

Sepals 5, 4, or 3, free or united (wanting in *A. Huegelii* and *A. squamata*). Petals as many, free or united (wanting in *A. squamata*). Stamens indefinite, usually very numerous, free or slightly connected at the very base. Pod linear or oblong, flat or nearly cylindrical, straight, falcate or variously twisted, opening in 2 valves or indehiscent. Seeds more or less flattened, usually marked in the centre of each face with an oval or horseshoe-shaped depression or opaque spot or ring, sometimes very obscure. Funicle usually thickened into a fleshy aril under or round the seed.—Trees, shrubs, climbers, or rarely undershrubs, with or without prickles or stipular spines. Leaves twice pinnate or reduced to a simple phyllodium or dilated petiole. Flowers usually yellow or white, in globular heads or cylindrical spikes, often polygamous.

A very large genus, dispersed over the warmer regions of the globe, and in Australia the most numerous in species of all Phanogamous genera. Of the Australian species, one only, *A. Farnesiana*, is common to the warmer regions of the New and the Old World, the remainder are all endemic. Of these by far the greater number belong to the phyllodineous series, which is entirely Australian, with the exception of a very few from New Caledonia, the Indian Archipelago, and the Pacific Islands, none of which can be specifically identified with any Australian ones, although very near some of the tropical species. Acacias are also very generally distributed over every part of Australia, but are entirely absent from New Zealand.

Taken as a whole, the genus is the most marked of those which have been dismembered from the Linnean *Mimosa*, being at once distinguished from *Inga* and its allies by the free stamens, and from the true *Mimoseae* by their indefinite number; but, for its subdivision, notwithstanding considerable differences in the flowers and more striking ones in the fruit, it has been found impossible to establish upon these differences any definite sections, even among those species where both flowers and fruit are well known, and in the majority of specimens gathered, the pod is neglected by collectors. Species with the most discrepant pods are sometimes almost identical in foliage, and, on the other hand, pods apparently identical, sometimes belong to species widely different in foliage and even in flower. I have therefore on each of the three occasions when I have gone through the genus in detail, with a large number of specimens before me, in vain sought for any better mode of distributing the species than in *Series*, founded chiefly upon foliage and inflorescence. There are only one or two species in which the cylindrical spike appears to pass into the globular head, and the venation of the phyllodia is nearly, though not quite, as constant. The glands on the upper edge of the phyllodia and on the common petiole in the compound leaf seldom afford even a specific distinction, and the bracts in the flower-head still less so, and I have therefore in the descriptions seldom mentioned them. The bracts are almost always narrow, closely packed in with the flowers, and more or less dilated at the end, sometimes quite pelate; generally the outer ones of each head are flatter, the inner ones more slender and pro-

portionally more dilated at the end, where they are usually ciliate and sometimes acuminate. The characters derived from the united or free sepals must be used with caution, for the sepals, at first united, often separate as the flowering advances. The forms assumed by the pod are tolerably constant in species, although rarely available for classing them in groups; so it is also with the seeds, transverse or longitudinal, and with the infinite variety of forms assumed by the funicle. This funicle on the ripe seed rarely remains short and filiform, it almost always forms two or three folds under the seed, the end of the last fold or the whole of the last and more or less of the lower folds being thickened into a variously-shaped small fleshy aril, usually described as a strophiole, but always a part of the funicle and continuous with the lower filiform part, or forming the whole funicle; occasionally the thickened part is much elongated extending round one side of the seed, returning on the same side and forming another double fold on the other side, or completely encircling the seed in a double fold returning on the same side, or extending twice round without a return, or even encircling it in a triple fold. All these and other modifications appear to be constant in each species, but only rarely available for specific diagnosis, for in many species the funicle is as yet unknown; it is often unsafe to rely on it unless the seed is quite ripe, and then the thin part of the funicle is so brittle that it is often destroyed merely by the elastic opening of the pod.

*Leaves all or mostly reduced to flat terete or subulate phyllodia or minute scales without leaflets. (Phyllodineae.)*

Flowers in globular heads.

Phyllodia none or reduced to minute scales.

Branches spinescent . . . . .

11. *A. spinescens*.

Branches rush-like, not spinescent . . . . .

IV. CALAMIFORMES.

Phyllodia (either small and tooth-like or vertically flattened or elongated) decurrent on or continuous with the branches.

Branches flat or 2-winged by the decurrent phyllodia . . . . .

I. ALATÆ.

Branches 3-winged or the phyllodia (usually pungent) very shortly or scarcely decurrent, but not articulate . . . . .

II. CONTINUÆ.

Phyllodia articulate on the stems, at least when old.

Phyllodia rigid, tapering into pungent straight points, usually narrow or short, not whorled (except in 43, *A. verticillata*) . . . . .

III. PUNGENTES.

Phyllodia linear-subulate, terete or tetragonous, rarely slightly flattened, obtuse or with incurved or innocuous points, not whorled . . . . .

IV. CALAMIFORMES.

Phyllodia terete or slightly flattened, usually short, all whorled or crowded and irregularly whorled or clustered . . . . .

V. BRUNIOIDÆ.

Phyllodia vertically flattened, broader than thick, obtuse acute or with incurved or innocuous points.

Phyllodia 1-nerved, the veins pinnate, reticulate or rarely 1 or 2 secondary small nerves from the base on one side of the midrib . . . . .

VI. UNINERVES.

Phyllodia with 2, 3 or more parallel nerves . . . . .

VII. PLURINERVES.

Flowers in cylindrical or oblong spikes.

Phyllodia rigid, tapering into pungent points.

Phyllodia several-nerved, decurrent on the stem . . . . .

10. *A. triptera*.

Phyllodia 1- or 3-nerved, articulate on the stem . . . . .

III. PUNGENTES.

Phyllodia obtuse or with a callous, innocuous or hooked point . . . . .

VIII. JULIFLORE.

*Leaves all bipinnate. Flowers in globular heads or rarely in spikes. (Bipinnatæ.)*

Stipules none or brown and scarious. Spines none or axillary.

Flower-heads several, in axillary or paniculate racemes . . . . .

IX. BOTRYOCEPHALÆ.

Flower-heads or spikes single, on axillary solitary or clustered peduncles . . . . .

X. PULCHELLÆ.

Stipules all or some of them spinescent. Flower-heads single on axillary peduncles . . . . .

XI. GUMMIFERÆ.



**SERIES I. *Alatæ*.**—*Phyllodia* bifariously decurrent, forming 2 opposite wings to the stem, the free part short, broad, and acute, or rigid and pungent-pointed. Flowers in globular heads, on axillary simple peduncles, rarely appearing racemose by the reduction of the flowering branches.

- Wings broad, continuous with the next below, removing the axillary bud to a distance from the stem. . . . . 1. *A. bossiæoides*.  
 Wings interrupted at each node, the axillary bud sessile on the stem.  
 Wings broad, free part of the phyllodia usually short and broad, with an almost central nerve.  
 Phyllodia without glands. Flowers numerous in a small compact head . . . . . 2. *A. glaucoptera*.  
 Phyllodia with a glandular angle on the upper edge. Heads 6 to 12-flowered . . . . . 3. *A. alata*.  
 Wings narrow, free part narrow or with the nerve almost marginal.  
 Phyllodia erect, incurved. Flowers numerous in the head, 5-merous. Petals smooth . . . . . 4. *A. diptera*.  
 Phyllodia rigid, recurved. Flowers few in the head, 4-merous. Petals strongly striate . . . . . 5. *A. stenoptera*.

**SERIES II. *Continuæ*.**—*Phyllodia* narrow, rigid, tapering into a pungent point, continuous with the stem and shortly and trifariously or irregularly decurrent. Flowers in heads or spikes on axillary simple peduncles.

- Flowers in globular heads.  
 Phyllodia linear or linear-lanceolate, flattened, 1-nerved.  
 Heads nearly sessile, with 4 to 8 flowers . . . . . 6. *A. incurva*.  
 Heads pedunculate, compact, with above 40 flowers . . . . . 7. *A. trigonophylla*.  
 Phyllodia terete, very shortly decurrent.  
 Lower phyllodia 1 to 2 in. long, upper ones short and distant.  
 Pod curved or twisted, about 2 lines broad . . . . . 8. *A. continua*.  
 Phyllodia crowded on the branchlets, slender and rigid, 2 to 4 in. long. Pod nearly 1½ in. broad . . . . . 9. *A. Peuce*.  
 Flowers in cylindrical spikes. Phyllodia lanceolate, thick, several-nerved . . . . . 10. *A. triptera*.

(106, *A. anceps*, has some of the phyllodia only half articulate on the angles of the stem, and 59, *A. extensa*, has the branches often narrowly winged, with phyllodia scarcely to be distinguished from them.)

**SERIES III. *Pungentes*.**—Rigid shrubs, branches in some species spinescent. *Phyllodia* articulate on the stem, rigid, tapering into pungent points, subulate, linear or lanceolate, or rarely none. Flowers in heads or spikes, on axillary simple peduncles.

(Besides the following species, a few of the short-leaved *Calamiformes* and of the small rigid-leaved *Plurinerves* might almost be classed among the *Pungentes*.)

**A. *Aphyllæ*.**—*Phyllodia* none. Branches spinescent. Heads globular, sessile . . . . . 11. *A. spinescens*.

**B. *Plurinerves*.**—*Phyllodia* 2- or more nerved, or terete and nerveless. Heads globular.

*Phyllodia* falcate, not exceeding ½ in. (See Series VII. *Plurinerves*.)

*Phyllodia* linear-lanceolate, 3- or more nerved. Petals smooth or with prominent midribs.

