or were much shorter. These differences in length quite frequently occurred on the same specimen. The interrupted inflorescence and dark venation on the lower sides of the leaflets are both characteristic of *T. capensis*, therefore, in my opinion, the specimens cited by Young as *T. ternatifolia* should be transferred back to *T. capensis*.

The very large amount of material included in this species shows a great range of variety in general habit, and, in particular, in the length and breadth of the leaflets, and in the almost complete absence of pubescence to types which are distinctly hairy. These variations frequently so merge into each other that it is puzzling to decide definitely to which variety a specimen may belong, so that the varieties tend to become rather artificial. In a few instances, specimens, generally collected only once, do appear to differ, but until such time as more complete material has been collected from the same localities, it is, I think, advisable to retain them in this group.

To the Zulus this plant is “isiKhwali” and they use the root to make an emetic for biliousness. The Suto name is “pelo-di-maroba” and the Suto use the cooked root with a decoction of *Commelina africana* for nervousness and weak heart.

48. **T. pseudocapitata** H. M. Forbes sp. nov., affinis *T. macropoda*e Harv., sed caulibus brevioribus, stipulis subulatis, dentibus calycis tubo brevioribus differt.

_Caules_ ascendentes vel decumbentes, e basi ramosi, parce fulvo-pilosi. _Folia_ 2-4-jugata, 2-5-8 cm. longa; foliola obovato-cuneata, 2-5-5-5 cm. longa, 0-8-2 cm. lata, mucronata, supra glabra, subtus leviter pilosa; stipulae subulatae, usque ad 1-5 cm. longae; pedunculi usque ad 14 cm. longi. _Flores_ 1-5 cm. longi; bracteae lineari-subulatae; dentes calycis triangulare-subulati, tubo breviores; ovarium pubescens; stylus pilosus.

_Type specimen, Wylie (N.H. 21787), in Natal Herbarium, Durban._

_Stems_ ascending or decumbent, branching from the base, thinly tawny pilose. _Leaves_ 2-4-jugate, 2-5-8 cm. long; leaflets obovate-cuneate, mucronate, glabrous above, thinly pilose below, 2-5-5 cm. long, 0-8-2 cm. broad. _Stipules_ subulate, up to 1-5 cm. long. _Peduncles_ terminal, up to 14 cm. long, flowers few in a short dense raceme, almost capitate. _Flores_ purple, 1-5 cm. long; bracts linear-subulate. _Calyx_-lobes triangular-subulate, shorter than the tube. _Ovary_ pubescent. _Style_ bearded.


_Caules_ ascendentes vel decumbentes, e basi ramosi, fulvo-pilosi. _Folia_ 3-5-jugata, 6-5-12 cm. longa; foliola cuneata vel obovato-cuneata, 2-4-5 cm. longa, 0-7-2 cm. lata, apice truncata vel emarginata, supra glabra, subtus leviter pilosa; stipulae subulatae, acuminatae, 1-2 cm. longae, 3-5 nervatae; pedunculi 6-5-19-5 cm. longi. _Flores_ 1-3-2 cm. longi; bracteae lineari-subulatae, 7-8 mm. longae; calyx dense fulvo-pilosus, dentibus lineari-lanceolatis tubo exceedentibus; ovarium fulvo-pubescentes; stylus pilosus.

_Type specimen, Wood 8341, in Natal Herbarium, Durban._

_Stems_ ascending or procumbent, branching from the base, fulvous pilose. _Leaves_ 3-5-jugate, 6-5-12 cm. long; leaflets cuneate or obovato-cuneate, truncate or emarginate, mucronulate, glabrous above, thinly pilose below, 2-4-5 cm. long, 0-7-2-2 cm. broad. _Stipules_ subulate, acuminate, 1-2 cm. long, 3-5 nerved. _Peduncles_ terminal, 6-5-19-5 cm.
long, flowers in a lax raceme, in fascicles of 2-4. Flowers 1·35-1·9 cm. long; pedicels 0·6-1 cm. long; bracts linear-subulate, 7-8 mm. long. Calyx densely fulvo-pilose, teeth longer than the tube, linear-lanceolate. Ovary fulvo-pubescent. Style bearded.

Natal.—Maritzburg district: Hawthorns Hill, Maritzburg, Allsopp 465 (N.); near Maritzburg, Bell (N.); Howick, Wood 8431 (K., N.); Harding district: Harding, Oliver 98 (N.).


Caules decumbentes vel ascendentes, e basi ramosi, parce pubescentes. Folia 2-5-jugata, 1·5-4·5 cm. longa; foliola elliptico-cuneata, apiculata, 2-4 cm. longa, 0·5-1·2 cm. lata, supra glabra, subtus leviter pilosa; stipulae linear-liiubulatae, acuminatae, 1-1·5 cm. longae; pedunculi terminales axillaresque, usque ad 16 cm. longi; bractae lineares, 7-8 mm. longae. Flores 1·3-1·5 cm. longi; calyx dense pubescens, lobi tubo subaequilongi uno longiori; ovarium dense pubescens; stylus pilosus. Fructus non visus.

Type specimen, Acocks 11749, in Natal Herbarium, Durban.

Stems decumbent or ascending, several arising from a woody root-stock, thinly pubescent. Leaves 2-5-jugate, 1·5-4·5 cm. long, shortly petioled; leaflets elliptic-oblong, apiculate, thinly pilose below, glabrous above, 2-4 cm. long, 0·5-1·2 cm. broad. Stipulae linear-subulate, acuminate, 1-1·5 cm. long. Peduncles terminal and axillary, up to 16 cm. long, few-flowered at apex or flowers in an interrupted raceme, 2-4 together; bracts linear, 7-8 mm. long. Flowers 1·3-1·5 cm. long; vexillum densely tawny-velvety without. Calyx densely pubescent, four lobes subequal to tube in length, lowest longer, lobes lanceolate. Vexillary stamen free; ovary densely pubescent. Style bearded. Legumes not seen.

Natal.—Utrecht district: Kaffir Drift, Thode A 224 and A 268 (N., P.); Paulpietersburg district: between Paulpietersburg and Sunkelsdrift, Acocks 11749 (N.); Paulpietersburg, Galpin 9707 and 10908 (K., P.).

