

The naturalized and cultivated exotic *Acacia* species in South Africa

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ABSTRACT

The first species of *Acacia* from Australia are thought to have been brought to the Cape in 1845. Some of the factors which are believed to have contributed to the success of the exotic *Acacia* species are enumerated briefly. A key to the identification of the naturalized *Acacia* species is provided, together with descriptions of each species and an indication of their range of distribution in our area.

INTRODUCTION

Seeds of *Acacia cyclops* A. Cunn. ex G. Don and *A. saligna* (Labill.) Wendl., the first Australian species introduced into our area, are thought to have been brought to the Cape in about 1845 (Roux in S. Afr. J. Sci. 57: 99-102, 1961). These species, which were introduced initially to stabilize the shifting sand on the Cape Flats, proved highly successful for this task and their achievement in reclaiming large areas of drifting sand has been of lasting value. However, their spread beyond the confines of the Flats and the fact that they would in time invade, suppress and displace the indigenous vegetation in many areas was never envisaged by those who went to such great lengths to propagate them. So successful are some of these introduced species in the south-western Cape that there is a grave concern over the future of many of our indigenous species. Indeed, the stage has now been reached when some form of biological control of these introduced invading species is being contemplated.

Some of the factors which are thought to account for the success and spread of these introduced species were discussed by Roux & Middlemiss in S. Afr. J. Sci. 59: 286-294 (1963). They are briefly:

1. Fire assists the spread of the introduced Acacias by exposing bare ground, raising soil pH, destroying the seeds of some indigenous species and inducing the germination of the seeds of the Acacias.
2. The introduced species have a much more rapid and sustained growth-rate than the indigenous species.
3. *A. cyclops* and *A. saligna*, at least, form root-nodules and are capable of fixing atmospheric nitrogen.

To these may be added:

4. Schutte in S. Afr. J. Bot. 26: 45-49 (1960) revealed that micronutrient deficiency symptoms occur in nature in some species of the indigenous Cape vegetation, and suggested that a factor favouring the spread of the introduced species may be their lower requirements for certain micronutrients.

5. Jones *et al.* in J.S. Afr. Sci. 59: 295-296 (1963) found that substances which had a delaying effect on the germination of seedlings of certain indigenous species could be extracted from the dried roots of *A. cyclops*, but the ecological significance of this is not known.
6. The introduced species have escaped from their natural pests and predators and therefore, unlike the indigenous species, are free from pest pressure.

None of the introduced *Acacia* species, except perhaps *A. farnesiana* (L.) Willd., is likely to be confused with any of the indigenous *Acacia* species. The introduced species can be readily distinguished as they either have the leaves modified to phyllodes (entire, leaf-like flattened organs), or, if the leaves are bipinnate, are unarmed (except for *A. farnesiana*). Although *A. farnesiana* is armed with paired stipular spines, it is easily distinguished from all of the indigenous species by the following combination of characters: absence of "ant-galls", leaflets with the lateral nerves raised and somewhat prominent beneath, apical involucels, bright golden-yellow flowers in non-paniculate heads, and dark brown to blackish subterete or turgid pods. A further very significant diagnostic feature is that the anthers lack, even in bud, the small deciduous apical gland which is present in all of the indigenous capitate-flowered Acacias occurring in our area.

Examination of available herbarium material suggests that the species dealt with in this account are the only *Acacia* species which have become naturalized in our area. Most herbaria contain very little material of these introduced species and it appears that in general collectors tend to ignore them and concentrate almost solely on the indigenous vegetation. Most of the species are known to be more widely distributed than indicated in this account, but unfortunately this knowledge is not substantiated by herbarium specimens. For example, *A. mearnsii* De Wild. is widespread throughout most of Natal and yet specimens have been collected from only three degree squares. This is a regrettable state of affairs and a plea is made to collectors to pay more attention to these exotic species and to collect specimens from throughout the distributional ranges of these species.

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Key to the naturalized and cultivated exotic *Acacia* species

Leaves bipinnate:

Plant armed with paired stipular spines..... 1. *A. farnesiana*

Plant unarmed:

Leaflets large, mostly 2–5 cm long, 0.4–1 cm wide, lanceolate to linear-lanceolate, often somewhat falcate; leaves large, 30–40 cm long..... 13. *A. elata*

Leaflets 1.5–15 mm long, < 2 mm wide; leaves smaller than above:

Leaves with 1–4 pinnae pairs:

Petiole and rachis together < 2.5 cm long; pinnae crowded, glaucous; midrib \pm central in the leaflet or inconspicuous; inflorescence an axillary raceme or panicle, longer than the leaves..... 5. *A. baileyana*

Petiole and rachis together > 3 cm long; pinnae neither crowded nor glaucous; midrib almost marginal throughout the length of the leaflet, pubescent; inflorescences axillary, solitary, paired or fascicled..... 14. *A. visite*

Leaves with (5)8–26 pinnae pairs:

Leaflets 1.5–5.5 mm long:

Leaf-rachis with a gland at the junction of each pinna pair and usually also with additional glands between the pinnae pairs; pods \pm moniliform..... 2. *A. mearnsii*

Leaf-rachis with a gland at the junction of all or most pairs of pinnae, but not between the pinnae pairs; pods not or only slightly moniliform..... 3. *A. dealbata*

Leaflets 6–15 mm long:

Young branchlets prominently angled, sometimes with wing-like ridges 1–2 mm high; pinnae up to 15 pairs per leaf; leaflets 6–15 \times 0.3–0.75 mm, midrib \pm central, glabrous; inflorescence an axillary raceme or panicle..... 4. *A. decurrens*

Young branchlets not prominently angled; pinnae up to 7 pairs per leaf; leaflets 6–9 \times 0.8–1.25(2) mm, midrib almost marginal throughout its length and pubescent; inflorescences axillary, solitary, paired or fascicled..... 14. *A. visite*

Leaves apparently simple, modified to phyllodes by dilation of the petiole and rachis:

Plant armed with stipular spines..... 6. *A. armata*

Plant unarmed:

Phyllodes each with one main longitudinal nerve:

Phyllodes < 4 cm long, 0.5–2 cm wide, seldom up to 4.5 cm long but then < 0.5 mm wide and linear-oblong:

Phyllodes 2–5 mm wide, linear-oblong, the margins typically densely ciliate..... 17. *A. fimbriata*

Phyllodes 6–20 mm wide, not linear-oblong:

Young branchlets and phyllodes densely grey-pubescent, especially when young; phyllodes ovate to elliptic or elliptic-oblong, mostly 10–20 mm wide; pods 1.5–2 cm wide..... 7. *A. podalyriifolia*

Young branchlets and phyllodes glabrous; phyllodes obliquely obovate-lanceolate to ovate-triangular, 5–11 mm wide; pods 5–7 mm wide..... 15. *A. cultriformis*