Sepals distinct, narrow, spatulate (Western species except *A. Oswaldi*).

- Phyllodia* attached by a broad base, very rigid and pungent . . . . . 12. *A. latipes*.  
*Phyllodia* slightly contracted at the base, very rigid and pungent . . . . . 13. *A. cochlearis*.  
*Phyllodia* linear-lanceolate, with 3 prominent nerves, scarcely pungent. Petals without prominent midribs . . . . . 177. *A. heteroclita*.

*Phyllodia* rigid, but scarcely pungent, several-nerved. Flower-heads almost sessile (Eastern species) . . . . . 184. *A. Oswaldi*.

Sepals united (Eastern or tropical species).

Seeds longitudinal (extratropical species).

Peduncles short. Pod 4 to 5 lines broad. Branches usually woolly . . . . . 14. *A. lanigera*.

Peduncles slender. Pod 1 to 2 lines broad . . . . . 16. *A. trinervata*.

Seeds obliquely transverse. Branches glabrous, somewhat viscid (tropical species) . . . . . 15. *A. phlebocarpa*.

*Phyllodia* nearly terete, striate with several nerves or nerveless. Petals smooth.

Stipules lanceolate, small and very deciduous.

*Phyllodia* divaricate, straight or slightly incurved. Peduncles very short. Petals narrow, with raised midribs . . . . . 17. *A. colletioides*.

*Phyllodia* straight, short, with not more than 2 nerves. Peduncles very short. Petals smooth . . . . . 34. *A. sphacelata*.

*Phyllodia* divaricate, straight or recurved. Peduncles as long as or longer than the heads. Petals with raised midribs . . . . . 18. *A. striatula*.

*Phyllodia* crowded, incurved, mostly under 1 in. Petals without raised midribs . . . . . 21. *A. sulcata*.

Stipules setaceous or spinescent.

Stipules slender. *Phyllodia* divaricate, recurved or flexuose. Pod flat, with raised margins . . . . . 19. *A. campylophylla*.

Stipules rigidly spinescent. *Phyllodia* erect, almost obtuse, with short pungent points. Petals concave and thickened at the top . . . . . 20. *A. teretifolia*.

*Phyllodia* linear or lanceolate, recurved, with 2 thick marginal or nearly marginal nerves. Stipules setaceous or spinescent. Petals striate.

*Phyllodia* mostly ¼ in. long, rather broad . . . . . 22. *A. costata*.

*Phyllodia* ½ to 1 in. long, narrow . . . . . 23. *A. barbinervis*.

*Phyllodia* 1 to 2 in. long, very narrow, with hooked points . . . . . 24. *A. ataxiphylla*.

Petals smooth. *Phyllodia* ¼ to 1 in., rather broad . . . . . 25. *A. Baxteri*.

*Phyllodia* subulate, terete, finely striate. Heads sessile, ovoid. Flowers 5-merous . . . . . 228. *A. aciphylla*.

C. **Uninerves.**—*Phyllodia* 1-nerved. Heads globular.

Petals prominently striate. Pod thick, with broad smooth margins.

Flowers 5-merous.

*Phyllodia* crowded, under  $\frac{1}{2}$  in. long, obliquely oblong-lanceolate, often falcate . . . . . 26. *A. auronitens*.

*Phyllodia* scattered,  $\frac{3}{4}$  to  $1\frac{1}{2}$  in. long, linear-tetragonous . . . . . 27. *A. quadrisulcata*.

Petals membranous, smooth or with a prominent midrib.

Flowers mostly 5-merous.

*Phyllodia* oblong-lanceolate, under  $\frac{1}{2}$  in. long. Branches spinescent, woolly . . . . . 28. *A. erioclada*.

*Phyllodia* linear or lanceolate, broader than thick.

Pod  $2\frac{1}{2}$  to 3 lines broad, not contracted between the seeds when perfect (E. and S. species) . . . . . 29. *A. siculiformis*.

Pod  $1\frac{1}{2}$  lines broad, regularly contracted between every seed (N.W. species) . . . . . 30. *A. patens*.

*Phyllodia* linear-subulate, acicular or 4-gonous.

*Phyllodia* mostly recurved. Branches tomentose. Peduncles slender. Heads small. Pod-valves very convex, striate . . . . . 31. *A. laricina*.

*Phyllodia* straight, clustered at the old nodes. Peduncles slender. Funicle encircling the seed . . . . . 32. *A. tetragonophylla*.

*Phyllodia* straight, often numerous, but not clustered. Peduncles very short . . . . . 34. *A. sphacelata*.

*Phyllodia* scattered, erect or slightly spreading, often 1 in. long. Peduncles slender, mostly clustered . . . . . 33. *A. genistoides*.

*Phyllodia* scattered, divaricate, rather broader or with a small glandular angle at the base.

Petals without any prominent nerve. Peduncles slender . . . . . 35. *A. ingrata*.

Petals with a prominent midrib. Peduncles slender.

Funicle filiform . . . . . 36. *A. juniperina*.

Petals without any prominent nerve. Heads almost sessile (See also 93, *A. vomeriformis*, with the glandular angle more prominent.) . . . . . 37. *A. asparagoides*.

Flowers mostly 4-merous or 3-merous.

Sepals free, narrow. Funicle shortly thickened . . . . . 38. *A. tenuifolia*.

Calyx toothed or lobed.

Peduncles longer than the flower-head.

*Phyllodia* linear. Funicle folded and thickened under the seed . . . . . 39. *A. diffusa*.

*Phyllodia* linear-lanceolate, broad at the base. Funicle dilated and clasping the base of the seed . . . . . 40. *A. rupicola*.

Flower-heads almost sessile, few-flowered.

Flowers 6 to 10, mostly 4-merous . . . . . 41. *A. rhigiophylla*.

Flowers 1 to 4, mostly 3-merous . . . . . 45. *A. axillaris*.

D. **Spicatae.**—*Phyllodia* 1- to 3-nerved. Flowers 4- or 3-merous in cylindrical oblong or ovoid spikes.

Spikes or heads few-flowered, almost sessile.

Flowers 6 to 10, mostly 4-merous . . . . . 41. *A. rhigiophylla*.

Flowers 1 to 4, mostly 3-merous . . . . . 45. *A. axillaris*.

Spikes pedunculate, many-flowered.

Spikes cylindrical or ovoid, dense. Flowers mostly 4-merous.

*Phyllodia* linear-lanceolate, very rigid, 3- or 4-nerved and striate . . . . . 42. *A. oxycedrus*.

*Phyllodia* subulate, linear, or oblong, mostly 1-nerved and verticillate . . . . . 43. *A. verticillata*.

Spikes interrupted, slender. Flowers mostly 3-merous . . . . . 44. *A. Riceana*.

SERIES IV. **Calamiformes.**—*Phyllodia* rarely none, more frequently narrow-linear or subulate, terete tetragonous or very slightly flattened, articulate on the stem, obtuse or with short innocuous or recurved points, 1- or several-nerved. Flowers in globular heads on simple axillary peduncles, or rarely several heads in a short raceme, or irregularly racemose by the abortion of the floral *phyllodia*.

(Some of Ser. VIII., *Juliflorae*, have similar *phyllodia*, but cylindrical or ovoid flower-spikes. 21, *A. sulcata*, and a few allied *Pungentes*, have varieties with the *phyllodia* almost obtuse, bringing them near to the short-leaved *Calamiformes*.)

A. **Subaphyllae.**—*Phyllodia* none or very few and slender, resembling the branches.

Flowers 1 to 4 in the head, 4-merous. Petals striate. Pod 4-angled . . . . . 46. *A. tetragonocarpa*.

Flowers numerous, 5-merous. Petals smooth. Pod not angled.

Flower-heads racemose . . . . . 47. *A. restiacea*.

B. **Plurinerves.**—*Phyllodia* striate, with 2, 3, or more nerves on each side.

No calyx or corolla. Flower-heads in a raceme, enclosed when young in imbricate deciduous scales . . . . . 48. *A. squamata*.

Calyx and corolla present. Peduncles 1-headed.

*Phyllodia* numerous, under  $\frac{1}{2}$  in. long, obtuse or with a short straight point. Peduncles 3 to 4 lines long . . . . . 49. *A. brachyphylla*.

*Phyllodia* mostly nearly 1 in. long, with a hooked or recurved point. Peduncles 3 to 4 lines long.

Petals narrow, membranous (tropical species) . . . . . 50. *A. Bynoeana*.

Petals concave and thickened at the end (Western species) . . . . . 20. *A. teretifolia*.

*Phyllodia* mostly  $1\frac{1}{2}$  to 3 in. or longer. Peduncles very short.

Nerves of the *phyllodia* few and prominent, usually 3.

Sepals narrow-spathulate, free (Western species) . . . . . 51. *A. triptycha*.

Sepals united (Eastern species) . . . . . 178. *A. elongata*.

Nerves of the *phyllodia* numerous, very fine, often only visible under a lens.

*Phyllodia* slender, terete, scarcely hooked. Sepals narrow-spathulate, nearly free. Pod unknown (Western species) . . . . . 52. *A. leptoneura*.

*Phyllodia* thick, slightly flattened, hooked. Flowers unknown. Pod broad, flat, membranous (Southern species) . . . . . 54. *A. papyrocarpa*.

*Phyllodia* terete, rigid, scarcely hooked. Sepals spatulate, united to the middle. Pod very narrow, twisted, convex, coriaceous (Eastern species) . . . . . 53. *A. rigens*.

(185, *A. lineolata*, has sometimes nearly the *phyllodia* of *A. leptoneura*, but decidedly flattened and often much broader.)