Transvaal.—Piet Retief district: Piet Retief, Jenkins (T.M.); Ermelo district: Spitzkop, Ermelo, Pott (T.M., B.H.).

KEY TO SECTION 4.

Stems erect. ......................................................... A.
Stems ascending, decumbent or trailing. ...................... B.
A. Peduncles terminal. ......................................... C.
   Peduncles terminal, axillary or leaf-opposed. .............. D.
C. Peduncles 2-7 cm. long, densely flowered. ............. 51. zambensis.
   Peduncles up to 5 cm. long, few (2-4) flowered. ........ 52. Bachmannii.
D. Peduncles terminal and leaf-opposed. .................... E.
   Peduncles terminal and axillary. .......................... F.
E. Peduncles racemosely few-flowered towards apex. .... 53. Wyliei.
   Peduncles not racemosely flowered. ............................ G.
G. Flowers fasciculato-corymbose at apex. ............... 54. grandiflora.
   Flowers 2-3 together in interrupted spicate glomerules. 55. glomeruliflora.
F. Peduncles up to 2 cm. long; calyx lobes much longer than tube. 56. subulata.
   Peduncles exceeding 2 cm.; calyx lobes subequal to tube. 57. shiluwaniensis.
B. Stems ascending or decumbent. .......................... H.
   Stems trailing or diffuse. .................................. I.
   Stems, etc., densely albo-pilose. .......................... J.
   Stems, etc., not albo-pilose. .............................. K.
J. Stipulae cordate; leaves 3-6-jugate. .................. 59. cordata.
   Stipulae ovate; leaves 1-4-jugate. .......................... L.
K. Stems erect or ascending; calyx teeth longer than tube. 60. spathacea.
Stems decumbent or ascending; calyx teeth subequal to tube L.
L. Stems bearing several leaves and peduncles; leaves long petioled.
I. Flowers subtended by minute lanceolate bracts; leaves 5-7-jugate.
M. Leaves shortly petioled.
N. Stems more or less robust; stipules broadly ovate, up to 1-2 cm. long.
O. Leaves 1-2-jugate; stamens monadelphous.

51. **T. zombensis** Baker in Kew Bull. 257 (1897); Baker f. Leg. Trop. Afr. 1.213 (1926);
 Burtt Davy Fl. Tvaal. 1.2.377 (1932).

Type specimen, Whyte, in Herbarium, Kew.

A shrub, branches woody, densely clothed with white or tawny hairs. **Leaves** shortly petiolate, 5-15-jugate, 3-5-18-5 cm. long; leaflets oblong, obtuse, mucronate, green and glabrous above, sericeous below, 1-5-4-5 cm. long, 0-6-1-5 cm. broad. **Stipules** ovate, acuminate, densely pilose on back, 2-3 mm. broad, 0-5-1 cm. long. **Peduncles** terminal, 2-7 cm. long, racemes densely flowered, subglobose. **Flowers** up to 1-8 cm. long, pedicellate; pedicels 6-7 mm. long; bracts lanceolate, pubescent. **Calyx** densely pilose, tube 4 mm. long, 1 cm. in diam., lobes acuminate, 0-7-1 cm. long, much longer than the tube. **Vexillum** orbicular, sericeous on the back, 1-4 cm. long, 1-5 cm. broad. **Ovary** linear, pilose, 9 mm. long. **Style** thinly bearded along inner surface. **Legumes** about 3 cm. long, 6 mm. broad, densely velvety.

**Cape.**—Piquetberg district: open mountain side, De Hoek, Taylor 646 (P.).

**Transvaal.**—Pietersburg district: Magoebas Kloof, Houtboschberg, Burtt Davy 2600 (P.); upper slopes of Magoebas Kloof, Obermeyer (T.M., N.); New Agatha, Rogers 18886 (K., Z., B.H., T.M.); De Hoek, Taylor 646 (P.).

The type specimen was collected by Whyte at Mt. Zomba, Nyasaland in 1896. It has also been collected in Nyasaland by Buchanan and in Southern Rhodesia by Eyles.

In general appearance **T. zombensis** Bak. is similar to **T. Vogelii** Hk. f., but there are points of difference, particularly in the long acuminate calyx lobes of the former species. **T. zombensis** is reputed to have toxic properties similar to those of **T. Vogelii**.


Type specimen, Bachmann 616, in Botanisches Museum, Berlin-Dahlem.

A shrub, branching freely, branches ascending, appressedly puberulous when young, becoming quite glabrous. **Leaves** 3-6-jugate, shortly petiolate, 1-4 cm. long; leaflets linear-oblancoelate, narrowed towards the base, apex obtuse or acute, mucronulate, glabrous above, pubescent below, 1-8-4-5 cm. long, 2-5-5-5 mm. broad. **Stipules** ovate, acute, pubescent or subglabrous, 5-nerved, 4-6 mm. long, 2-3 mm. broad. **Peduncles** up to 5 cm. long, terminal, few-flowered (2-4 flowers); bracts ovate, sericeous, up to 5 mm. long. **Flowers** about 2 cm. long; pedicels 4-7 mm. long, sericeous. **Calyx** densely fulvous silky, lobes not longer than the tube, upper lobe lanceolate-ovate, acute; lateral lobes a little shorter, deltoid-ovate, acute, lower broadly 2-dentate. **Vexillum** about 2 cm. long and broad, densely fulvous silky without. **Ovary** with long fulvous hairs along the sutures. **Style** bearded. **Legumes** 2-7 cm. long, 0-8 cm. broad, fulvous along the margins.

**Cape.**—Pondoland: no definite locality, Bachmann 616 (B.).
Natal.—Port Shepstone district: near Murchison, Wood 3021 (N.); Wood 3101 (K., N.); Margate, Rump (N.); Oribi Flats, Rump (N.).

A shrub with large showy mauvy-pink flowers. It is readily distinguished from the other large flowered species by the tawny hairs on the petioles, peduncles, calyx and vexillum which are a striking contrast to the canescent pubescence of the bracts subtending the flowers and the undersurface of the leaves.