Phyllodes 5–22 cm long:

Phyllodes 1.5–3 mm wide..... 18. *A. adunca*

Phyllodes > 5 mm wide:

Phyllodes \pm straight or sometimes slightly falcate, linear-lanceolate to linear-oblong or oblanceolate, mostly 0.6–1.4 cm wide:

Flower-heads > 6.5 mm in diameter; peduncles 6–22 mm long; naturalized species..... 8. *A. saligna*

Flower-heads < 6 mm in diameter; peduncles 3–6 mm long; cultivated only... 16. *A. retinodes*

Phyllodes distinctly falcate, obovate-lanceolate, mostly 1.3–3 cm wide..... 9. *A. pycnantha*

Phyllodes each with 2–7 or more longitudinal nerves:

Flowers in spikes:

Pods straight or slightly curved, glabrous; inflorescence axis glabrous or almost so; naturalized species..... 10. *A. longifolia*

Pods variously coiled or twisted, pubescent; inflorescence axis pubescent; cultivated only..... 19. *A. maidenii*

Flowers in round heads:

Phyllodes < 4 mm wide:

Phyllodes green; inflorescences axillary, solitary or paired, rarely fascicled; pods 3–3.5 mm wide, sparingly to densely pubescent, margins not winged..... 20. *A. viscidula*

Phyllodes greyish or glaucous; inflorescence a short axillary raceme; pods 8–18 mm wide, the margins distinctly winged..... 21. *A. pendula*

Phyllodes > 5 mm wide:

Phyllodes 0.6–2.5 cm wide, green, longitudinal nerves conspicuous; pods falcate or variously coiled or spirally twisted, margins not winged; naturalized species:

Flowers bright yellow; petals free; phyllodes usually \pm straight, sometimes slightly falcate, with anastomosing longitudinal venation between the main longitudinal nerves..... 11. *A. cyclops*

Flowers pale yellowish-white; petals united to above the middle; phyllodes usually \pm falcate, sometimes \pm straight, with conspicuous reticulate venation between the main longitudinal nerves..... 12. *A. melanoxylon*

Phyllodes 0.5–0.9 cm wide, greyish or glaucous, longitudinal nerves not prominent; pods straight or slightly curved, the margins distinctly winged; cultivated only... 21. *A. pendula*

1. *Acacia farnesiana* (L.) Willd., Sp. Pl. ed. 4, 4: 1083 (1806); Benth. in Fl. Austral. 2: 419 (1864); Oliv. in Fl. Trop. Afr. 2: 346 (1871); Benth. in Trans. Linn. Soc. Lond. 30: 502 (1875); Bak. f., Leg. Trop. Afr. 3: 835 (1930); Brenan, Check-list Tang. Terr.: 334 (1949); Gilbert & Boutique in Fl. Congo Belg. 3: 164 (1952); Torre in Consp. Fl. Angol. 2: 278 (1956); Keay in Fl. W. Trop. Afr. ed. 2, 1: 499 (1958); Brenan in Fl. Trop. E. Afr. Legum.-Mimos.: 111, fig. 16/38 (1959); in Fl. Zamb. 3, 1: 111 (1970); Ross, Fl. Natal 193 (1973). Type: Aldinus, Exact. Descr. Pl. Romae Hort. Farnesiano 4 (1625) (lecto!).

Mimosa farnesiana L., Sp. Pl. 1: 521 (1753). Type as above.

Shrub or small tree to 4 m high; young branchlets grey to reddish-brown or purplish, epidermis not obviously peeling off, with numerous somewhat transversely elongated lenticels, glabrous or almost so. *Stipules* spinescent, in pairs, usually short, up to 1.5 (3) cm long, straight, slender, never inflated; "ant-galls" and other prickles absent. *Leaves* bipinnate: petiole sparingly to ± densely pubescent, usually with a small gland; rhachis sparingly to ± densely pubescent, often with a small gland below the junction of the top pinna pair; pinnae 2–7 pairs; leaflets 10–21 pairs, 2–7 × 0.75–1.75 mm, midrib and lateral nerves visible and somewhat raised beneath, glabrous throughout or with few inconspicuous marginal cilia. *Inflorescences* capitate, on axillary peduncles, solitary or in pairs or three's. *Flowers* bright golden-yellow, sweetly scented; peduncles sparingly to ± densely pubescent basally, sparingly glandular; involucre apical. *Calyx* and corolla glabrous except for the apices of the lobes. *Pods* dark brown to blackish, 4–7.5 × 0.9–1.5 cm, straight or curved, subterete and turgid, glabrous, indehiscent, finely longitudinally striate. *Seeds* chestnut-brown, 7–8 × 5.5 mm, elliptic, thick, only slightly compressed; areole 6–7 × 4 mm.

Probably a native of tropical America, doubtfully so in Africa. Widely introduced in the tropics and often becoming naturalized. Only planted or an escape from cultivation in our area.

TRANSVAAL.—2528 (Pretoria): Wonderboom Poort, at the footpath of stones laid across the Aapies River, *Gerstner 5519*. 2531 (Komatipoort): Komatipoort, *Pole Evans sub PRE 18281*.

NATAL.—2930 (Pietermaritzburg): Durban Botanic Gardens, *Ross 1714*.

CAPE.—2824 (Kimberley): Kimberley, *Wilman sub BOL 15701*.

A. farnesiana is grown for ornament and for its fragrant flowers which are used to make perfume. The pods of *A. farnesiana* are very distinctive and enable the species to be easily recognized. In the absence of pods, it will be helpful to recall that no other African *Acacia* has the following combination of characters: absence of "ant-galls", leaflets with the lateral nerves raised and somewhat prominent beneath, apical involucre, and bright golden-yellow flowers in non-paniculate heads.

A further very significant distinguishing feature of *A. farnesiana* is that the anthers lack, even in bud, the small deciduous apical gland which is present in all of the indigenous capitate-flowered acacias occurring in our area.

2. *Acacia mearnsii* De Wild., Pl. Bequaert. 3: 61 (1925); Brenan in Fl. Trop. E. Afr. Legum.-Mimos.: 95, fig. 15/21 (1959); Brenan & Melville in Kew Bull. 14: 37 (1960); Tindale in Beadle, Evans & Carolin, Handb. Vasc. Pl. Sydney Distr. & Blue Mts. 231 (1962); Brenan in Fl. Zamb. 3, 1: 111 (1970); Ross, Fl. Natal 193 (1973). Type: Kenya, near Thika, *Mearns 1092* (BR, lecto., BM!).

A. decurrens sensu Bak. f., Leg. Trop. Afr. 3: 853 (1930) sultem pro parte, non Willd. sensu stricto. *A. mollissima* sensu auct. mult., Benth. in Hook., Lond. J. Bot. 1: 385 (1842); Burt Davy, Fl. Transv. 2: 345 (1932); Brenan, Check-list Tang. Terr. 333 (1949); Salter in Adamson & Salter, Fl. Cape Penins. 454 (1950); F. White, Eor. Fl. N. Rhod. 82 (1962), non Willd.