C. **Uninerves.**—*Phyllodia* 1-nerved or nerveless.

- Phyllodia* mostly elongated, above  $1\frac{1}{2}$  in. long.  
 Peduncles 1-headed. Flowers 1 to 4 in the head, 4-merous.  
 Petals striate . . . . . 46. *A. tetragonocarpa*.  
*Phyllodia* 1-headed. Sepals spatulate (Eastern species).  
 Petals with a prominent midrib . . . . . 55. *A. pugioniformis*.  
*Phyllodia* 3 to 6 in. long, obscurely nerved. Petals without  
 any prominent nerve . . . . . 56. *A. juncifolia*.  
 Peduncles mostly bearing a raceme of 2 or 3 heads. Calyx  
 shortly toothed or lobed (Eastern species) . . . . . 57. *A. calumifolia*.  
 Peduncles 1-headed or rarely irregularly racemose. Calyx trun-  
 cate (Western species).  
 Phyllodia terete, obscurely nerved . . . . . 58. *A. scirpifolia*.  
 Phyllodia prominently nerved. Branches acutely angular,  
 almost winged . . . . . 59. *A. extensa*.  
*Phyllodia* short, rarely exceeding 1 in.  
 Phyllodia very rigid, tetragonous, with very prominent nerves, 1  
 in. long or rather more . . . . . 60. *A. gonophylla*.  
 Phyllodia mostly under 1 in., terete or slightly flattened hori-  
 zontally, usually nerveless, and often petiolate.  
 Branches not thorny.  
 Phyllodia mostly  $\frac{1}{2}$  to  $\frac{3}{4}$  in., narrowed but not petiolate.  
 Peduncles slender . . . . . 61. *A. ericifolia*.  
 Phyllodia mostly 1 in. long, distinctly petiolate. Peduncles  
 short . . . . . 62. *A. uncinella*.  
 Branches spinescent . . . . . 63. *A. ozyclada*.  
 (147. *A. subulata*, has sometimes the long slender phyllodia scarcely broader than in *A.*  
*juncifolia*, but is readily distinguished by the small flower-heads several in a raceme.)

**SERIES V. Brunioides.**—*Phyllodia* numerous, small, linear-subulate (except *A. conferta*), verticillate, clustered or crowded, obtuse or with innocuous or rarely rigid points. Flowers in globular heads or simple axillary peduncles, usually exceeding the phyllodia.

- Phyllodia* all regularly verticillate.  
 Phyllodia many in the whorl, rigid, almost pungent,  $\frac{1}{2}$  to 1 in.  
 long. Petals smooth . . . . . 64. *A. cedroides*.  
 Phyllodia 8 to 10 or more in the whorl, slender, under  $\frac{1}{2}$  in. long.  
 Petals striate.  
 Phyllodia recurved at the end, sulcate. Pod sessile . . . . . 65. *A. lycopodifolia*.  
 Phyllodia recurved at the end, not sulcate. Pod on a stipes  
 of 2 to 3 lines . . . . . 67. *A. galioides*.  
 Phyllodia straight at the end, sulcate. Pod sessile . . . . . 66. *A. hippuroides*.  
 Phyllodia 5 to 7 in the whorl, recurved at the end, not sulcate.  
 Petals not striate, with a prominent midrib . . . . . 68. *A. Baueri*.  
 Phyllodia in clusters of about 3. Pod almost woody, narrowed  
 into a long stipes . . . . . 69. *A. subternata*.  
 Phyllodia crowded, but scattered or irregularly verticillate, under  
 $\frac{1}{2}$  in. long.  
 Phyllodia linear-subulate . . . . . 70. *A. bruniades*.  
 Phyllodia flattened . . . . . 71. *A. conferta*.

**SERIES VI. Uninerves.**—*Phyllodia* vertically flattened, either narrow and obtuse or with a short oblique point, or broad and obtuse, acute or rarely pungent-pointed, with 1 central or nearly marginal nerve, or very rarely 2-nerved. Flowers in globular heads, either on simple axillary peduncles, solitary, in pairs or clusters, or several in axillary racemes.

**A. Spinescentes.**—Rigid shrubs, with spinescent branches. *Phyllodia* small, usually narrow, not pungent, without marginal glands. Stipules minute or none (except sometimes in *A. scabra*). Peduncles 1-headed.

- Phyllodia* narrow-linear.  
 Scabrous-pubescent. Phyllodia scattered. Stipules setaceous . . . . . 72. *A. scabra*.  
 Nearly glabrous. Phyllodia clustered. Sepals free . . . . . 73. *A. nodiflora*.  
 Glabrous. Phyllodia scattered.  
 Flowers not above 10, in a very small head. Calyx very short,  
 truncate. Funicle filiform . . . . . 74. *A. spinosissima*.  
 Flowers about 20 in the head. Calyx lobed, half as long as  
 the corolla. Funicle club-shaped . . . . . 75. *A. ulicina*.  
 Phyllodia obovate oblong or lanceolate, 2 to 4 lines long. Calyx  
 very short, truncate . . . . . 76. *A. erinacea*.

**B. Armatae.**—Shrubs or undershrubs, not spinescent (except sometimes *A. congesta* and *A. idiomorpha*). *Phyllodia* from obovate to lanceolate, rarely above  $1\frac{1}{2}$  in. long, more or less undulate, with a central nerve and usually nerve-like margins; marginal glands none or very small and obscure. Stipules generally persistent, either spinescent or setaceous or acuminate or phyllodia-like. Peduncles 1-headed.

- Phyllodia* short, broadly recurved-falcate, pungent pointed. Calyx  
 none. Petals 5, hirsute . . . . . 77. *A. Huegelii*.  
*Phyllodia* obovate to incurved-falcate. Calyx small. Petals 4,  
 glabrous.  
 Glabrous. Buds obtuse. Stipules spinescent . . . . . 78. *A. nervosa*.  
 Scabrous-pubescent. Buds acuminate. Stipules small . . . . . 79. *A. obovata*.  
*Phyllodia* various. Flowers 5-merous.  
 Petals glabrous.  
 Glabrous, rigid and spinescent. Phyllodia obliquely ovate-lan-  
 ceolate rigid, almost pungent. Stipules small . . . . . 80. *A. congesta*.  
 Glabrous, rigid, unarmed except the stipules. Phyllodia ob-  
 liquely oblong or cuneate, very thick or rigid, undulate . . . . . 81. *A. dermatophylla*.  
 Glandular-pubescent and resinous. Phyllodia obliquely ob-  
 long-linear or narrow-falcate . . . . . 82. *A. aspera*.  
 Hirsute or glabrous. Phyllodia obliquely semiovalate or lan-  
 ceolate. Stipules spinescent (wanting in some garden va-  
 rieties) . . . . . 83. *A. armata*.  
 Densely pubescent, rigid and spinescent. Phyllodia broadly  
 ovate, pungent-pointed . . . . . 84. *A. idiomorpha*.  
 Petals hirsute.  
 Shrubby. Phyllodia obovate-orbicular, not narrowed at the  
 base . . . . . 85. *A. Shuttleworthii*.  
 Undershrub. Phyllodia obliquely obovate or oblong, narrowed  
 at the base. Stipules setaceous . . . . . 87. *A. pilosa*.



- Habit and phyllodia of *A. pilosa*. Bracts more acuminate.  
 Stipules with a broad base . . . . . 86. *A. Gregorii*.  
 Undershrub. Phyllodia narrow, incurved and oblique, scarcely  
 narrowed at the base. Stipules setaceous . . . . . 88. *A. crispula*.  
 Phyllodia of *A. crispula*. Stipules like the phyllodia and about  
 half their length . . . . . 89. *A. crassistipula*.

Some garden specimens of *A. armata* have some of the phyllodia 2-nerved; the other 2- or more nerved species, formerly included in *Armata*, are now transferred to the *Plurinerues*.

107, *A. hispidula*, and 108, *A. undulifolia*, among *Brevifoliae*, have the undulate phyllodia, but not the stipules of *Armata*, and 120, *A. sentis*, and 121, *A. dentifera*, among *Angustifoliae*, have occasionally spinescent stipules.

**C. Triangulares.**—*Shrubs usually rigid and occasionally spinescent. Phyllodia small, rigid, the nerve either near the lower margin or rarely central, the upper side more or less dilated, the margin rounded or angular, with usually a gland at the angle. Stipules spinescent or setaceous or minute. Peduncles 1-headed.*

- Phyllodia tapering to a pungent point, the glandular angle below  
 the middle or diverging from the base.  
 Phyllodia hastate or lanceolate, the nerve nearly central. Flowers  
 4-merous, 3 to 5 (usually 4) in the head.  
 Petals glabrous . . . . . 90. *A. hastulata*.  
 Petals densely villous . . . . . 91. *A. horridula*.  
 Phyllodia semilanceolate or divaricately 2-lobed, the nerve near  
 the lower margin.  
 Flowers 4-merous, 8 to 12 in the head . . . . . 92. *A. divergens*.  
 Flowers 5-merous, 30 or more in the head . . . . . 93. *A. vomeriformis*.  
 Phyllodia truncate-triangular or trapezoid, the nerve often excentric,  
 produced into a small pungent point, the upper angle  
 above the middle.  
 Flowers 4-merous, 2, rarely 3 or 4 in the head . . . . . 94. *A. biflora*.  
 Flowers 4-merous, 6 to 10 or more in the head.  
 Phyllodia triangular or rhomboidal, not much longer than  
 broad at the top . . . . . 95. *A. decipiens*.  
 Phyllodia cuneate, much longer than broad . . . . . 96. *A. cuneata*.  
 Flowers mostly 5-merous, 8 to 20 or more in the head. Glandular  
 angles of the phyllodia broad and rounded, the pointed  
 angle at the end of the lower side scarcely pungent.  
 Calyx lobed.  
 Phyllodia very coriaceous. Petals hirsute . . . . . 97. *A. dilatata*.  
 Phyllodia usually small, slightly coriaceous. Petals glabrous.  
 Phyllodia obovate or broadly cuneate-oblong . . . . . 98. *A. bidentata*.  
 Phyllodia narrow-cuneate oblong . . . . . 99. *A. acanthoclada*.  
 Sepals distinct, spatulate. Phyllodia scarcely triangular.  
 (See the first 3 species of the following subseries.)