Suffrutex. Caules erecti, glabrescentes vel parce pubescentes. Folia 4-7-jugata, 4-7.5 cm. longa; foliola cuneata, apice retusa vel emarginata, 1-2.2 cm. longa, 0.5-1 cm. lata, mucronata, supra glabra, subtus parce appresse pubescentia; stipulae ovato-cordatae, acuminatae, 5-6 mm. longae; pedunculi usque ad 22 cm. longi; bracteae ovatae, 3-5 mm. longae, mox caducae. Flores 1.3-1.5 cm. longi; calyx leviter pubescens, lobes lanceolatilis tubo subaequilongis; stylus pilosus. Fructus linearis, 3.5-4 cm. longis, 0.7 cm. latus, glaber.

Type specimen, Wylie (Wood 5219), in Natal Herbarium, Durban.

Suffrutex. Stems erect, branching, glabrescent, or very slightly pubescent, dark reddish-brown. Leaves 4-7-jugate, 4-7.5 cm. long; petiole 1.5-3.5 cm. long before first pair of leaflets; leaflets cuneate, apex retuse or emarginate, mucronate, glabrous above, shortly appressedly pubescent below, 1-2.2 cm. long, 0.5-1 cm. broad. Stipules ovate-cordate, acuminate, 5-6 mm. long. Peduncles terminal and leaf-opposed, 6-22 cm. long, few-flowered towards apex. Flowers purple, 1.3-1.5 cm. long. Bracts ovate, 3-5 mm. long, soon caducous. Calyx sparsely pubescent, lobes lanceolate, subequal to tube. Style bearded. Legumes linear, 3.5-4 cm. long, 0.7 cm. broad, glabrous.

Natal.—Elandskop district: Sevenfontein near Boston, Wylie [Wood 5219] (N.); Wylie [Wood 9928] (N., Z., P., B.H.); Maritzburg district: Zwartkop, Wood 10235 (N., P.); Wood 11142 (N.).

This plant has been named in honour of Mr. J. Wylie who, for many years, worked with the late Dr. Medley Wood. On his many trips throughout Natal and Zululand he collected extensively, many of his specimens being new to science.


Type specimen, Aiton Cult. Hort. Kew is non extant. Aiton (1789) cites Galega grandiflora as being figured in L’Heritier Stirp. nov. t. 44, but according to Britten and Woodward, Journ. Hot. 43.270 (1905), this plate was never published. Aiton (1812) withdraws this reference in the second edition of his “Hortus Kewensis.”

Fruticose, erect. Stems subglabrous to densely pubescent. Leaves up to 7.5 cm. long, shortly petiolate, 4-8-jugulate; leaflets variable in length and breadth, cuneate-oblong, obcordate or sometimes almost lanceolate, obtuse or acute, retuse or nucrernulate, glabrous or pubescent above, canescent below, 1-3-8 cm. long, 0.4-1-8 cm. broad. Stipules broadly ovate, 0.5-1.3 cm. long. Peduncles terminal and opposite leaves, 3-12 cm. long, fasciculato-corymbose at apex; young flowers enclosed by broad ovate deciduous bracts up to 1.8 cm. long and 1 cm. broad at base. Flowers up to 2 cm. long, pedicellate; pedicels 0.5-1.3 cm. long. Vexillum densely fulvous without. Calyx thinly to densely pubescent, tube up to 3 mm. long, lobes subulate, unequal, two upper slightly shorter than tube, lateral and lowest 2.5-3.5 mm. long, lowest longest. Ovary 1.4-1.6 cm. long, hairy along sutures. Style bearded. Legumes 4-7.5 cm. long, 0.9-1 cm. broad, linear, compressed, glabrous, thinly hairy along sutures.