Unarmed tree up to 15 m high with a conical or rounded crown; bark grey-brown to blackish, smooth or rough on very old trunks; young branchlets angular; all parts (except flowers) ± densely pubescent or puberulous, indumentum on young parts often golden. *Leaves* bipinnate: petiole 1–2.5 cm long, often with a gland above; rhachis usually 4–12 cm long, with numerous raised glands all along its upper surface both at and between the junctions of the pinnae pairs; pinnae 8–21 pairs; leaflets 15–70 pairs, 1.5–4 × 0.5–0.75 mm, linear-oblong, appressed-pubescent or glabrous beneath, margins usually with cilia. *Inflorescences* capitate, in terminal panicles. *Flowers* pale yellow, fragrant, on peduncles 2–6 mm long. *Calyx* sparingly pubescent especially towards the apices of the lobes. *Corolla* glabrous or almost so. *Pods* (1.6) 3–10 × 0.5–0.8 cm, jointed, almost moniliform, ± grey-puberulous, dehiscing longitudinally along one margin only, straight or slightly curved. *Seeds* black, ± 5 × 3.5 mm, elliptic, compressed, smooth; caruncle conspicuous; areole 3.5 × 2 mm.

Introduced from Australia and now widespread in parts of the Transvaal, Swaziland, Natal and the Cape Province.

TRANSVAAL.—2430 (Pilgrim's Rest): Belvedere 26N forest, ± 29 km from Pilgrim's Rest, *Davidson & Mogg 33515*. 2528 (Pretoria): Waterkloof, Pretoria, *Schlieben 10090*. 2530 (Lydenburg): 26.4 km SSE. of Lydenburg, *D. Morris 58*.

SWAZILAND.—2731 (Louwsburg): 3.2 km east of Goedegegun, *Ross 1767*.

NATAL.—2929 (Underberg): Cathkin Peak area, *Strey 7809*. 2930 (Pietermaritzburg): Winterskloof, *Ross 2129*. 3030 (Port Shepstone): Mtwalume, *Wood 10589*.

CAPE.—3318 (Cape Town): Ida's Valley, bottom of Hell's Hoogte Pass, Stellenbosch, *Thompson 837*. 3319 (Worcester): Bain's Kloof, *White 5657*. 3225 (Somerset East): Glen Avon Falls area, *P. T. van der Walt 190*. 3326 (Grahamstown): Grahamstown, *Troughton 49*.

A. mearnsii is the well-known Black Wattle, which is economically important for the tannin content of the bark. The wood is used for firewood and for building.

By a strange mischance, *A. mearnsii*, the earliest valid name for this Australian species, is based on a specimen collected in Kenya and thought by De Wildeman to be endemic there.

3. *Acacia dealbata* Link., Enum. Hort. Berol. 2: 445 (1822), non *A. dealbata* A. Cunn. (1825); Benth. in Fl. Austral. 2: 415 (1864); Trans. Linn. Soc. Lond. 30: 497 (1875); Burt Davy, Fl. Transv. 2: 346 (1932); Brenan, Check-list Tang. Terr. 332 (1949); in Fl. Trop. E. Afr. Legum.-Mimos.: 50 (1959); Salter in Adamson & Salter, Fl. Cape Penins. 455 (1950); Tindale in Beadle, Evans & Carolin, Handb. Vasc. Pl. Sydney Distr. & Blue Mts. 231 (1962); Brenan in Fl. Zamb. 3, 1: 112 (1970); Ross, Fl. Natal 193 (1973). Type a plant cultivated at Berlin.

Unarmed shrub or tree up to 15 m high with a conical or rounded crown; bark grey-brown to blackish, smooth or rough on very old trunks; young branchlets usually densely short-pubescent, rarely subglabrous, ± grey-pruinose, indumentum grey, or sometimes yellowish at first and then grey. *Leaves* bipinnate, often glaucous: petiole 0.5–2 cm long, eglandular; rhachis 2.5–10 cm long, with a raised gland on its upper surface at the junction of each pair of pinnae, but without other glands in

between the pinnae pairs as in *A. mearnsii*; pinnae (5) 10–26 pairs; leaflets in 17–50 pairs, 2–5, 5×0, 4–0, 7 mm, linear-oblong, sparingly to ± densely pubescent or glabrous beneath, margins with or without cilia. *Inflorescences* capitate, paniced or racemose. *Flowers* bright yellow, on densely pubescent peduncles up to 6 mm long. *Calyx* and corolla glabrous except for apices of the lobes. *Pods* 3–8×0, 7–1, 3 cm, not or only slightly moniliform, dehiscing longitudinally along one margin only, straight or slightly curved. *Seeds* brown to blackish-brown, 5–6×3–3, 5 mm, elliptic, compressed, smooth; caruncle conspicuous; areole 3, 5–4×0, 75–1, 5 mm.

Introduced from Australia.

TRANSVAAL.—2526 (Zeerust); Swartruggens, *Sutton* 1031. 2528 (Pretoria): east of Pretoria, *Kinges* 1781. 2529 (Witbank): Loskop Dam Reserve, *Theron* 1752. 2531 (Komatipoort): Kruger National Park, Pretoriuskop-Seekoeigat, *Van der Schijff* 3177. 2628 (Johannesburg): Melville Koppies, Johannesburg, *MacNae* 1161 (BOL). 2629 (Bethal): Ermelo, *Burtt Davy* 594.

NATAL.—2730 (Vryheid): near Grootspuit, *Strey* 8053. 2930 (Pietermaritzburg): Hilton Road, *Ross* 2105; farm Moun-jain Glen, *Dargle, Taat* 1025.

LESOTHO.—2927 (Maseru): Roma, *Ruch* 16; Mamathe's, *Jacot-Guillarmod* 1426.

CAPE.—3318 (Cape Town): Cape Town, *Gerstner* 6147. 3326 (Grahamstown): 1820 Settlers Nature Reserve, *Troughton* 227.

A. dealbata, commonly known as the Silver Wattle, is sometimes confused with *A. mearnsii*. It differs from the latter in lacking the glands in between the pinnae pairs along the upper surface of the leaf-rhachis, in being more pruinose, and in having wider usually less moniliform pods.

4. *Acacia decurrens* Willd., Sp. Pl. ed. 4, 4: 1072 (1806); Benth. in Fl. Austral. 2: 414 (1864); Trans. Linn. Soc. Lond. 30: 496 (1875); Burtt Davy, Fl. Transv. 2: 345 (1932); Tindale in Beadle, Evans & Carolin, Handb. Vasc. Pl. Sydney Distr. & Blue Mts. 230 (1962). *Ross*, Fl. Natal 193 (1973). Type from Australia, unknown.