**D. Brevifoliae.**—*Shrubs, never spinescent. Phyllodia either broad ovate or falcate, or narrow, oblong or linear, short (under 1 in. or larger in *A. anceps*), obtuse or with a small recurved innocuous point, occasionally undulate and more pointed. Stipules minute or none. Peduncles 1-headed.*

- Phyllodia from obovate-orbicular to linear, obtuse but with the  
 nerve ending in a small recurved point. Sepals free, linear-  
 spatulate.  
 Phyllodia rarely exceeding  $\frac{1}{2}$  in. Branches scarcely angular.  
 Flowers 10 to 15 or rarely 20 in the head (Eastern species).  
 Phyllodia broadly obovate or orbicular . . . . . 100. *A. obliqua*.  
 Phyllodia oblong, with a minute gland at the end . . . . . 101. *A. acinacea*.  
 Phyllodia linear . . . . . 102. *A. lineata*.  
 Phyllodia mostly  $\frac{1}{2}$  to 1 in. Branches acutely angular. Flowers  
 numerous (30 or more) in the head (Western species).  
 Phyllodia linear. Pod narrow. Funicle short . . . . . 103. *A. triquetra*.  
 Phyllodia lanceolate . . . . . 104. *A. ligustrina*.  
 Phyllodia obovate-oblong or obliquely cuneate. Pod broad.  
 Funicle long, much-folded . . . . . 105. *A. Meissneri*.  
 Phyllodia crowded, linear, obtuse, under  $\frac{1}{2}$  in. long. Sepals linear-  
 spatulate . . . . . 71. *A. conferta*.  
 Phyllodia from orbicular to cuneate or linear, very obtuse or mucronate.  
 Sepals united in a toothed calyx (except *A. dura*).  
 Branches with 3, rarely 2 acute angles. Phyllodia very thick,  
 rather large, broad or narrow. Flower-heads dense, on thick  
 peduncles . . . . . 106. *A. anceps*.  
 Branches scarcely angular.  
 Phyllodia oblong-falcate, often undulate, the nerve-like margin  
 scabrous denticulate . . . . . 107. *A. hispidula*.  
 Phyllodia broadly ovate or orbicular, mucronate, much undulate,  
 entire. Peduncles slender . . . . . 108. *A. undulifolia*.  
 Phyllodia linear or linear-oblong, very obtuse, with a thick  
 nerve within the lower edge, and a very thick nerve-like  
 upper edge. Flower-heads small, few-flowered.  
 Calyx shortly lobed or toothed. Branches usually hoary  
 (Eastern species) . . . . . 109. *A. flexifolia*.  
 Sepals free, spatulate. Branches glabrous. Phyllodia very  
 rigid (Western species) . . . . . 110. *A. dura*.  
 Phyllodia cuneate-oblong, very obtuse, thick and fleshy,  
 almost nerveless . . . . . 111. *A. spathulata*.  
 Phyllodia oblong-linear, obtuse, equally but not prominently  
 2-nerved . . . . . 113. *A. montana*.

(155, *A. brachybotrya* has occasionally the peduncles 1-headed, and is then near *A. undulifolia*.)



**E. Angustifoliae.**—Shrubs or trees, not spinescent. Phyllodia oblong-lanceolate or linear, occasionally falcate, with 1 central nerve or rarely 2-nerved, mostly above 1 in. long. Stipules minute or none, or rarely spinescent. Peduncles 1-headed. Some of the species very resinous.

- Peduncles very short, rarely above  $\frac{1}{4}$  in. long. Usually resinous.  
 Phyllodia oblong-linear or lanceolate, faintly 1-nerved. Sepals free, narrow . . . . . 112. *A. microcarpa*.  
 Phyllodia 2-nerved. Calyx toothed or lobed.  
 Phyllodia very obtuse, mostly under  $1\frac{1}{2}$  in. . . . . 113. *A. montana*.  
 Phyllodia mostly acute, above  $1\frac{1}{2}$  in. . . . . 114. *A. verniciflua*.  
 Phyllodia 1-nerved. Calyx toothed or lobed.  
 Phyllodia mostly acute or mucronate; lateral veins fine and not very conspicuous . . . . . 115. *A. leprosa*.  
 Phyllodia mostly obtuse; lateral anastomosing veins very numerous and conspicuous . . . . . 116. *A. stricta*.  
 Peduncles usually nearly or above  $\frac{1}{2}$  in. long. Phyllodia always 1-nerved.  
 Very resinous. Lateral veins few, rather prominent, anastomosing. Calyx toothed or lobed.  
 Phyllodia lanceolate or linear-lanceolate . . . . . 117. *A. dodonæifolia*.  
 Phyllodia narrow-linear, numerous . . . . . 118. *A. Gnidium*.  
 Not resinous. Lateral veins scarcely conspicuous.

- Phyllodia narrow-linear, thick, the midrib obscure. Funicle linear, thick, scarcely folded. (Flowers unknown) . . . . . 119. *A. ramosissima*.  
 Phyllodia with a prominent midrib.  
 Calyx short, truncate . . . . . 138. *A. salicina*.  
 Sepals narrow, free.  
 Pedicels solitary or in pairs, the upper ones often racemose from the abortion of the phyllodia. Stipules often spinescent.  
 Phyllodia rarely above 2 in. long . . . . . 120. *A. sentis*.  
 Phyllodia very narrow, 3 to 8 in. long . . . . . 121. *A. dentifera*.  
 Pedicels slender, clustered in the axils. Stipules not spinescent. Phyllodia lanceolate-falcate, 4 to 6 in. long . . . . . 122. *A. fasciculifera*.

**F. Racemose.**—Not spinescent. Phyllodia not pungent (except in a few broad-leaved species), with one central nerve or very rarely a second shorter or fainter one, the veinlets when visible diverging from the midrib or reticulate. Flower-heads globular, few or all or nearly all in axillary racemes, very rarely a few solitary in the lower axils of a young branch. Flowers usually small and 5-merous in all except *A. myrtifolia*. Petals not striate.

- Phyllodia mostly long, falcate-lanceolate or almost linear, narrowed at the ends, more or less distinctly penniveined. Calyx about half as long as the corolla.  
 Eastern species. Flower-heads small.  
 Phyllodia mostly long lanceolate-falcate.  
 Sepals free, narrow. Gland of the phyllodia at the base or none. Funicle surrounding the seed . . . . . 123. *A. falcata*.  
 Sepals united. Gland of the phyllodia at the base or none. Veinlets transverse; funicle short . . . . . 124. *A. macradenia*.  
 Sepals united. Gland of the phyllodia distant from the base, a secondary nerve often leading to it. Veinlets obtuse. Funicle surrounding the seed . . . . . 125. *A. penninervis*.  
 Phyllodia mostly long linear-falcate.  
 Sepals united. Gland distant from the base or none. Funicle surrounding the seed . . . . . 126. *A. retinodes*.  
 Sepals free or nearly so. Gland at the base of the phyllodia minute or none. Funicle short, the last fold clavate . . . . . 127. *A. neriifolia*.  
 Western species (the first near *A. sentis*, the second near *A. falcata*, the others near *A. pycnantha*).  
 Phyllodia 1-nerved.  
 Sepals narrow, quite distinct . . . . . 121. *A. dentifera*.  
 Sepals united, at least at first.  
 Flower-heads small, on short slender peduncles. Funicle long, folded . . . . . 128. *A. microbotrya*.  
 Flower-heads rather large, on rather stout peduncles. Funicle clavate, as long as the seed, scarcely folded at the base.  
 Phyllodia more or less prominently penniveined . . . . . 130. *A. cyanophylla*.  
 Phyllodia smooth, the veins scarcely conspicuous . . . . . 129. *A. saligna*.  
 Phyllodia 2-nerved . . . . . 174. *A. bivenosa*.  
 Phyllodia long falcate-lanceolate or almost linear or thick and nearly straight. Flower-heads dense, rather large. Calyx at least long as the corolla.  
 Phyllodia penniveined, much falcate. Seeds longitudinal, funicle clavate, scarcely folded at the base . . . . . 181. *A. pycnantha*.  
 Phyllodia thick, straight or falcate, obtuse. Seeds transverse, the funicle almost encircling them . . . . . 132. *A. notabilis*.