CAPE.—Humansdorp district: Clarkson, Penther 2473 (V., B.); Thode A 812 (K., N., P.); Kabeljouws river, Penther 2469 (B.); Humansdorp, Rosenbrock 456 (B.); West 92 (K.); about 7 m. N. of Humansdorp, Schoenland 2044 (A.M.); between Gamtoos River and Humansdorp, West 207 (B.H.); Uitenhage district: Diep Valley, Zitzikamma, Fourcade 780 (A.M.); Zitzikamma, Krauss 29 (V.); ad sylv. marginis in Zitzikamma, Murray 39 (Z., B.); among shrubs in district of Uitenhage, Ecklon and Zeyher (B.); Hofman’s Bosch near St. Albans, Britten 1053 (A.M., Pa.); on banks of the Krom River, Bowie 1 (K., B.M.); Krom River, Zeyher (A.M.); Thunberg (U., B.M.); Pappe (K.); Albany district: in humidis vallibus pr. Grahamstown, Read (K.); hill above Grahamstown, Prior (K.); Featherston Weather Kioof, Rennie 179 (S.A.C.); Grahamstown, Rogers 1579 (K.); Rogers 396 (B.M.); Schoenland (Z., B.); Schechter 2617 (B.); Williamsson 20 (B.M.); Daly and Sole 131 a (P.); and Daly and Sole 1013 (A.M.); Grower 4 (P.); Alexander 112 (K.); Bolus (T.H.); Haagner 235 (Z., B.); ad ripas fluviorum pr. Grahamstown. MacOwan 1929 (A.M.); MacOwan 206 (B.M., Z., N.); edge of forest, Howison’s Poort, Zeyher (S.A.M.); dry rocky hills at Grahamstown, Bunbury 41 (B.M.); Signal Hill, Bolus 1930 (B.H.); in collibus inter Grahamstown and Coldstream, Bolus 10634 (B.H.); inter Grahamstown and Assegai Bosch, Zeyher (K., S.A.M.); on stony hills between Grahamstown and Assegai Bosch, Zeyher 191 (V., O.); Flats, Oudebosch, Fourcade 866 (K., Z., A.M.); Trapps Valley, Daly 631 (A.M., P.); Garrow, Burtt Davy 11397 (P.); Albany, Harvey 191 (K., B.M.); Victoria district, near Alice, Cooper 374 (K., B.M., Z., V., P.); Kingwilliamstown district: Drige (K.); Hoffmanskloof and Driefontein, Drige (S.A.M.); Stockenstrom district: Elands River above Waterfall, Stockenstrom, Scullvy 216 (P.); Stutterheim district: Amabele, Moss 20491 (W.); Fort Cunynghame, Schoenland 80 (A.M.); pr. Fort Cunynghame, Bolus 21777 (B.H.); Bathurst district: Port Alfred, Rogers 28073 (Z.); East London district: East London, Bryer (T.M.); Galpin 3299 (A.M., P.); Rogers 17015 (Z., W.); Thode (S.); Ottley 2529 (B.M., W.); Naohon River Valley, Smith 3750 (K., P.); Blood River Valley, Southernwood, Smith 3666 (P.); Kei Road, Schechter 6134 (B.); along road to Buffalo Bridge, Colmer (G.U.C.); Komgha district: among shrubs near Komgha, Planagan 632 (Z., S.A.M., B.H., A.M.); Komgha, Krook [Penther 2540 and 2545] (V., B.); Kentani district: Pegler 458 (K., B.M., P., S.A.M., A.M.); Qutosa, Kentani, Edwards [Moss 17581] (W.); Kaffraria, Cooper 82 (K., B.M., Z., G., V., N., P., B.H.); Pondoland district: Port St. Johns, Schoenland 4046 (A.M.); Moss 2723 (W.); Bachmann 618 (B.); Libode, Schoenland 3895 (A.M.); apud litus ad ostia fl. Umkwani, Tyson 2624 (K., B.M., Z., S.A.M.); Pondoland, Bachmann 609 and 610 (B.); Bachmann 611 (B.M., B.); Bachmann 612 (Z., B.); an moorig Rand v. Sandsteinbachen, Beyrich 252 (B.); inter Omsamwubo and Omsamcabo Rivers, Drige (K.); Umtata district: Colossa—Umtata, Krook [Penther 1612] (V., B.); East Griqualand, Mt. Ayliffe district: In montibus pr. Mt. Ayliffe, Tyson 2752 (P., S.A.M., S.).
NATAL.—Port Shepstone district: Margate, Boardmore [Moss 15139] (W.); near Murchison, Wood 3022 (K., N.); Marburg, Rogers 544 (B.M.); Isopo district: open ground, Umgoye, near Dumisa, Wood 3865 (B.M., Z.); Umzinto district: Ifafa, Rudatis 42 (B.); Durban district: coastland, Sutherland (K.); Pinetown district: Northdene, wood near Krantz Kloof, Rogers 24460 (T.M.); Camperdown district: near river Umlaas, Evans 345 (N.); Impendhle district: Boston, Wylie [Wood 9928] (B.M.); Inanda district: Inanda, Rehmann 8420 (Z.); Inanda, Wood 289 (B.M., N., K., S.A.M., B.H.); Zululand, Eshowe district: margins of forest, Eshowe, Galpin 12159 (K., V., P.); Eshowe, Rogers 24460 (Z., A.M., W.); Forbes [N.H. 20538] (N.); Forbes 708 (N.); plantations. Port Durnford, Kotze 22 (P.); Nkandhla district: Melmoth, Mogg 4574 (P.); Babanango, King 450 (N.); Ngoye, Wylie [Wood 10363] (P.); no definite locality, Gerrard and McKen 302 (K., B.M., Pa., V.); Gerrard 1087 (K.); Gerrard 1752 (K., B.M., Pa.).

No Definite Locality.—Ecklon and Zeyher 1629 (O., Pa., G., V., B.); Zeyher 2395 (P.); Barber (A.M.); Drège [Herb. E. Meyer 5468] (B.); Drège [Herb. E. Meyer 5469] (B.); Drège 415 and 416 (V.); Ecklon and Zeyher 810 (Z.); Krebs 110 (G.); Krebs s.n. (B.); Rohde (V.); Talbot (K.); Verreaux (G.); Burchell 3867 (K.); Cooper 2224 (K.); Corvallia (V.); Hennegart (P.); Mund and Maire (B.); Masson (B.M.).

A decoction of the root of this plant, known to the Zulus as “iHlozane” is used as a parasiticide.


Type specimen, Gueinzius, in Herbarium, Kew.

Suffruticose, erect, whole plant more or less greyish pubescent. Stems branching, terete. Leaves—3–12-jugate, 3–10×5 cm. long, petiolate; leaflets 1.5–4 cm. long, 0.5–1.2 cm. broad, narrow oblong, obtuse or subacute, mucronate, thinly pilose or glabrous above, more or less densely canescent below; petiolules about 2 mm. long. Stipules lanceolate or ovate-lanceolate, striate, 0.5–1 cm. long. Peduncles terminal and leaf-opposed, 11–20 cm. long. Flowers 1.8–2.2 cm. long 2–3 together in interrupted spicate glomerules. Bracts ovate, acuminate, 0.9–3.5 cm. long, deciduous. Pedicels up to 1.2 cm. long, short at first but lengthening as the flower develops. Calyx-tube 0.9–1.5 cm. in diam., lobes 3–5 long and two upper connate and slightly shorter. Vexillum sericeous without, 1.8–2 cm. mm. long, and broad. Ovary 1.4–1.8 cm. long, densely hairy along sutures. Style 0.6–1 cm. long, bearded. Legumes hairy along sutures, compressed, 5–6 cm. long, 8–9 mm. broad.

CAPE.—Pondoland: hillside, Signal Hill, Port St. Johns, Galpin 9537 (K., P.); forests, Port St. Johns, Moss 2740 (W.); amongst rocks in sea sand, Port St. Johns, Howlett 52 (P.).

NATAL.—Port Shepstone district: sandy grassy places near beach, Uvonga, Thode (B., S.); Umzinto district: Park Rynie, Wood 12367 (N., P., T.M.); Friedenau, Ümgaiflat, Rudatis 280 (B., P.); Durban district: Port Natal, Gueinzius (K.); Berea, Durban, Wood 4843 (B.M., G., N., P., B.H.); cult. in Botanic Gardens, Durban, Wood 12564 (K., N.); Sydenham, Wood 11927 (A.M.); Rooikop near Sydenham, Forbes 543 (N., T.M.); Springfield, Wood 13062 (N., T.M.); Pinetown district: inter Pinetown and Umbilo, Rehmann 8044 (K.); Greytown district: near Greytown, Wood 5984 (V., B., B.H., N.); Impendhle district: Boston, Wood 11400 (N.); Tugela district: Chaka’s Kraal, Thode (B.); Zululand, Mtunzini district: Mtunzini, Wood 11360 (N., P.); Mogg 4348 (A.M., P., B.H.); Eshowe district: Port Durnford Plantations, Kotze 22 (P.); Ngoye, Wylie [Wood 10345]
N. P.; Wood 10363 (P.); Wylie [Wood 8482] (B.); Wylie [Wood 5654] (G., P.); open ground, Wood 722 (B.M., B.); Wood 3865 (K., S.A.M., B.M.); Umfolosi district: St. Lucia Bay, Pole-Evans 3647 (P.)