Mimosa decurrens Donn, Hort. Cant. 1: 114 (1796), nomen nudum.

Unarmed tree up to 12 m high with a conical or rounded crown; young branchlets prominently angled, sometimes with wing-like ridges 1–2 mm high, glabrous or the very young shoots slightly tomentose-pubescent. *Leaves* bipinnate, green, decurrent; petiole angular, 1, 5–2, 5 cm long, often eglandular; rhachis 3–10 cm long, with a raised gland just below the junction of each pinna pair; pinnae (5) 8–15 pairs; leaflets 15–35 pairs, 6–12×0, 3–0, 75 mm, linear, usually glabrous throughout. *Inflorescences* capitate, paniced or racemose. *Flowers* bright golden-yellow, on peduncles 2–5 mm long. *Calyx* sparingly pubescent on apices of lobes. *Corolla* glabrous or almost so. *Pods* brown or dark brown, 3, 5–10×0, 4–0, 7 cm, not or only slightly moniliform, dehiscing longitudinally along one margin only, straight or slightly curved. *Seeds* brown to blackish-brown, ±5×3, 5 mm, elliptic, compressed, smooth; caruncle conspicuous; areole ±3, 5×2 mm.

Introduced from Australia.

NATAL.—2930 (Pietermaritzburg): Winterskloof, *Ross* 2130.

A. decurrens, commonly known as the Green Wattle, is readily distinguished by its long narrow leaflets from all of the other introduced *Acacia* species with bipinnate leaves in our area.

A. decurrens is usually attributed to "Wendl., Willd." with *Mimosa decurrens* Wendl., Bot. Beob.: 57 (1798), being taken as the basionym. However, Willdenow cited only *Mimosa decurrens* Donn,

Hort. Cant. 1: 114 (1796), which is a nomen nudum. As he provided no reference to Wendland, either direct or indirect, Willdenow's binomial must be treated as a new name.

5. *Acacia baileyana* F. Muell. in Trans. & Proc. Roy. Soc. Victoria 24: 168 (1887); Brenan in Fl. Trop. E. Afr. Legum.-Mimos.: 50 (1959); Tindale in Beadle, Evans & Carolin, Handb. Vasc. Pl. Sydney Distr. & Blue Mts. 231 (1962); Brenan in Fl. Zamb. 3, 1: 112 (1970). Type from Australia.

Unarmed shrub or tree up to 5 m high; young branchlets subglabrous to sparingly pubescent. *Leaves* bipinnate, glaucous; petiole very short, 2–8 mm long; rhachis 0–1, 2 cm long, with a gland at the junction of each or only the top few pinnae pairs; pinnae (1) 2–4 pairs, crowded; leaflets 12–20 pairs, 3–7×0, 8–1, 5 mm, linear-oblong, often slightly falcate, glabrous throughout or with few marginal cilia. *Inflorescences* capitate, in axillary racemes or panicles longer than the leaves. *Flowers* bright yellow, on peduncles 2–5 mm long. *Calyx* and corolla glabrous or almost so. *Pods* brown, 4–10×0, 8–1, 4 cm, straight or slightly curved, margins entire or only slightly and irregularly constricted between some of the seeds, dehiscing longitudinally along one margin. *Seeds* blackish, ±6×3 mm, smooth; caruncle conspicuous; areole ±5×2 mm.

Introduced from Australia.

TRANSVAAL.—2528 (Pretoria): Prince's Park, *Repton* 1B. 2626 (Klerksdorp): near Rooijantjiesfontein, *Kinges* 1475.

NATAL.—(Pietermaritzburg): Manderston, *Ross* 2103.

CAPE.—3125 (Steynsburg): Grootfontein, *Theron* 612. 3326 (Grahamstown): Grahamstown, *Troughton* 65.

6. *Acacia armata* R. Br. in Ait.f., Hort. Kew, ed. 2, 5: 463 (? Dec. 1813); DC., Prodr. 2: 449 (1825); Benth. in Fl. Austral. 2: 347 (1864); Trans. Linn. Soc. Lond. 30: 461 (1875); Salter in Adamson & Salter, Fl. Cape Penins. 453 (1950); Beadle, Evans & Carolin, Handb. Vasc. Pl. Sydney Distr. & Blue Mts. 224 (1962). Type: South Australia, Bay IX Memory Cove, *R. Brown* (BM, holo.).

Shrub up to 3, 5 m high; young branchlets reddish-brown or brown, angular-striate, usually hirsute-pubescent, seldom glabrous. *Stipules* spinescent, in pairs, slender, divaricate, up to 1 cm long. *Leaves* phyllodic, apparently simple, 0, 5–1(1, 5)×0–2–0, 6 cm, obliquely-ovate to oblong or narrowly lanceolate, undulate, with a single nearly centric midrib, apex obtuse or distinctly mucronate, glabrous throughout or sometimes with hairs on the margins and on the midrib. *Inflorescences* capitate, on axillary peduncles which are about as long as the phyllodes. *Flowers* bright yellow. *Calyx* lobed but not separating into sepals, ± half as long as the corolla. *Petals* narrow, glabrous. *Pods* straight or ± falcate, 2, 5–6×0, 2–0, 6 cm, dehiscent, villous, rarely glabrous or hispid. *Seeds* dark brownish-black, ±7×2, 5 mm, smooth; caruncle conspicuous.

Introduced from Australia.

CAPE.—3318 (Cape Town): Cape Peninsula, Rhodes Estate, *Salter* 7619 (BOL); above Rhodes Memorial and Groote Schuur Hospital, *Gerstner* 6141.

It is quite probable that *A. paradoxa* DC., Cat. Hort. Monsp.: 74 (Feb.–Mar. 1813), is an earlier name for this species. However, until this has been definitely established, the name *A. armata* is retained.

7. *Acacia podalyriifolia* A. Cunn. ex G. Don, Gen. Syst. 2: 405 (1832); Benth. in Fl. Austral. 2: 374 (1864); Trans. Linn. Soc. Lond. 30: 474 (1875); Brenan, Check-list Tang. Terr. 332 (1949); in Fl. Trop. E. Afr. Legum.-Mimos.: 51 (1959); Beadle,

Evans & Carolin, Handb. Vasc. Fl. Sydney Distr. & Blue Mts. 225 (1962); Brennan in Fl. Zamb. 3, 1: 113 (1970); Ross, Fl. Natal 193 (1973). Type: Australia, Queensland, Birnam Range, Brisbane River, *A. Cunningham* 157/1828 (K, holo.).