- Phyllodia straight or falcate, thick, oblong-linear and obtuse or rarely lanceolate acute, the lateral veins inconspicuous or very obscure. Calyx about half as long as the corolla, readily separating into distinct sepals.
- Phyllodia 3 to 6 in. long, obtuse, incurved. Sepals narrow, quite distinct. Two folds of the funicle encircling the seed . . . 133. *A. gladiiformis*.
- Phyllodia  $1\frac{1}{2}$  to 3 in. long, obtuse, nearly straight. Racemes very short. Sepals at first cohering . . . 134. *A. obtusata*.
- Phyllodia about 3 in. long, rather acute, usually with 1 gland. Racemes many-headed. Sepals at first cohering . . . 135. *A. rubida*.
- Phyllodia (on flowering branches)  $1\frac{1}{2}$  to  $2\frac{1}{2}$  in. long, usually with 2 or 3 distant glands. Racemes many-headed. Sepals at first cohering. Three folds of the funicle encircling the seed . . . 136. *A. amœna*.
- Phyllodia 2 to 5 in. long, scarcely falcate, thick, obscurely reticulate. Racemes few-headed. Sepals at first cohering. Funicle clavate, scarcely folded at the base . . . 137. *A. hakeoides*.
- (See also the longest-leaved forms of *A. crassiuscula* and *A. decora*.)
- Phyllodia linear, thick, rarely falcate-lanceolate, usually without glands, the lateral veins reticulate and obscure. Seeds longitudinal.
- Calyx short, thin, truncate.
- Phyllodia mostly oblong-linear, obtuse. Pod thick . . . 138. *A. salicina*.
- Phyllodia lanceolate-linear with an oblique or recurved callous point (western species) . . . 139. *A. rostellifera*.
- Calyx lobed, thin, half as long as the corolla (Western species).
- Phyllodia all narrow-linear, erect. Pod narrow, flat, thinly coriaceous. Funicle folded into a small fleshy aril . . . 140. *A. pycnophylla*.
- Phyllodia all narrow-linear. Flower-heads small. Pod  $\frac{1}{2}$  in. broad, very flat, coriaceous. Funicle long, folded . . . 141. *A. Harveyi*.
- Phyllodia linear or lanceolate, usually thick. Sepals very thin or narrow, distinct. Pod very flat, obtuse. Seeds transverse. Young racemes often enclosed in imbricate scales.
- Young branches acutely triquetrous. Pod broad coriaceous and glaucous. Sepals very thin.
- Phyllodia mostly above 3 in. long (Eastern species) . . . 142. *A. suaveolens*.
- Phyllodia mostly under 3 in. long (Western species) . . . 143. *A. subcærulea*.
- Phyllodia long, lanceolate, penniveined (Western species) . . . 144. *A. Lindleyi*.
- Young branches scarcely angular. Pod membranous. Sepals very narrow.
- Phyllodia under 2 in. long, oblong-linear or lanceolate (Western species) . . . 145. *A. leptopetala*.
- Phyllodia several inches long, narrow linear (Eastern species). . . 146. *A. Murrayana*.
- Phyllodia very narrow-linear, rather thin, 3 to 6 in. long. Flowers of *A. linifolia* . . . 147. *A. subulata*.
- Phyllodia rarely exceeding  $1\frac{1}{2}$  in., linear lanceolate or obliquely oblong, not very thick, without thick margins.
- Pod flat 4 to 6 lines broad, not contracted between the seeds. Seeds along the centre.
- Glabrous or pubescent. Flowers under 15 in the head.
- Phyllodia linear, straight . . . 148. *A. linifolia*.
- Phyllodia lanceolate-falcate or slightly oblong . . . 149. *A. prominens*.
- Hispid with long hairs. Flowers above 20 in the head . . . 150. *A. Leichhardtii*.
- Pod rather thick, coriaceous, 2 to  $2\frac{1}{2}$  lines broad, contracted between the seeds. Flowers about 20 in the head . . . 151. *A. crassiuscula*.
- Pod flat, about 3 lines broad, often contracted between the seeds. Seeds close to the edge.
- Phyllodia linear or lanceolate, 1 to  $1\frac{1}{2}$  in. Flowers 15 to 20 in the head . . . 152. *A. decora*.
- Phyllodia obliquely oblong or broadly lanceolate, rarely above 1 in. long. Flowers 8 to 15 in the head . . . 153. *A. burxifolia*.
- Phyllodia falcate oblong or obliquely ovate, rarely above 1 in. long. Flowers 4 to 10 in the head . . . 154. *A. lunata*.
- Phyllodia ovate obovate or broadly oblong, usually under 1 in., or in Nos. 157 and 158 often  $1\frac{1}{2}$  in. long.
- Racemes short with few heads. Flowers numerous.
- Sepals free or separating. Funicle short, clavate . . . 155. *A. brachybotrya*.
- Calyx short, broad, shortly toothed. Funicle long, folded round the seed . . . 156. *A. Wattsiana*.
- Racemes much longer than the phyllodia.
- Glaucous and scarcely pubescent. Phyllodia ovate obovate or broadly oblong, 1 to  $1\frac{1}{2}$  in. long. Flowers numerous . . . 157. *A. podalyriæfolia*.
- Softly pubescent. Phyllodia elliptical falcate or broadly and obliquely oblong,  $1\frac{1}{2}$  in. or rather longer. Flowers numerous . . . 158. *A. uncifera*.
- Hirsute. Phyllodia ovate-elliptical recurved obliquely aristate mostly about  $\frac{1}{2}$  in. Flowers 10 to 20 . . . 159. *A. vestita*.
- Glaucous and glabrous. Phyllodia falcate-ovate or curved-oblong, under 1 in. long. Flowers 10 to 20 . . . 160. *A. cultriformis*.
- Glabrous. Phyllodia falcate-obovate or trapezoid, usually 2-nerved and not exceeding  $\frac{1}{2}$  in. Flowers 8 to 12 . . . 161. *A. pravissima*.
- Phyllodia ovate, spinescent, 1 to 3 in. long. Stipules spinescent. Racemes exceeding the leaves. Flowers numerous . . . 162. *A. pyrifolia*.
- Phyllodia incurved-falcate, ovate lanceolate or linear, coriaceous with thick margins. Flowers 4-merous, 2 to 4 or rarely 6 in the head. Racemes rarely exceeding the leaves . . . 163. *A. myrtifolia*.



SERIES VII. **Plurinerves**.—*Phyllodia* vertically flattened, obtuse or with an innocuous or recurved point (rarely pungent when the phyllodium is broad), with 2 or more longitudinal nerves. Flowers in globular heads on axillary peduncles, either solitary or clustered or shortly racemose.

**A. Armatae**.—*Stipules* spinescent. *Phyllodia* falcate, subulate-acuminate or almost pungent.

*Phyllodia*  $\frac{3}{4}$  to  $1\frac{1}{2}$  in. long, 2-nerved, the upper margin entire, nerve-like, with a prominent angle . . . . . 164. *A. scalpelliformis*.

*Phyllodia*  $1\frac{1}{2}$  to 3 in. or longer, 2- to 4-nerved, the upper margin much-curved, undulate, crenulate . . . . . 165. *A. urophylla*.

**B. Triangulares**.—*Stipules* setaceous or minute, not spinescent. *Phyllodia* small (under  $\frac{1}{2}$  in. long), broadly falcate-ovate or triangular with small points often pungent.

*Phyllodia* triangular. Pod narrow, curved or twisted, glabrous.

Branches usually spinescent. *Phyllodia* rather distant. Flowers 20 to 30 in the head . . . . . 166. *A. sublanata*.

Branches elongated, rather rigid. *Phyllodia* numerous. Flowers 10 to 15 in the head . . . . . 167. *A. amblygona*.

*Phyllodia* ovate-falcate. Pod flat, glandular-hispid.

Flowers not  $\frac{3}{4}$  line long. Calyx much shorter than the corolla . 168. *A. deltoidea*.

Flowers above 1 line long. Calyx nearly as long as the corolla. 169. *A. stipulosa*.

(95, *A. decipiens* and some allied 1-nerved species, have occasionally 1 or 2 secondary nerves, but fainter and shorter than the principal one.)

**C. Brevifoliae**.—*Phyllodia* under 1 in. long, obovate ovate or broadly oblong, very obtuse, often undulate. *Stipules* inconspicuous.

*Phyllodia* under  $\frac{1}{2}$  in. or very rarely  $\frac{1}{2}$  in. long. Petals smooth.

*Phyllodia* faintly 2-nerved, very oblique . . . . . 170. *A. loxophylla*.

*Phyllodia* faintly several-nerved, obtuse but with an incurved hair-like point . . . . . 171. *A. setulifera*.

*Phyllodia*  $\frac{1}{2}$  to 1 in. long. Petals strongly striate.

*Phyllodia* faintly nerved. Calyx shortly toothed. Pod thick and hard, hooked at the end, tapering into a long stipes . . 172. *A. translucens*.

*Phyllodia* several-nerved. Sepals spatulate, free or separating.

Pod thinly coriaceous, flat with thickened parallel margins, glutinous and villous . . . . . 173. *A. impressa*.

**D. Oligoneurae**.—*Phyllodia* above  $\frac{1}{2}$  in. and mostly above 1 in. long, oblong lanceolate or linear, straight or scarcely falcate, with 2 or 3 nerves, faintly or not at all veined between them (except *A. Simsii*), and not glutinous (except *A. subporosa*).

Flower-heads racemose. *Phyllodia* coriaceous, obtuse.

*Phyllodia* 2-nerved. Flower-heads loosely and irregularly racemose. Calyx short, toothed . . . . . 174. *A. bivenosa*.

*Phyllodia* 3-nerved. Flower-heads very shortly racemose. Sepals distinct . . . . . 175. *A. trineura*.

Peduncles solitary or clustered.

*Phyllodia* rigid, prominently 3-nerved, rarely 2-nerved.

Sepals free, spatulate (Western species).

*Phyllodia*  $\frac{1}{2}$  to  $1\frac{1}{2}$  in. long, linear-cuneate . . . . . 176. *A. nitidula*.

*Phyllodia*  $1\frac{1}{2}$  to 3 in. long, linear-lanceolate or linear . . . 177. *A. heteroclita*.