No Definite Locality.—Gueinzius 306 (V.).


Type specimen, *Galpin 843*, in Herbarium, Kew.

Suffruticose, stems erect or ascending. *Leaves* pinnate, 4-8-jugate, 5-10 cm. long; leaflets 1-4-3 cm. long, 0-5-1.5 cm. broad, oblong, retuse, mucronulate. *Stipules* broad, more or less ovate, striate, sparsely ciliate and pilose without. *Peduncles* terminal and axillary, up to 2 cm. long, few flowered. *Flowers* 1-5-2 cm. long; bracts acute, 5-7 mm. long, striate, subglabrous; pedicels 6 mm. long. *Calyx*-tube 2-5-3 mm. long, 8 mm. in diam., lobes linear-subulate, 4-7 mm. long, much longer than the tube, subglabrous. *Vexillum* 1-5-1.7 cm. long, 1.1-1.8 cm. broad, pubescent without. *Ovary* 1.1-1.5 cm. long, thinly hairy along the sutures. *Style* 5 mm. long, bearded along the inner side. Immature pods 4-5 cm. long, 0.6 cm. broad, glabrous.


NATAL.—Umzinto district: Friedenau, Umgai Flat, Rudatis 308 (B.); Pinetown district: Trappisten Kolonie, Mariannhill, Landauer 236 (B.); Greytown district: grassy places near streams, De Rust, Greytown, Thode (B.).

TRANSVAAL.—Barberton district: Highland Creek, Barberton, Galpin 843 (K., N., P., S.A.M.); Moodies Hill near stream, Thorne (K., T.M.); Roses Creek, Thorncroft 36 (T.M.).


*Tephrosia Meisneri* Hutch. and Burtt Davy i.e.

Type specimen, *Junod 2355*, in Botanisches Museum, Zurich.

Suffruticose, erect, sparsely branched, branches grey-pilose when young, at length glabrous. *Leaves* 3-6-jugate, petiolate, 5.5-13 cm. long; leaflets oblong-obovate or cuneate, truncate or emarginate, mucronate, glabrous above, thinly appressedly grey-pilose below, 1-4.5 cm. long, 0.4-1.3 cm. broad. *Stipules* ovate-acuminate, pilose, densely ciliate along the margins, 0.5-1 cm. long. *Peduncles* axillary and terminal, racemously few-flowered at apex, 8-11 cm. long, terminal peduncle occasionally up to 20 cm. long; pedicels 2-9 mm. long; flowers subtended by broad ovate bracts, soon caducous. *Flower* 1.5 cm. long. *Calyx* long pilose, tube 3 mm. long, 8 mm. in diam., lobes unequal, 2-5-3.5 mm. long. *Vexillum* densely clothed with adpressed silky golden-brown hairs without, about 1.5 cm. long and 1.4 cm. broad. *Ovary* 1.1 cm. long. *Style* 5 mm. long, bearded along inner side. *Legume* 4 cm. long, 7 mm. broad, glabrous.

TRANSVAAL.—Zoutpansberg district: bas pays, Shiluwane, *Junod 2355* (Z., G.); *Junod 1106* (K., Z.) [cited as *T. spathacea* in Fl. Tvaal.]; *Junod 117* (Z., G.); in eliv. mont. Houtboschberg, Schlechter 4417 (B.); Houthosch, Rehmann 6228 (K.); and 6229 (K., Z.); Lydenburg district: hillsides, Sabie Valley, Galpin 13598 (B.M., P.); Governments Spruit, north of town, Lydenburg, Wilms 341 (K.), [type of *T. spathacea* Hutch. and B. Davy] Spitzkop Goldmine, Wilms 341 bis (Pa., G.); Louis Trichardt, Young, in Herb. Moss 17248 (W.); Ermelo district: rock crevices, Blaauwpan A. Moss 16326 (W.).

*Folia* 1-6-jugata, 2·5-11 cm. longa; foliolla obovato-cuneata, retusa, mucronata, 2·5-5·5 cm. longa, 0·8-2·2 cm. lata, supra glabra, subtus pilosa; stipulae ovatae, pilosae, 0·7-1·5 cm. longae, 3-5 mm. latae, 5-7 nervatae; pedunculi 7-12 cm. longi; bracteae ovatae, mox caducae. *Flores* 1·8-2 cm. longi; pedicelli 5-8 mm. longi; dentes calycis lineari-lanceolati tubo excedentes; ovarium marginibus pilosis; stylus pilosus.

**Type specimen,** *Wylie* (N.H. 21590), in Natal Herbarium, Durban.

**Stems** simple, ascending or decumbent, branching from the base, clothed with long white hairs. **Leaves** 1-6-jugate, 2·5-11 cm. long; leaflets obovate-cuneate, retuse, mucronate, glabrous above, pilose below, 2·5-5·5 cm. long, 0·8-2·2 cm. broad. **Stipules** broad, ovate, 5-7 nerved, pilose, 0·7-1·5 cm. long, 3·5 mm. broad. **Peduncles** terminal, 7-12·5 cm. long, flowers almost capitate in a short dense raceme at the apex. **Flowers** purple, 1·8-2 cm. long; pedicels 5-8 mm. long, pilose, bracts ovate, soon caducous. **Calyx** pilose, lobes longer than tube, linear-lanceolate. **Ovary** with margins densely pilose. **Style** bearded.


**Type specimen,** *Burtt Davy* 2886, in Herbarium, Kew.

**Suffruticose. Stems** ascending, soon glabrescent. **Leaves** pinnate, 5-6-jugate, 3-13·5 cm. long; leaflets oblong, 1·3-3·4 cm. long, 0·4-1·7 cm. broad, mucro up to 2 mm. long, glabrous above, thinly appressedly pilose beneath. **Stipules** broadly cordate at base, broadly ovate, very acute, 1-2·5 cm. long, 0·5-1·2 cm. broad. **Peduncles** terminal, few-flowered towards apex, 4-14 cm. long, pedicel 0·5-1 cm. long. **Calyx** pilose, tube 9 mm. in diam., 3 mm. long, lobes lanceolate, all about 2 mm. long. **Vexillum** pilose without, 1·4 cm. broad, 1·6 cm. long. **Ovary** 1·3 cm. long, hairy along the margins. **Style** 8 mm. long, bearded along inner surface. **Legumes** 3·5-5 cm. long, 6-8 mm. broad, glabrous, narrow-oblong, flat.