Unarmed shrub or small tree up to 6 m high; young branchlets densely grey-pubescent. *Leaves* phyllodic, apparently simple, glaucous, mostly 1.5–4 × 1–2 cm, ovate to elliptic or elliptic-oblong, often oblique, with a single midrib and finely but distinctly pinninerved, sparingly to densely pubescent, with 1 or 2 marginal glands. *Inflorescences* capitate, in axillary racemes which are usually longer than the phyllodes, mostly terminal. *Flowers* bright yellow, on pubescent peduncles up to 7 mm long. *Calyx* less than half as long as the corolla, pubescent apically. *Petals* ± free, hirsute. *Pods* brown, glabrous or pubescent, 4–8.5 × 1.5–2 cm, straight or almost so, flattened, margins often ± undulate, dehiscing longitudinally. *Seeds* dark brownish-black, 6–7 × ±3.5 mm, smooth, compressed; caruncle conspicuous; areole 3.5–4 × ±1.5 mm.

Introduced from Australia.

TRANSVAAL.—2528 (Pretoria): Riviera, Pretoria, *Schlieben* 10083.

NATAL.—2930 (Pietermaritzburg): slopes below World's View, *Ross* 2104.

CAPE.—3318 (Cape Town): Stellenbosch, *Louw* 5. 3326 (Grahamstown): Grahamstown, *Troughton* 44.

8. *Acacia saligna* (Labill.) Wendl., Comm. Acac. 26 (1820); Benth. in Fl. Austral. 2: 364 (1864); Trans. Linn. Soc. Lond. 30: 469 (1875); Maslin in Nuytsia 1: 334 (1974). Type from Western Australia, *Labillardiere* (Fl. lecto.).

Mimosa saligna Labill., Pl. Nov. Holl. 2: 86, t. 235 (1806). Type as above.

Acacia cyanophylla Lindl., Bot. Reg. 25: Misc. 45 (1839); Benth. in Fl. Austr. 2: 364 (1864); in Trans. Linn. Soc. Lond. 30: 469 (1875); Salter in Adamson & Salter, Fl. Cape Penins. 454 (1950); F. White, For. Fl. N. Rhod. 82 (1962); Roux & Middlemiss in S. Afr. J. Sci. 59: 286 (1963); Henderson & Anderson in Mem. Bot. Surv. S. Afr. 37: 170, fig. 84a, b, c (1966); Brennan in Fl. Zamb. 3, 1: 112 (1970); Ross Fl. Natal 193 (1973). Type from Australia.

Unarmed shrub or tree up to 10 m high; young branchlets slightly angular, glabrous. *Leaves* phyllodic, apparently simple, glabrous, mostly 8–22 × 0.5–1.4 cm (the lower ones sometimes much longer and 4 cm or more wide), usually narrow, linear-lanceolate to linear-oblong or oblanceolate, straight or slightly falcate, with a basal gland, much narrowed basally, with a single midrib and finely but distinctly pinninerved, sometimes glaucous (on young plants and coppice shoots bipinnate leaves are sometimes produced at the apex of the phyllode). *Inflorescences* globose, in short axillary racemes. *Flowers* bright yellow, on peduncles up to 2.2 cm long. *Calyx* slightly pubescent apically. *Corolla* glabrous. *Pods* brown, 5.5–15 × 0.5–0.6 cm, straight or slightly falcate, flattened, margins slightly constricted between some of the seeds, dehiscing longitudinally. *Seeds* dark brown, 5–7 × 2.75–3.5 mm, smooth, compressed; caruncle conspicuous; areole 3.5–5 × ±1.5 mm.

Introduced into the Cape Province from Australia and now fairly widespread from the Cape Peninsula to the eastern Cape; also introduced into Natal more recently.

S.W.A.—2615 (Luderitz): Luderitz, *Kingex* 2736.

TRANSVAAL.—2528 (Pretoria): Sunnyside, *Repton* 1861.

NATAL.—2930 (Pietermaritzburg): Botha's Hill, *Ross* 2132. 2931 (Stanger): Virginia Airport, *Ross* 2139.

CAPE.—3318 (Cape Town): Ida's Valley, bottom of Hell's Hoogte Pass, Stellenbosch, *Thompson* 836. 3325 (Port Elizabeth): Port Elizabeth, *Begg s.n.* (GRA). 3326 (Grahamstown): road from Port Elizabeth to Grahamstown, *Wells* 2603. 3418 (Simonstown): Tokai, *Burt Davy sub FHO* 20021 (K). 3422 (Mossel Bay): Sedgefield, farm Karawater, bank of Karatara River, *Ross* 2410.

A. saligna, commonly called the "Port Jackson Willow" on account of its pendulous branches and phyllodes, was introduced on the Cape Flats in the 1870's in an attempt to stabilize the shifting dune sands. It proved highly successful for this purpose and soon started spreading by natural means. *A. saligna* is now found far beyond the area of the Cape Flats and has become a serious menace in many parts of the Cape Peninsula and on the mainland by invading and displacing the indigenous vegetation. In many areas *A. saligna* occurs in dense stands.

A. saligna coppices when cut down near the ground. The wood is relatively soft and the branches are brittle.

9. *Acacia pycnantha* Benth. in Hook., Lond. J. Bot. 1: 351 (1842); Fl. Austral. 2: 365 (1864); Trans. Linn. Soc. Lond. 30: 469 (1875); Salter in Adamson & Salter, Fl. Cape Penins. 455 (1950); Beadle, Evans & Carolin, Handb. Vasc. Pl. Sydney Distr. & Blue Mts. 226 (1962). Type from Australia.

Unarmed shrub or tree up to 10 m high; young branchlets terete or almost so, glabrous. *Leaves* phyllodic, apparently simple, glabrous, 10–20 × (1) 1.5–3 cm, obovate-lanceolate, distinctly falcate, mostly obtuse apically, narrowed basally, with a single midrib and finely but distinctly pinninerved, margin nerve-like, with a fairly large marginal gland near the base (on young plants and coppice shoots bipinnate leaves are sometimes produced at the apex of the phyllode). *Inflorescences* globose, in axillary racemes or panicles. *Flowers* bright yellow, on stout peduncles up to 7 mm long. *Calyx* about 2/3 as long as the corolla, pubescent apically. *Corolla* ± glabrous. *Pods* brown, 6–12 × 0.4–0.7 cm straight or slightly curved, flattened, margins slightly constricted between some of the seeds, dehiscing longitudinally. *Seeds* dark brownish-black, 5–7 × 2.75–3.5 mm, smooth, compressed; caruncle conspicuous.

Introduced from Australia.

CAPE.—3318 (Cape Town): Pinelands, *Salter* 8767; Cape Town University, *Leighton sub BOL* 25537. 3418 (Simonstown): Somerset West, *Parker* 3517 (K). 3420 (Bredasdorp): Potteberg, *Van Nickerk sub BOL* 23359.