Calyx turbinate, lobed. *Phyllodia* long, linear (Eastern species) 178. *A. elongata*.

*Phyllodia* less rigid, nerves 3 rarely 2, less prominent, and often veins between them.

Glutinous. *Phyllodia* marked with numerous glandular dots. 179. *A. subporosa*.

Not glutinous nor dotted . . . . . 180. *A. Simsii*.

(13, *A. cochlearis* and some allied species among *Pungentes*, have occasionally scarcely pungent *phyllodia*, bringing them near to *A. heteroclita*.)

(113, *A. montana*, and 114, *A. verniciflua*, have usually 2 prominent nerves, but are closely connected with and pass into some 1-nerved species; both are glutinous.)

(191, *A. Whanii*, 194, *A. iriophylla*, and some others of *F. Nervosae*, have sometimes only 2 or 3 nerves, but usually either a greater number or they anastomose with each other.)

**E. Microneurae**.—*Glabrous* or *glaucous* and not glutinous. *Phyllodia* thick, veinless or with very fine, scarcely prominent parallel veins, narrow or rarely short and obovate.

*Phyllodia* cuneate-oblong or almost obovate, very obtuse, about  $\frac{1}{2}$  in. long . . . . . 181. *A. leptospermoides*.

*Phyllodia* linear or linear-cuneate, obtuse,  $\frac{3}{4}$  to  $1\frac{1}{2}$  in. long . . 190. *A. farinosa*.

*Phyllodia* linear-lanceolate, 1 to 3 in. long.

Flower-heads on short peduncles.

Pod 2 to 3 lines broad, coriaceous, longitudinally striate . . 182. *A. homalophylla*.

Pod 5 lines broad, thin, flat, transversely reticulate . . . 183. *A. pendula*.

Flower-heads sessile . . . . . 184. *A. Oswaldi*.

*Phyllodia* linear, very narrow and rigid,  $1\frac{1}{2}$  to 2 in. long . . . 185. *A. lineolata*.

*Phyllodia* linear,  $\frac{1}{2}$  ft. long or more.

Veins only visible under a lens (Western species) . . . . . 186. *A. coriacea*.

Veins very fine but prominent (Eastern species) . . . . . 187. *A. stenophylla*.

*Phyllodia* linear-lanceolate falcate,  $\frac{1}{2}$  ft. long or more . . . . . 200. *A. harpophylla*.

**F. Nervosae**.—Often viscid, occasionally glaucous, rarely hoary or pubescent. *Phyllodia* straight or sometimes falcate, coriaceous or thin, with several prominent nerves and, when broad, reticulate between them, the nerves rarely reduced to 3 when the phyllodium is narrow.

Glaucous. *Phyllodia* coriaceous, oblong-cuneate, obtuse; nerves

3 to 5, slightly prominent, veins reticulate . . . . . 188. *A. hemignosta*.

Glabrous, not viscid. *Phyllodia* linear, coriaceous with a prominent

midrib and several fine parallel nerves . . . . . 192. *A. heteroneura*.



- Glabrous, often viscid. Phyllodia rigid, narrow, obtuse, with few prominent, more or less anastomosing nerves.
- Phyllodia  $\frac{1}{2}$  to 1 in. long. Veins scarcely anastomosing. Sepals free.
- Nerves prominent. Peduncles glabrous . . . . . 189. *A. sclerophylla*.
- Nerves faint. Peduncles tomentose . . . . . 190. *A. farinosa*.
- Phyllodia  $1\frac{1}{2}$  to 2 in. long. Veins more anastomosing. Sepals very thin, united . . . . . 191. *A. Whanii*.
- Very viscid. Nerves or veins numerous.
- Nerves parallel scarcely anastomosing.
- Phyllodia narrow-linear . . . . . 193. *A. viscidula*.
- Phyllodia linear-lanceolate or oblong . . . . . 194. *A. iriophylla*.
- Reticulate veins very prominent, anastomosing with the nerves . 195. *A. dictyophleba*.
- Not viscid. Nerves or veins usually numerous.
- Phyllodia nearly straight, coriaceous, many-nerved, strongly reticulate.
- Phyllodia oblong-lanceolate. Funicle folded and thickened under the seed (Eastern species) . . . . . 196. *A. venulosa*.
- Phyllodia oblong, obtuse. Funicle encircling the seed in a double fold (Western species) . . . . . 197. *A. cyclopis*.
- Phyllodia falcate-oblong or lanceolate, obtuse. Veins numerous. Funicle encircling the seed (Eastern species) . . . 198. *A. melanoxydon*.
- Phyllodia long and falcate, coriaceous.
- Reticulate veins numerous.
- Pod broad. Funicle encircling the seed in a double fold . 198. *A. melanoxydon*.
- Pod narrow, twisted. Funicle folded under the seed . . . 199. *A. implexa*.
- Reticulate veins few, scarcely conspicuous, nerves several, fine . 200. *A. harpophylla*.
- Phyllodia rather thin, straight, with several nerves and few fine intermediate veins.
- Branches terete . . . . . 201. *A. excelsa*.
- Branches flattened, 2-edged or 2-winged . . . . . 202. *A. complanata*.
- G. Dimidiatae.**—Phyllodia, usually broad, and often long, falcate or very oblique, with 2, 3, or 4 prominent distant nerves, and reticulately penniveined between them.
- Glabrous. Phyllodia rather thin (3 to 4 in.). Flower-heads in axillary racemes growing out into leafy branches. Pod 6 to 8 lines broad . . . . . 203. *A. binervata*.
- Glabrous. Phyllodia coriaceous, long-falcate (6 to 8 in.). Flower-heads in axillary clusters or very short racemes . . . 204. *A. latescens*.
- Hoary or glaucous. Phyllodia large, broad (3 to 4 in.). Pod above 1 in. broad . . . . . 205. *A. sericata*.
- Young shoots hoary or yellowish-tomentose. Phyllodia large broad (4 to 8 in.). Flower-heads small, in a terminal panicle. Pod  $\frac{1}{2}$  in. broad . . . . . 206. *A. flavescens*.
- Woolly or velvety-tomentose. Phyllodia obovate or orbicular ( $1\frac{1}{2}$  to 2 in.). Flower-heads in a terminal raceme . . . . . 207. *A. retivenia*.
- SERIES VIII. Juliflorae.**—Phyllodia vertically flattened or in a few species terete, several-nerved or rarely 1-nerved, obtuse acute or pointed, rarely slightly pungent. Flowers in cylindrical dense or interrupted spikes, rarely, when sessile, shortly oblong.
- A. Rigidulae.**—Phyllodia flat, often short, straight oblique or shortly falcate. Spikes dense (except *A. megalantha*). Flowers 5-merous. Species all tropical except the last 2, which are eastern.
- Phyllodia small, rarely above  $\frac{1}{2}$  in. long, undulate.
- Phyllodia mostly clustered, narrow, 2 to 4 lines long. Spikes sessile. Sepals free . . . . . 208. *A. amentifera*.
- Phyllodia broad, about  $\frac{1}{2}$  in. long. Spikes pedunculate. Calyx sinuate-toothed. Seeds oblique . . . . . 209. *A. Wickhami*.
- Phyllodia narrow, obtuse with a short point,  $\frac{1}{2}$  to  $1\frac{1}{2}$  in. long.
- Phyllodia obscurely 3- to 5-nerved. Pod 3 to 6 lines broad.
- Seeds oblique . . . . . 210. *A. lysiphloea*.
- Phyllodia obscurely 1-nerved. Pod  $1\frac{1}{2}$  lines broad. Seeds longitudinal . . . . . 211. *A. linarioides*.
- Phyllodia rather broad, coriaceous, mostly 1 to 3 in. rarely 4 in. long, obtuse or with a glandular callous point, straight oblique or shortly falcate.
- Tomentose or pubescent. Stipules conspicuous. Phyllodia 1 to 2 in. long, 2- to 4-nerved, with anastomosing veins. Pod narrow . . . . . 212. *A. stipuligera*.
- Resinous. Phyllodia 1 to  $1\frac{1}{2}$  in. long, 5- to 9-nerved, without intermediate veins . . . . . 213. *A. ptychophylla*.
- Glabrous, except the young shoots. Phyllodia obliquely narrowed at both ends, somewhat undulate, with a terminal gland often large.
- Phyllodia finely 3- to 5-nerved. Spikes pedunculate. Buds very striate. Calyx sinuate-toothed . . . . . 214. *A. stigmatophylla*.
- Phyllodia very coriaceous, 5- to 9-nerved. Spikes sessile.
- Pod terete, turgid. Seeds oblique . . . . . 215. *A. umbellata*.
- Phyllodia finely 3- to 5-nerved. Spikes pedunculate. Buds smooth. Calyx deeply lobed . . . . . 216. *A. leptophleba*.
- Phyllodia broadly oblong-falcate, obtuse or with a hooked callous point, very coriaceous.
- Spikes dense. Flowers not 1 line long. Pod flat. Seeds oblique.
- Pod sessile, but narrowed at the base . . . . . 217. *A. limbata*.
- Pod stipitate . . . . . 218. *A. brevifolia*.
- Spikes interrupted. Flowers 2 lines long . . . . . 219. *A. megalantha*.
- Phyllodia nearly straight, coriaceous, obtuse, 3 to 4 in. long. Pod narrow. Seeds longitudinal.
- Branches very angular.
- Spikes pedunculate . . . . . 220. *A. gonoclada*.
- Spikes sessile . . . . . 221. *A. pycnostachya*.
- Branches terete or nearly so . . . . . 222. *A. subtilinervis*.