**Suffruticose. Stems** erect or ascending, thinly pilose when young, glabrous later. **Leaves** 2-4-jugate, 2·5-8 cm. long, petioled; leaflets elliptic- or oblong-cuneate, mucronate, thinly pilose below when young, glabrous on both sides later, 1·5-3 cm. long, 0·6-1·5 cm. broad. **Stipules** ovate-acuminate, up to 1 cm. long, 0·5-0·6 cm. broad. **Peduncles** terminal and leaf-opposed, few flowered towards apex. **Flowers** small, bracts acuminate. **Calyx** teeth scarcely exceeding the tube, subulate acuminate. **Legumes** linear, flat, very sparsely ciliate along sutures, later quite glabrous.

**Tembuland.—** In collibus prope flumen Chwenka, *Bolus* 8877 (P.).
Natal.—Maritzburg, Phillips 3461 (P.); Zululand, Mahlabathini, Gerstner 4247 (N.).

Swaziland.—Hlatikulu, Pierce (P.).

Transvaal.—Middelburg district: Pan, Middelburg, Burtt Davy 13254 (P.); Hodgson (P.); near Witbank Stn., Gifillian (P.); Zoutpansberg district: New Agatha, McCallum (P.).


Caules ascendentes vel decumbentes. Folia 1-4-jugata, 2-5-8 cm. longa; foliola elliptica vel oblongo-cuneata, mucronata, 2-4 cm. longa, 0;5-0·7 cm. lata, supra glabra subitus leviter pubescentia vel glabrescentia; pedunculi 10-22 cm. longi; bracteae ovatae 5-7 mm. longae, max caducae. Flores 1·3-1·5 cm. longi; dentes calycis tubo aequilongi; stylus leviter pilosus. Fructus non visus.

Type specimen, Galpin 14755, in National Herbarium, Pretoria.

Stems petioled, 1-4-jugate, 2-5-8 cm. long; leaflets elliptico- or oblongo-cuneate, mucronate, glabrous on both sides or sparsely appressedly pubescent below, 2-4 cm. long, 0;5-1·5 cm. broad. Stipules broadly ovate, acuminate, 1 cm. long, 0;5-0·7 cm. broad. Peduncles 10-22 cm. long, terminal and axillary, few flowered towards apex. Bracts ovate, 5-7 mm. long, soon caducous. Flowers purple, 1·3-1·5 cm. long. Calyx glabrous or very sparsely pilose, calyx teeth equal in length to tube. Style thinly bearded. Legumes non visus.

Natal.—Grevtown district: Grevtown, Galpin 14755 (P., N.); Galpin 14727 (P.); Wylie (N.).

The late Mr. E. E. Galpin, in whose honour this plant has been named, was well-known in the botanical world. He was an indefatigable collector and a keen botanist, and his contribution to the botanical knowledge of South Africa is invaluable.


Caules decumbentes vel ascendentes, graciles, parce pubescentes. Folia 1-3-jugata, 0·5-1·7 cm. longa; foliola elliptico-oblonga, mucronata, supra glabrescentia pallidaque, subitus parce pubescentia, usque ad 7 mm. longa; pedunculi 7-23 cm. longi, pauciflorae; bracteae ovato-acuminatae, 3-4 mm. longae. Flores 1·6-1·7 cm. longi; pedicelli 5·5-8 mm. longi; dentes calycis tubo subaequilongi; stylus pilosus. Fructus complanatus.

Western Zululand.—No definite locality, March 1895, Baker [Evans 566]. Type in Natal Herbarium.

Stems decumbent or ascending, slender, thinly pubescent. Leaves shortly petioled, 1-3-jugate, 0·5-1·7 cm. long; leaflets elliptico-oblonga, mucronata, mucro usually recurved, glabrous and light green above, thinly hirsute, secondary veinings dark below, 1·7-4·5 cm. long, 0·4-1 cm. broad. Stipules ovate-acuminate, up to 7 mm. long. Peduncles 7-23 cm. long, laxly few-flowered towards apex. Bracts subtending young flowers, ovate, acuminate, 3-4 mm. long, soon caducous; pedicelli 5·5-8 mm. long. Flowers purple-red, 1·6-1·7 cm. long. Calyx pubescent, lobes sub-equal to or very slightly longer than tube. Vexillum densely silky without. Style bearded. Legumes (immature) 3·5 cm. long, 6 mm. broad, flat, appressedly hairy along sutures.

Only one gathering of this plant was seen. Apparently several stems arise from the root-stock, each stem bearing only one leaf and one or two peduncles.


Type specimen, *Welwitsch 2082*, in Herbarium, British Museum (Natural History), South Kensington, London.

A wide trailing perennial herb with copiously branched, slender, flexuous, prostrate stems, 6-9 m. long, densely clothed with fine spreading pubescence. *Leaves* petiolate, 5-7-jugate; leaflets obovate-oblong, truncate, mucronate, grey-green and glabrescent above, persistently grey-silky below, midrib tawny, 0-7-2-5 mm. long, 0-4-1-3 cm. broad. *Stipules* ovate, 3-5 mm. long. *Peduncles* usually terminal, laxly 6-15 flowered, 2-5-10 cm. long. *Flowers* 1-1.1 cm. long; pedicels 0-3-1 cm. long; bracts lanceolate, minute. *Calyx* pubescent, tube 5-7 mm. in diam., 2-2.5 mm. broad, lobes lanceolate, cuspidate, two upper approximately 1-5 mm. long, lateral and lowest 2-3 mm. long. *Vexillum* silky on back, 1-1.1 cm. long, 7-8 mm. broad. *Ovary* 4-5 mm. long, densely and finely pubescent. *Style* bearded along inner surface. *Legumes* 2-3 seeded, oblong, 1-2-5 cm. long, 5-7 mm. broad, pubescent.