10. *Acacia longifolia* (Andr.) Willd. in L., Sp. Pl. ed. 4, 4: 1052 (1806), non *A. longifolia* Paxt. (1846); Benth. in Fl. Austral. 2: 397 (1864); Trans. Linn. Soc. Lond. 30: 487 (1875); Salter in Adamson & Salter, Fl. Cape Penins. 454 (1950); Beadle, Evans & Carolin, Handb. Vasc. Pl. Sydney Distr. & Blue Mts. 228 (1962); Henderson & Anderson in Mem. Bot. Surv. S. Afr. 37: 170, fig. 84 d, e, f (1966); Ross, Fl. Natal: 193 (1973). Type from Australia.

Mimosa longifolia Andr., Bot. Rep. t. 207 (1802). Type as above.

Unarmed shrub or tree to 8 m high; young branchlets angular, glabrous or the young shoots minutely pubescent. *Leaves* phyllodic, apparently simple, glabrous, 6–18 × 0.7–2 cm, linear-lanceolate or narrowly oblong to oblanceolate, straight or almost so, mucronate apically, sometimes obliquely so, narrowed basally, with 2–5 prominent longitudinal nerves and faintly or conspicuously anastomosing almost longitudinal veins between the nerves. *Inflorescences*

spicate, axillary, solitary or in pairs; spikes up to 4 cm long. *Flowers* bright yellow, sessile. *Calyx* very short. *Corolla* glabrous. *Pods* brown, 7–14 × 0.4–0.6 cm, cylindrical, straight or slightly curved, margins constricted between the seeds, dehiscing longitudinally along both margins, valves longitudinally wrinkled or striate, acuminate apically, glabrous. *Seeds* dark brownish-black, 4–7 × ±2.5 mm, more or less oblong, smooth, compressed; areole ±3.5 × 1.5 mm; funicle not much folded, thickened almost from the base into a small ± cupular aril enclosing the apex of the seed.

Introduced from Australia.

TRANSVAAL.—2627 (Potchefstroom): Randfontein, *Barnard sub PRE 32122*. 2628 (Johannesburg): Johannesburg, *Moss 5258* (BM).

NATAL.—2930 (Pietermaritzburg): Town Bush Valley, 1.6 km west of Cascade Falls, *Ross 1281* (NU); Hilton Road, *Ross 2106*.

CAPE.—3318 (Cape Town): Rondebosch, lower slopes of Devil's Peak behind University, *White 5002*. 3319 (Worcester): Franschhoek, *Van der Merwe 1209*. 3325 (Port Elizabeth): 24 km up Elands River road, *Acocks 21275*. 3326 (Grahamstown): road from Port Elizabeth to Grahamstown, *Wells 2602*. 3418 (Simonstown): near Wynberg, *Schlechter 1061* (GRA). 3419 (Caledon): Kogelberg Reserve, Paardeberg, *Grobler 17140*. 3422 (Mossel Bay): Mossel Bay, *Hutchinson s.n.* (K).

A. longifolia is commonly known as the Golden Wattle. Like several of the other introduced Australian species, *A. longifolia* is also invading and displacing the indigenous vegetation in some areas.

A. longifolia is a variable species. Although some of the extremes look very different, they are connected by an almost continuous range of intermediates and consequently cannot be separated satisfactorily. Benth. l.c. 397 (1864) enumerated six forms of *A. longifolia*.

Beadle, Evans & Carolin l.c. 228 recognized two varieties, namely, var. *longifolia* and var. *sophorae* (Labill.) F. Muell. ex Benth. Var. *sophorae* has mostly obovate-oblong, oblanceolate or oblong-elliptic phyllodes 1.2–3.6 cm wide and 5–12 cm long, in contrast to the linear or linear-lanceolate phyllodes 0.3–1 cm wide and 7.5–13 cm long of var. *longifolia*. Although there is no distinct morphological discontinuity between the two, in Australia var. *sophorae* has somewhat different ecological preferences and tends to occur as a low plant along the coastal sand dunes, while var. *longifolia* grows into a larger plant. Specimens from our area are often difficult to place in one variety or the other with certainty.

11. *Acacia cyclops* A. Cunn. ex G. Don, Gen. Syst. 2: 404 (1832); Benth. in Fl. Austral. 2: 388 (1864); Trans. Linn. Soc. Lond. 30: 481 (1875); Salter in Adamson & Salter, Fl. Cape Penins. 454 (1950); Roux in S. Afr. J. Sci. 57: 99 (1961); Roux & Middlemiss in S. Afr. J. Sci. 59: 286 (1963); Middlemiss in S. Afr. J. Sci. 59: 419 (1963); Henderson & Anderson in Mem. Bot. Surv. S. Afr. 37: 172, fig. 85 (1966). Syntypes: Western Australia, King George's Sound, *A. Cunningham* 104/1818 (K!), 328/1821 (K!).

Unarmed shrub or small tree up to 6 m high; young branchlets usually angular and glabrous. *Leaves* phyllodic, apparently simple, glabrous, 3–9 × 0.6–1.5 cm, narrowly-oblong, usually ± straight, sometimes slightly falcate, obliquely mucronate apically, narrowed basally, with 3–5 prominent longitudinal nerves and anastomosing almost longitudinal veins. *Inflorescences* globose, solitary or two or three in short axillary racemes. *Flowers* bright yellow, on peduncles up to 7 mm long. *Calyx* pubescent apically, more than half as long as the corolla. *Petals* free. *Pods* brown, 5–15 × 0.8–1.3 cm, oblong, falcate or variously coiled or spirally twisted, flattened, margins

not constricted between the seeds, dehiscing longitudinally along both margins. *Seeds* dark brown, 5–7 × 3–4 mm, smooth, compressed; areole ±4 × 2 mm; funicle thickened, bright red or orange, encircling the seed in a double fold.

Introduced into the Cape Province from Australia and now widespread in coastal areas from Lambert's Bay in the north-west to Kidd's Beach in the north-east.

S.W.A.—2615 (Luderitz): Luderitz, *Kinges 2732*.

CAPE.—3318 (Cape Town): Hell's Hoogte, Stellenbosch, *Taylor 7298*. 3325 (Port Elizabeth): Port Elizabeth, *Theron 1142*. 3326 (Grahamstown): Kowie River, *Wells 2580*. 3418 (Simonstown): Cape Peninsula, *Rodin 3287A*. 3419 (Caledon): near Caledon, *Gilliland A 62* (BM). 3422 (Mossel Bay): Sedgelyield, farm Karawater, bank of Karatara River, *Ross 2408*. 3423 (Knysna): bank of Lagoon, road to Knysna Heads, *Bos 935*.

Like *A. saligna*, *A. cyclops* was introduced on the Cape Flats in the 1870's in an attempt to stabilize the shifting dune sands. It proved highly successful for this purpose and soon started spreading by natural means. *A. cyclops* is now found far beyond the area of the Cape Flats and has become a serious menace in many parts of the Cape Peninsula and on the mainland by invading and displacing the indigenous vegetation. In many areas *A. cyclops* occurs in dense almost impenetrable stands.