B. **Tetrameræ**.—*Phyllodia* flat, coriaceous or thin, straight or falcate, several-nerved or 1-nerved when very narrow. Spikes often loose. Flowers 4-merous. Seeds longitudinal.

MEMORANDUM

Spikes very dense and sessile.

*Phyllodia* linear-lanceolate, very rigid, 5- to 7-nerved. Pod spirally twisted (Western species) . . . . . 223. *A. cochliocarpa*.

*Phyllodia* long, broadly falcate, 2- to 5-nerved and much reticulate . . . . . 224. *A. Dallachiana*.

Spikes usually slender or interrupted.

*Phyllodia* broadly and obliquely obovate,  $\frac{3}{4}$  to  $1\frac{1}{2}$  in. long . . . . . 225. *A. alpina*.

*Phyllodia* rarely falcate, 2 to 6 in. long or more, 3- to 5-nerved, broadly oblong and much reticulate or narrow and scarcely veined . . . . . 226. *A. longifolia*.

*Phyllodia* long, narrow-linear, mostly 1-nerved . . . . . 227. *A. linearis*.

(44, *A. Riceana*, and 45, *A. axillaris*, differ from the short-leaved forms of *A. linearis* in having the *phyllodia* more rigid and pungent.)

(A few species of the following *Stenophyllæ* have 4-merous flowers, but with linear-terete finely-striate *phyllodia*.)

C. **Stenophyllæ**.—*Phyllodia* linear-subulate or narrow-linear, straight or slightly curved, terete or flat but thick, rarely under 2 in. long or above  $1\frac{1}{2}$  lines broad. Spikes dense, short or slender, with small 5-merous, or in terete-leaved species often 4-merous flowers.

Spikes sessile. Flowers 5-merous or 4-merous. Pod narrow, with

longitudinal seeds in *A. aciphylla* and *A. ephedroides*, broad with oblique seeds in *A. brachystachya*, unknown in the others.

*Phyllodia* linear-subulate, terete or nearly so.

*Phyllodia* pungent-pointed, minutely striate under a lens. Spikes ovoid or oblong. Flowers 5-merous . . . . . 228. *A. aciphylla*.

*Phyllodia* few-nerved. Spikes ovoid or oblong. Flowers 4-merous . . . . . 229. *A. ephedroides*.

*Phyllodia* minutely striate under a lens. Spikes 3 to 4 lines long. Flowers 4-merous . . . . . 230. *A. Burkittii*.

*Phyllodia* very long, minutely striate under a lens. Spikes  $\frac{1}{2}$  in. long. Flowers 5-merous . . . . . 232. *A. cyperophylla*.

*Phyllodia* with few prominent nerves. Spikes above  $\frac{1}{2}$  in. long. Flowers 4-merous . . . . . 233. *A. multispicata*.

*Phyllodia*  $\frac{1}{2}$  to 1 line broad, flat but thick. Spikes under 4 lines long.

*Phyllodia* finely striate, with the central nerve prominent. Flowers 4-merous. Sepals united . . . . . 231. *A. microneura*.

*Phyllodia* minutely striate under a lens. Flowers 5-merous. Sepals free . . . . . 241. *A. brachystachya*.

Spikes pedunculate. Flowers usually 5-merous. Pod narrow, with longitudinal seeds in *A. pityoides* and *A. oncinophylla*; hard, with valves rolling back elastically and oblique seeds, in *A. xylocarpa*, *A. gonocarpa*, *A. drepanocarpa*, and *A. arida*; flat, broad, thin, with oblique or transverse seeds, in *A. aneura* and *A. brachystachya*.

*Phyllodia* terete or scarcely flattened, very finely striate under a lens.

Calyx thin and deeply divided, the lobes not spatulate . . . . . 234. *A. pityoides*.

Sepals free, narrow-spatulate . . . . . 240. *A. aneura*.

*Phyllodia* terete, nerveless or obscurely 1-nerved. Calyx lobed. . . . . 235. *A. xylocarpa*.

*Phyllodia* very narrow but flat, 1-nerved. Sepals free . . . . . 236. *A. gonocarpa*.

*Phyllodia* flat but thick, prominently 3- or 5-nerved.

*Phyllodia* with a hooked or rarely straight point (Western species) . . . . . 237. *A. oncinophylla*.

*Phyllodia* obtuse (tropical species) . . . . . 238. *A. drepanocarpa*.

*Phyllodia* flat, minutely striate under a lens.

Calyx shortly lobed . . . . . 239. *A. arida*.

Sepals free, linear-spatulate.

Spikes cylindrical . . . . . 240. *A. aneura*.

Spikes ovoid or oblong, 2 to 3 lines long . . . . . 241. *A. brachystachya*.

D. **Falcatæ**.—*Phyllodia* usually long or large, more or less falcate, narrowed at each end, with numerous parallel nerves or veins either all equal or the central one or several more prominent than the others, the smaller ones occasionally anastomosing. Spikes slender, dense or rarely interrupted. Flowers mostly 5-merous.

(Several species of this group cannot be distinguished without the fruit.)

Pod (where known and probably in all the species) narrow, with longitudinal seeds, or rarely broader with the longitudinal seeds along the centre.

*Phyllodia* narrow-lanceolate or linear-lanceolate, rather thick, slightly falcate, with very fine parallel nerves, the midrib usually more prominent.

Loosely pubescent. Stipules conspicuous. *Phyllodia* not above 3 in. long . . . . . 242. *A. conspersa*.

Glabrous or the young shoots silky-pubescent. Stipules inconspicuous. *Phyllodia* mostly above 3 in. long.

Eastern species. Pod unknown . . . . . 243. *A. doratozylon*.

cont'd



- Western species.  
 Young shoots usually silky-pubescent. Midrib of the phyllodia prominent. Pod narrow, convex over the oblong seeds . . . . . 244. *A. acuminata*.  
 Quite glabrous. Nerves of the thick phyllodia nearly equal. Pod unknown . . . . . 245. *A. stereophylla*.  
 Glabrous and glaucous. Pod rather broad, with thickened margins. Seeds ovate . . . . . 246. *A. signata*.  
 Phyllodia narrow-lanceolate, not so thick and rather more falcate than in the preceding species, usually with about 3 nerves more prominent than the rest.  
 Phyllodia sprinkled with a few hairs. Pod flat, slightly convex over the seeds . . . . . 247. *A. delibrata*.  
 Phyllodia very glabrous, the smaller veins between the 3 principal nerves scarcely conspicuous. Pod unknown . . . . . 248. *A. oligoneura*.  
 Phyllodia glabrous. Nerves numerous. Pod very convex over the seeds and moniliform . . . . . 249. *A. torulosa*.  
 Phyllodia glabrous. Pod spirally twisted into numerous coils . . . . . 250. *A. julifera*.  
 Phyllodia glabrous. Spikes interrupted, 2 to 3 in. long (slender but dense in the preceding species) . . . . . 251. *A. Solandri*.  
 Phyllodia more falcate than in the preceding species, often broader or longer, with more nerves. Pod narrow or flat, straight or twisted.  
 Branches scarcely angular. Phyllodia coriaceous, often hoary with numerous very fine nerves, all free from the base. Calyx pubescent . . . . . 253. *A. glaucescens*.  
 Branches very angular. Phyllodia with 1 or 2 of the principal nerves confluent with the lower margin of the base. Pod twisted . . . . . 254. *A. Cunninghamii*.  
 Branches terete or nearly so. Flowers glabrous. Pod very narrow and straight . . . . . 255. *A. leptocarpa*.  
 Pod broad, very flexuose or twisted, not spiral. Seeds along the centre . . . . . 256. *A. polystachya*.  
 Branches terete or nearly so. Flowers pubescent. Pod long and slender, longitudinally striate and furrowed . . . . . 257. *A. holcocarpa*.  
 Pod (where known and probably in all the species) rather broad, coriaceous woody or rarely rather thin. Seeds very oblique or transverse. Parallel veins of the phyllodia usually numerous and closely packed.  
 Phyllodia long, narrow, and slightly falcate (as in *A. julifera*). Pod flat, with straight margins and undulate valves. Seeds orbicular.  
 Branches acutely angular . . . . . 258. *A. plectocarpa*.  
 Branches scarcely angular . . . . . 259. *A. pachycarpa*.  
 Phyllodia broad, falcate or very oblique. Pod nearly terete and turgid . . . . . 260. *A. tumida*.  
 Phyllodia long, as in *A. julifera*, but usually more falcate. Pod hard, flat, contracted to the base.  
 Phyllodia 3 to 5 lines broad. Pod obtuse, not hooked . . . . . 261. *A. loxocarpa*.  
 Phyllodia 6 to 8 lines broad. Pod obtusely hooked at the end . . . . . 262. *A. oncinocarpa*.  
 Phyllodia broad, falcate or very oblique. Pod broad, hard, and woody, obliquely veined.  
 Branchlets 3-angled. Pod obtusely recurved or hooked at the end, much narrowed at the base . . . . . 264. *A. aulacocarpa*.  
 Branchlets very flat. Pod not hooked, narrowed at the base . . . . . 265. *A. calyculata*.  
 Branchlets nearly terete or slightly angular. Pod broad, very hard, obliquely truncate at the base.  
 Pod flat or scarcely twisted, the outer margin entire . . . . . 266. *A. crassicaarpa*.  
 Pod much twisted, the outer margin deeply sinuate . . . . . 267. *A. auriculiformis*.  
 Pod quite uncertain.  
 Phyllodia narrowed at both ends, with numerous parallel veins or nerves, and usually falcate, as in the *Falcatae*, but under 3 in. long . . . . . 252. *A. leptostachya*.  
 Phyllodia of *A. julifera* and others of the *Falcatae*, but the small lateral parallel veins appearing, under a lens, very much anastomosed into a fine network . . . . . 263. *A. retinervis*.  
 E. **Dimidiatae**.—Phyllodia large, broad, very oblique or falcate, with 3 or more distant prominent nerves, more or less confluent at or near the lower margin at the base, pinnately net-veined between them.  
 Branchlets very acutely angular or almost winged.  
 Glabrous and glaucous. Spikes pedunculate. Flowers mostly 4-merous . . . . . 268. *A. latifolia*.  
 Hoary or silky-pubescent. Spikes sessile. Flowers mostly 5-merous . . . . . 269. *A. holosericea*.  
 Branchlets terete or scarcely angular.  
 Spikes 1 to 2 in. long. Flowers glabrous. (Erect shrub) . . . . . 270. *A. dimidiata*.  
 Spikes scarcely  $\frac{1}{2}$  in. long, dense. Flowers densely pubescent. Stem prostrate or diffuse . . . . . 271. *A. humifusa*.