In the Journal of Botany 37.430 (1899), Baker fil., describes a variety, *T. rhodesica* var. *rhodesica* as follows: "Leaflets generally 7, rather broader than in the type. Legume broader than type." In my opinion I do not think this variety can stand, for the type specimen, *Welwitsch 2082*, has quite a few leaves with seven leaflets, also the breadth of the leaflets and legumes is too variable a character to differentiate between typical *T. radicans* and the variety.

64. *T. zuluensis* H. M. Forbes sp. nov., affinis *T. macropodae* sed petiolis brevioribus differt.

**Caules** decumbentes vel ascendentes, pubescentes. *Folia* 2-3-jugata, 1 cm. longa, petiolis brevibus; foliola cuneato-oblonga, obtusa, mucronulata, 1-7-3-5 cm. longa, 0-75-1-5 cm. lata, supra glabra, subtus parce pubescentia; stipulae ovato-cordatae, acuminate, 5-6-5 mm. longae, 3-5-5 mm. latae; pedunculus usque ad 24 cm. longus; bracteae ovatae, usque ad 6-5 mm. longae. *Flores* 1-5 cm. longi; pedicelli 5-5 mm. longi, pubescentes; dentes calycis lanceolati, tubo excedentes; stylus pilosus. *Fructus* circiter 4-2 cm. longus, 0-6 mm. latus, marginibus hirsutis.

**Zululand.**—Nkandhla, J. *Wylie* (Wood 8966) in Natal Herbarium, Type.

**Stems** procumbent or ascending, pubescent. *Leaves* 2-3-jugate, 1 cm. long, petioles very short; leaflets cuneate-oblonga, obtuse, mucronate, glabrous above, thinly pubescent and with yellow brown secondary veining below, 1-7-3-5 cm. long, 0-75-1-5 cm. broad;
petiolules 1 mm. long, densely pilose. *Stipules* ovate-cordate, acuminate, pilose, 6-8-nerved, 5-6.5 mm. long, 3.5-5 mm. broad. *Peduncles* terminal and axillary, up to 24 cm. long, few-flowered at apex. *Bracts* broadly ovate, pilose, up to 6.5 mm. long, soon caducous; pedicels up to 5.5 mm. long, lengthening as flowers develop, pilose. *Flowers* 1.5 cm. long, purple. *Vexillum* suborbicular, densely silky without. *Calyx* lobes longer than tube, lanceolate, long pilose. *Style* bearded. (immature), 4.2 cm. long, 6 mm. broad, flat, pilose along margins, 7-8 seeded.

Except for the very short petioles, this plant has the appearance of *T. macropoda*, particularly the more robust forms of that species.


Type specimen, Drege (Herb. Meyer 5471), in Botanisches Museum, Berlin-Dahlem.

The two co-type specimens *Drège* (inter Gekau and Bashee) and *Drège* (inter Omtata and Omgaziana) are in the Herbarium, Kew.

*Stems* several from a large tuberous root-stock, procumbent, more or less robust, up to 3 feet long. *Leaves* 1-3-jugate, 6-14.5 cm. long, petioles usually long before first pair of leaflets; leaflets narrow to broadly elliptical or oblong, glabrous above, pubescent or glabrescent below, 2.6-5 cm. long, 0.6-3 cm. broad. *Stipules* broadly cordate-ovate, 0.5-1.2 cm. long, 0.5-1 cm. broad. *Peduncles* terminal and leaf-opposed, up to 48 cm. long, few-flowered at apex; bracts broadly ovate, bilobed at apex, soon caducous, 0.7-1.3 cm. long. *Flowers* large, 1.4-2.2 cm. long. *Calyx-*teeth, linear to linear-lanceolate, longer than tube. *Style* bearded. *Legumes* linear, flattened, glabrous, hisrate along sutures, up to 6 cm. long and 0.8 cm. broad.


**Indian Collector** (N.); among grass, Fields Hill, *Evans* 178 (N.); Krantzloof, *Kuntze* (K.); Inchangha, *Engler* 2638 (B.); *Stohr* 27 (B.M.); *Frith* 122 (W.); *Drummond, Galpin* 10299 (P.); Bothas Hill, *McClean* 102 (P., N.); Camperdown district: Camperdown, *Franks* (K., N.); *Rehmann* 7722 (Z.); Pietermaritzburg district: *Pietermaritzburg, Wilms* (K., B.M.); Alberton near Maritzburg, *Mogg* 2177 and 6590 (P.); Cedara, *Phillips* 3461 (P.); Shafton, *Howick, Evans* (N.); Inanda district: *Avoca, Oliver* 158 (N.); in graminosis, Phoenix, *Schlechter*
2904 (B., A.M.); Oakfort, Rehmann 8514 (Z.); Inanda, Wood 816 (K., B.M., N., P.); Zululand, Mtunzini, Mogg 4436 and 5812 (P.); Eshowe, Gerstner 3830 (N.). No definite locality, Gerrard 31 (V., Pa., B.M.).

**Transvaal.**—Witwatersrand district: Brakpan, Murray (O.); Pretoria district: Koedoespoort, Rehmann 4629 (Z.); Middelburg district: Waterval Boven, Rogers 14405 (B.M., Z., W.); Dullstroom, Galpin 13074 (K., P.); Witbank, Rand 45 (B.M.); Middelburg Hewitt (T.M.); Barberton district: eastern slopes, Saddleback Mountains, Galpin 1172 (P.); top and upper parts of Mt. Schagen, Barberton, Liebenberg 2498 (P.); Tweefontein Experimental Area, Sabie, Wager B.172 (P.); between Pilgrims Rest and Sabie, Rogers 21765 (Z.); Pietersburg district: Houtbosch, Rehmann 6232 (Z.); The Downs, Pietersburg, Moss and Rogers 325 and 326 (P.); Modjadjes near Pietersburg, Rogers 18029 (Z.); Zoutpansberg district: Messina, Moss and Rogers 25 bis (Z.); in clivis Mt. Elandspruitbergen, Schlechter 3997 (Z.).