Unlike *A. saligna*, *A. cyclops* does not usually coppice when cut down. The wood of *A. cyclops* provides a useful firewood.

A. cyclops is commonly known as "Rooikrans" on account of the bright red funicle which encircles the seed. The pods usually remain attached to the plant long after the ripe seed have been shed.

A number of species of birds feed on the conspicuous funicles and assist in the distribution of *A. cyclops* (see Middlemiss in S. Afr. J. Sci. 59: 419, 1963).

12. *Acacia melanoxylon* R. Br. in Ait. f., Hort. Kew ed. 2, 5: 462 (1813); Benth. in Fl. Austral. 2: 388 (1864); Trans. Linn. Soc. Lond. 30: 481 (1875); J. Phillips in Mem. Bot. Surv. S. Afr. 14: 291 (1931); Salter, Fl. Cape Penins. 454 (1950); Beadle, Evans & Carolin, Handb. Vasc. Pl. Sydney Distr. & Blue Mts. 227 (1962); Ross, Fl. Natal: 193 (1973). Type: Tasmania, Port Dalrymple, *R. Brown* (BM, holo.).

Unarmed tree up to 20 m high; young branchlets angular, glabrous or the young shoots minutely pubescent. *Leaves* phyllodic, apparently simple, glabrous, mostly 6–12 × 0.6–1.2 (2.5) cm, linear-lanceolate to oblanceolate or narrowly obovate, straight to falcate, narrowed basally, with 3–7 prominent longitudinal nerves and a conspicuous reticulate venation between the longitudinal nerves (on young plants bipinnate leaves are sometimes produced at the apex of the phyllode). *Inflorescences* globose, solitary or in short axillary racemes. *Flowers* pale yellowish-white, on peduncles up to 6 mm long. *Calyx* more than half as long as the corolla. *Corolla* glabrous. *Pods* brown, 5–15 × 0.6–0.8 cm, oblong, falcate or variously coiled or spirally twisted, flattened, margins thickened, not constricted between the seeds, dehiscing longitudinally along both margins. *Seeds* dark brownish-black, 4–5 × ±2.5 mm, smooth, compressed; areole ±3 × 1 mm; funicle very long, thickened, almost encircling the seed in a double fold.

Introduced from Australia.

TRANSVAAL.—2528 (Pretoria): Wonderboom Reserve, *Repton 1871*. 2627 (Potchefstroom): Krugersdorp, *Webster sub PRE 32118*. 2628 (Johannesburg): around Johannesburg, *Moss 7082* (BM).

SWAZILAND.—2631 (Mbabane): 1,6 km from Hlatikulu on Sitobela road, *Ross* 1759.

NATAL.—2730 (Vryheid): Donkerhoek, *Devenish* 1020. 2929 (Underberg): farm Vergelegen, Umkomaas River near Lesotho border, *Rissik s.n.* 2930 (Pietermaritzburg): slope below World's View, *Ross* 2128.

LESOTHO.—2927 (Maseru): Masoeling, *Jacot-Guillarmod* 2605.

CAPE.—3219 (Wuppertal): Cedar Mts., Algeria forest reserve, *Bos* 516. 3318 (Cape Town): Rondebosch, near University of Cape Town, *White* 5066. 3326 (Grahamstown): Grahamstown, *Roux sub PRE* 32121. 3422 (Mossel Bay): Sedgfield, farm Karawater, banks of Karatara River, *Ross* 2409.

A. melanoxydon, the well-known Blackwood, yields a good timber which is used in the manufacture of furniture. Like several of the other introduced Australian species, *A. melanoxydon* is also invading and displacing the indigenous vegetation in some areas.

In addition to the species dealt with in some detail above, several species are cultivated in our area. At present, however, there is no evidence to suggest that any of them have become naturalized. The species cultivated are:—

13. *Acacia elata* *A. Cunn. ex Benth.* in Hook., *Lond. J. Bot.* 1: 383 (1842), non *A. elata* R. Grah.; *Benth.* in *Fl. Austral.* 2: 413 (1864); in *Trans. Linn. Soc. Lond.* 30: 495 (1875); *Summerh.* in *Bot. Mag.* 154: t.9214 (1930); *Brenan* in *Fl. Trop. E. Afr. Legum.-Mimos.*: 50 (1959); in *Fl. Zamb.* 3, 1: 111 (1970); *Tindale* in *Beadle, Evans & Carolin, Fl. Sydney Region*: 272 (1972). Type: Australia, New South Wales, shaded ravines, *Cunningham* (K, holo.).

Unarmed tree. Leaves bipinnate, large, 30–40 cm long; pinnae 3–5 pairs; leaflets 8–15 pairs per pinna, mostly 2–5 × 0,4–1 cm, lanceolate to linear-lanceolate, often somewhat falcate, usually finely pubescent at least on the lower surface. *Flowers* pale yellow, in round heads, arranged in axillary racemes or panicles. *Pods* ± 9–15 × 0,9–1,3 cm, linear-oblong, straight or curved, the margins irregularly constricted between the seeds, compressed, dehiscing along both margins.

A. elata is easily distinguished from all of the other species with bipinnate leaves by its large leaflets.

Recorded from Krugersdorp in the Transvaal, *Gerstner* 6671, but much more widely cultivated.

The name *A. terminalis* (Salisb.) Macbride, in *Contr. Gray Herb.* 59: 7 (1919), has been applied incorrectly to this species.

14. *Acacia visite* *Griseb.* in *Abh. K. Ges. Wiss. Göttingen* 19: 135 (1874). Type from Argentina.

Unarmed tree. Leaves bipinnate; pinnae 2–7 pairs; leaflets 24–38 pairs per pinna, 6–9 × 0,8–1,25(2) mm, linear or linear-oblong, acute apically, midrib almost marginal throughout its length and usually pubescent. *Flowers* in round heads; inflorescences solitary, paired or fasciated in the axils of the leaves. *Pods* 7–12 × 1,4–1,9 cm, valves thin, dehiscing longitudinally.

Recorded from Capital Park, Pretoria, *Repton* 1880; Grounds of Division of Botany, Pretoria, *Verdoorn s.n.*, *Schlieben* 10106; Bloemfontein, *Potts* 3219.

15. *Acacia cultriformis* *A. Cunn. ex G. Don, Gen. Syst.* 2: 406 (1832); *Benth.* in *Fl. Austral.* 2: 375 (1864); in *Trans. Linn. Soc. Lond.* 30: 474 (1875); *Brenan* in *F.Z.* 3, 1: 113 (1970). Type from New South Wales, Australia.