**Orange Free State.**—Bloemfontein, Snoek (G.U.C.).

**South Africa.**—No definite locality: Drège 417 (V.); Drège (O.); Hennegart (Pa.); Gueinzius (K., Pa., V., AM., S.); Gerrard and McKen (K., B.M., Pa., V.); Junod 904 (Pa.); (G., Z) and 2532 (Z.); Rehmann 6231 (Z.) [cited as *T. spathaeea* in Fl. Tvaal.]; Watt and Brandwyk 886 (P.).

*T. macropoda* is an extremely variable species. Meyer, in his description in Comm. Pl. Afr. Austr., divides the material into two varieties, as follows:—

A. *latifolia*. Leaves 2-3-jugate, leaflets broad, oblong, obtuse, roughly hairy below or subglabrous; peduncles generally hispidulous.

B. *angustifolia*. Leaves 3-5-jugate, leaflets lanceolate-oblong, sericeous-argenteous; peduncles glabrescent or sparsely appressedly pilose.

Harvey in “Flora Capensis” does not maintain the varieties.

After a preliminary examination of a large amount of material, it seemed feasible to resuscitate the variety *angustifolia*. A further study of the material, however, showed that it would be very difficult to differentiate clearly, except between the forms with the very broad leaflets and the forms with the very narrow leaflets, for leaflets on the same specimen vary from broad to medium and medium to narrow.

The form with the narrowest leaflets seems to occur chiefly in the Eastern Province of the Cape and is very frequently confused with *T. aemula*. The most robust form with very broad leaflets occurs chiefly along the coastal areas of Natal and Zululand. Further inland in Natal and throughout the Transvaal the plants become less robust and the leaflets narrower.

Another variable character is the trifoliolate leaf, a character which led Harms to describe this plant as *T. triphylla*. Sometimes all the leaves on one stem will be trifoliolate while other stems arising from the same root-stock will bear 2-3-jugate leaves.

Three specimens collected by Tyson in East Griqualand are, in my opinion, dwarf forms of *T. macropoda*. The stems and petioles are shorter than in typical *T. macropoda*, but they agree otherwise.

These specimens are Tyson 1430 (K., S.A.M., P.); Tyson 1579 (K., B.H.) and Tyson 2092 (K., S.A.M., B.H.).

This plant is widely known as a fish-poison and the Zulus also use the powdered root as an insecticide, as well as for medicinal purposes. The Zulu name is “iLozane.”


Type specimen, Drège s.n. in Botanisches Museum, Berlin-Dahlem.

Subherbaceous. Stems very slender, procumbent, glabrous or thinly pubescent. *Leaves* 1–2-jugate, 3–11 cm. long, long petioled; leaflets elliptic- or cuneate-oblong, subobtuse, mucronulate, glabrous above, thinly appressedly pubescent below, 1–2.5 cm. long, 0.5–0.8 cm. broad. Stipules ovate, acuminate, 4–6 mm. long. *Peduncles* terminal and leaf-opposed, 10–25 cm. long, laxly few-flowered at apex; bracts ovate, bi-lobed at apex, 4–6 mm. long, caducous. *Flowers* 0.8–1.3 cm. long. *Calyx*–teeth subulate, acuminate, sub-equal to or slightly longer than tube. *Style* bearded. *Legumes* linear, flat, 2.7–3.5 cm. long, 0.5–0.7 cm. broad, glabrous or very shortly appressedly pubescent along margins, about 10-seeded.

**cape.** Komgha district: between Zandplaat and Komgha, Drège (B.); Cape, Belfort, Jacottet 124 (Z.).


This species is frequently confused with the narrow-leaved form of *T. macropoda*. It may be distinguished, however, by its 1–2-jugate leaves, more slender stems, etc., and its more glabrescent habit.

67. *T. diffusa* Harv. in Harv. and Sond. Fl. Cap. 2.210 (1861–62); O. Kuntze Rev. Gen. Pl. 1.175 (1891); *Wood* Fl. of Natal 41 (1907); *Wood* in Trans. S.A. Phil. Soc. 18.2.147 (1908); Burtt Davy and Potts in Ann. Tvl. Mus. 3.3.146 (1912); *Bews* Fl. Natal and Zululand 110 (1921); Watt and Breyer-Brandwyk Med. and Pois. Pl. of S.A. 74 (1932).


Type specimen, Drège (Herb. Meyer 5478), in Botanisches Museum, Berlin-Dahlem.

Suffruticose, procumbent. Stems and branches subfiliform. *Leaves* 2–4-jugate, 2–4 cm. long, long petioled; leaflets subcuneate-oblong, appressedly puberulous, 0.8–2.5 cm. long, 3–7 mm. broad. Stipules ovate, striate, 5–7 mm. long, 2–3 mm. broad near the base. Peduncles leaf-opposed, few flowered, 1–5–6 cm. long. Flowers subtended by ovate, deciduous bracts, 5–6 mm. long and deeply bi-lobed at apex. Calyx–tube 2 mm. long, 6 mm. in diam., lobes unequal, subulate, acuminate, very shortly ciliate, four lobes equalling tube, lowest longer. Vexillum 1.3 cm. long, 0.9 cm. broad. Stamens diadelphous. Style about 5 mm. long, thinly bearded. Legumes subglabrous, 2.2–5 cm. long, 4 mm. broad.

**cape.**—East Griqualand: Kokstad, Thode (B.); New Amalfi, *Forbes* 1123 (N.); hills above Matatiele, *Galpin* 14077 (N., P.); Pondoland: inter Omsamouba and Omsamca, Drège [Herb. Meyer 5478] (K., B.); Pondoland, Beyrich 256 (B.).

**natal.**—Inanda district: Inanda, *Wood* 886 (K., N.); Umhloti, *Wood* 713 (K., N.); Harding district: Murchison Flats near Oribi Flats, *McClean* 305 (N., P.); Bulwer district, top of the Peak, Byrne, *Galpin* 11974 (K., V., Pa., P., B.H.); New Hanover district; Noodsberg, *Wood* 886 (N.); Draakensberg district: Dooley Slopes, Mont-Aux-Sources: Bayer and McClean 206 (P.); Umlambonya Valley, Cathedral Peak Area, Schelpe 977 (N.).

This plant is called “iHlozane” by the Zulus, who use it as a parasiticide. It is said to be very poisonous.
### INDEX TO SPECIES.

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### EXCLUDED SPECIES.

- T. avasmontana Dtr.—Dolichos linearis E. Mey.