Unarmed shrub or small tree; young branchlets angular, glabrous. *Leaves* phyllodic, apparently simple, 0,8–3 × 0,6–1,1 cm, obliquely obovate-lanceolate to

ovate-triangular, glaucous, glabrous, with a single main longitudinal nerve and finely penninerved, usually with 1 marginal gland, sometimes on a prominent angle. *Flowers* in small round heads, arranged in axillary racemes which are longer than the phyllodes and are often ± aggregated terminally. *Pods* 5–9 × 0,5–0,7 cm, linear-oblong, glabrous, longitudinally dehiscent.

Recorded from Stellenbosch, *Garside* 1248 (K).

A. cultriformis differs from *A. podalyriifolia* in being glabrous and in having narrower pods.

16. *Acacia retinodes* *Schlechtend.* in *Linnaea* 20: 664 (1847); *Benth.* in *Fl. Austral.* 2: 362 (1864); in *Trans. Linn. Soc. Lond.* 30: 468 (1875); *Stapf & Ballard, Bot. Mag.* 153: t.9177 (1929); *Brenan* in *Fl. Trop. E. Afr. Legum.-Mimos.*: 51 (1959); *Court* in *Willis, Hand. Pl. Victoria* 2: 227 (1972). Type from Australia.

Unarmed glabrous shrub or small tree. *Leaves* phyllodic, apparently simple, linear-lanceolate to -oblong or oblanceolate, straight or slightly curved, 4,5–17 cm long, up to 1,5 cm wide, narrowing gradually towards the base, with a single main longitudinal nerve and finely but distinctly penninerved. *Flowers* in round heads up to 6 mm in diameter; inflorescences on peduncles 3–6 mm long, arranged in short axillary racemes. *Pods* 7–12 × 0,5–0,7 cm, linear-oblong, flattened, longitudinally dehiscent; funicle encircling the seed in a double fold.

Recorded from Roodeplaat near Pretoria, *Du Toit* 105, 151, *Schlieben & Mendelsohn* 12717.

A. retinodes differs from *A. saligna* in having smaller flower-heads, shorter peduncles and funicles which encircle the seeds in a double fold.

17. *Acacia fimbriata* *A. Cunn. ex G. Don, Gen. Syst.* 2: 406 (1832); *Beadle, Evans & Carolin, Fl. Sydney Region*: 267 (1972). Type from New South Wales, Australia.

Unarmed shrub or small tree. *Leaves* phyllodic, apparently simple, linear to narrowly oblong-elliptic, 2–4,5 cm long, 2–5 mm wide, narrowed basally, with a single main longitudinal nerve, margins typically densely ciliate, usually with a rounded gland near the base. *Flowers* in small round heads, arranged in axillary racemes. *Pods* linear-oblong, straight, flattened, up to 7 cm long and 7 mm wide, dehiscent.

Recorded from the grounds of the Union Buildings, Pretoria, *Repton* 2640, *Schlieben* 10084; *Grahams-town, Troughton* 228.

18. *Acacia adunca* *A. Cunn. ex G. Don, Gen. Syst.* 2: 406 (1832); *Maiden, For. Fl. New South Wales* 5, part 46: 113–118, t.173 (1911). Type: Australia, New South Wales, Hunters River, *Cunningham* 79/1827 (K, holo.).

A. accola *Maiden & Betche* in *Proc. Linn. Soc. New South Wales* 31(4): 734 (1907). Syntypes from Australia.

Unarmed small tree; young branchlets angular, glabrous. *Leaves* phyllodic, apparently simple, 5–12 cm long, 1,5–3 mm wide (in our area), linear, with a single main longitudinal nerve, usually with an oblique slightly recurved point apically, a fairly conspicuous marginal gland situated a short distance above the base. *Flowers* in small round heads, arranged in short axillary racemes which are mostly aggregated terminally. *Pods* reddish-brown when mature, 7–10 × 0,8–1 cm, oblong, margins often irregularly constricted, valves thin, umbonate over the seeds, longitudinally dehiscent.

Recorded from the Groot Drakenstein in the Cape Province, *Voorligtingsbeempte* C4.

19. *Acacia maidenii* F. Muell. in Linn. Soc. New South Wales Macleay Mem. Vol. 222: t.29 (1893); Court in Willis, Handb. Pl. Victoria 2: 240 (1972); Beadle, Evans & Carolin, Fl. Sydney Region: 271 (1972). Type from New South Wales, Australia.

Unarmed small to medium-sized tree. *Leaves* phyllodic, apparently simple, 6–15 × 0,8–1,5 cm, with 3–7 main longitudinal nerves and almost anastomosing longitudinal veins. *Flowers* in elongate spikes up to 4 cm long, spikes axillary, solitary or in twos or threes. *Pods* 4–12 cm long, 3–5 mm wide, variously coiled or twisted, pubescent.

Recorded from the Caledonian Grounds, Pretoria, *Repton* 3766.

Differs from *A. longifolia* in having pubescent coiled pods.

20. *Acacia viscidula* A. Cunn. ex Benth. in Hook., Lond. J. Bot. 1: 363 (1842); in Fl. Austral. 2: 387 (1864); in Trans. Linn. Soc. Lond. 30: 480 (1875). Type: Australia, New South Wales, banks of Lachlan River, *Fraser* (K, holo.).

Unarmed shrub or small tree; young branchlets angular, mostly sparingly pubescent, viscid. *Leaves* phyllodic, apparently simple, 4,5–10 cm long, 1,25–3 mm wide, linear, narrowed basally, with several longitudinal nerves. *Flowers* in small round heads,

on axillary peduncles, solitary or paired, rarely fascicled; peduncles up to 5 mm long, pubescent. *Sepals* free or shortly united basally. *Corolla* pubescent. *Pods* 4–7 cm long, 3–3,5 mm wide, linear, sparingly to densely pubescent, longitudinally dehiscent.

Recorded on the Cape Peninsula on the slopes below the ruins of Lady Anne Barnard's cottage, *Salter* 9044.

21. *Acacia pendula* A. Cunn. ex G. Don, Gen. Syst. 2: 404 (1832); Benth. in Fl. Austral. 2: 383 (1864); in Trans. Linn. Soc. Lond. 30: 479 (1875); Court in Willis, Handb. Pl. Victoria 2: 238 (1972). Type from New South Wales, Australia.

Unarmed tree or shrub. *Leaves* phyllodic, apparently simple, linear to linear-oblong or lanceolate, 4,5–8 cm long, 3–9 mm wide, narrowed towards the base, coriaceous, with several inconspicuous longitudinal nerves, often greyish or glaucous. *Flowers* in small round heads, usually arranged in very short axillary racemes. *Pods* oblong, flattened, 4–8 × 0,8–1,8 cm, the margins bordered by a narrow wing 0,5–2 mm wide.

Recorded from a Johannesburg park, *Hobson* sub *PRE* 32341; Middelburg, Cape, *Loock* sub *PRE* 32340.

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