SERIES IX. **Botryocephalæ**.—Leaves bipinnate. Stipules small or none. Flower-heads globular, in axillary racemes or terminal clusters.

- Pinnæ 2 to 4 pairs, rarely 5 or 6 pairs. Leaflets above  $\frac{1}{2}$  in. long.  
 Young shoots golden-pubescent. Leaflets 8 to 12 pairs, lanceolate, acute, 1 to 2 in. long . . . . . 272. *A. elata*.  
 Glabrous and glaucous. Leaflets 12 to 20 pairs, oblong or linear, scarcely acute, about  $\frac{1}{2}$  in. long. Gland distant from the lowest pinnæ . . . . . 273. *A. pruinosa*.  
 Glabrous and glaucous. Leaflets 4 to 8 pairs, obovate-oblong, very obtuse, 4 to 6 lines long. Gland close to the lowest pinnæ . . . . . 274. *A. spectabilis*.  
 Foliage pubescent. Leaflets 6 to 10 pairs or more, obtuse, 3 to 4 lines long. Gland at the base of the petiole . . . . . 275. *A. polybotrya*.  
 Foliage glabrous. Leaflets 10 to 15 pairs, obtuse or acute, firm, pale underneath, 3 to 4 lines long . . . . . 276. *A. discolor*.  
 Pinnæ 8 to 15 pairs. Leaflets very numerous, narrow-linear and very small, or 3 to 4 lines long and subulate.  
 Glabrous, or, if tomentose, pubescent, the young shoots of a yellowish or golden tinge. Pod (always?) under 4 lines broad, often contracted between the seeds . . . . . 277. *A. decurrens*.  
 Silvery-tomentose or very glaucous. Pod (always?) above 4 lines broad, not contracted between the seeds . . . . . 278. *A. dealbata*.  
 Pinnæ 12 to 15 pairs. Leaflets 6 to 10 pairs, ovate-cordate, under 1 line long. Branches pubescent . . . . . 279. *A. cardiophylla*.  
 Pinnæ 3 to 6 pairs. Leaflets 6 to 10 pairs, oblong, under 2 lines long. Branches glabrous or hispid. Flowers numerous, in dense heads . . . . . 280. *A. leptoclada*.  
 Pinnæ 3 to 10 pairs. Leaflets 6 to 20 pairs, linear, under 2 lines long. Branches hirsute. Flowers few in the heads . . . . . 281. *A. pubescens*.

SERIES X. **Pulchellæ**.—Leaves bipinnate. Stipules none or smaller, setaceous, not spinescent. Flower-heads globular or cylindrical, on simple axillary solitary or clustered peduncles.

- Seeds longitudinal. Flower-heads globular. Petals not striate.  
 Spines axillary, rarely entirely wanting. Pinnæ 1 pair. Leaflets 4 to 7 pairs . . . . . 282. *A. pulchella*.

No spines.

- Branches pubescent. Pinnæ 2 or 3 pairs. Leaflets 3 to 6 pairs, oblong, 1 to 2 lines long. Sepals free or nearly so . . . . . 283. *A. Mitchellii*.  
 Glabrous. Pinnæ 2 to 5 pairs. Leaflets 20 to 30 pairs, with a broad oblique base, 1 to 3 lines long. Calyx shortly toothed . . . . . 284. *A. pentadenia*.  
 Glabrous. Pinnæ 1 pair. Leaflets 4 to 6 pairs, above 3 lines long. Flowers large, 4-merous, 3 to 8 in the head . . . . . 285. *A. Gilbertii*.  
 Seeds transverse. No spines. Flower-heads globular. Petals usually striate. Pinnæ usually 1 or 2 pairs.  
 Glabrous. Leaflets 5 to 10 pairs, 3 to 5 lines long. Flowers 20 or more in the head . . . . . 286. *A. nigricans*.  
 Branches pubescent or hirsute. Flowers 12 to 15 in the head.  
 Leaflets 5 to 10 pairs, 2 to 3 or rarely 4 lines long . . . . . 287. *A. obscura*.  
 Leaflets 1 to 4 pairs, 1 to 2 lines long . . . . . 288. *A. strigosa*.  
 Seeds transverse. No spines. Flower-spikes cylindrical or rarely ovoid. Petals smooth. Pinnæ 2 pairs. Leaflets 2 to 6 pairs . . . . . 289. *A. Drummondii*.  
 (Branches of 292, *A. Bidwilli* and of 293, *A. pallida*, are sometimes almost or quite without stipular spines.)

SERIES XI. **Gummiferae**.—Leaves bipinnate. Stipules of some or all the leaves persistent and spinescent. Flower-heads globular, on solitary or clustered simple peduncles.

- Bracts small, close under the flower-heads.  
 Pinnæ 4 to 6 pairs. Leaflets small, 10 to 20 pairs. Pod thick, cylindrical or spindle-shaped, indehiscent, pithy between the seeds . . . . . 290. *A. Farnesiana*.  
 Pinnæ 1 or 2 pairs. Leaflets small, 8 to 12 pairs. Pod narrow-linear, 2-valved . . . . . 291. *A. suberosa*.  
 Bracts forming a little 4-lobed ring round the middle of the peduncle.  
 Pinnæ 15 to 25 pairs. Leaflets scarcely 1 line long. Flowers 4-merous. Pod coriaceous; valves slightly convex, striate lengthwise . . . . . 292. *A. Bidwilli*.  
 Pinnæ 3 to 10 pairs. Leaflets 3 to 4 lines long. Flowers 5-merous . . . . . 293. *A. pallida*.

*Mimosa obtigua*, Pers. Syn. ii. 261, not of Wendl. nor of Lam., a phyllodineous Australian *Acacia*, is insufficiently described to determine even to which series it belongs.

*A. visneoides*, Colla, Hort. Ripul. App. ii. 339, is described from a garden specimen in leaf only and is quite unrecognizable.

Numerous manuscript names of *A. Cunningham's*, *F. Mueller's*, and others, unaccompanied by descriptions, but quoted in G. Don's 'General System,' in my own papers in Hooker's 'London Journal of Botany,' i. 318, and in the 'Linnæa,' xxvi. 603, in F. Mueller's paper in the 'Journal of the Linnean Society,' iii. 114, in Seemann's work, 'Die in Europa eingeführten Acacien,' 1852, in Steudel's 'Nomenclator,' or in garden catalogues, are here omitted as unpublished.



N.I.B.

MIMOSACEAE

*Acacia adoxa* var. *adoxo*

Pedley

N.I.B.

MIMOSACEAE

*Acacia adoxa* var. *subglob*

Pedley.



N.I.B.

MIMOSACEAE

*Acacia argyraea*

Tindale

N.I.B.

MIMOSACEAE

*Acacia ampliceps*

Maslin



N.I.B.

MIMOSACEAE

*Acacia ancistrocarpa*  
Maiden et Blakely

N.I.B.

MIMOSACEAE

*Acacia anaticeps*

Tindale



239. **A. arida**, *Benth. in Hook. Lond. Journ. i. 370.* Glabrous or minutely hoary; branchlets slender, terete or slightly compressed. Phyllodia narrow-linear, obtuse or with a callous point, narrowed at the base, 2 to 4 in. long, 1 to 2 lines broad, flat but thick, obscurely 3-nerved. Spikes shortly pedunculate, solitary or in pairs, slender and compact,  $\frac{1}{4}$  to  $\frac{1}{2}$  in. long. Flowers very small, mostly 5-merous. Calyx shortly lobed. Petals smooth, without prominent midribs. Pod thick but flat, nearly 4 in. long, 3 lines broad, narrowed to the base; valves hard, almost woody, rolling back elastically. Seeds not seen, but evidently oblique.

**N. Australia.** Parched desert shores of Cambridge Gulf, N.W. coast, *A. Cunninghamham.* Differs from *A. xylocarpa* chiefly in the broader flat phyllodia.

264. **A. aulacocarpa**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 378. Slightly hoary or ashy-glaucous with a minute almost powdery down, which at length disappears; branchlets angular. Phyllodia falcate-lanceolate, narrowed at both ends, 3 to 4 in. long, about  $\frac{1}{2}$  in. broad, with a few slightly prominent nerves, the lower ones confluent with the lower margin at the base, and numerous smaller closely packed veins, rarely anastomosing. Spikes slender, loose, 1 to 2 in. long, tomentose-pubescent or glabrous. Flowers mostly 5-merous. Calyx with short broad lobes. Petals united below the middle. Pod falcate-oblong, flat but thick, obtusely recurved at the end, 1 to 2 in. long,  $\frac{1}{2}$  to  $\frac{3}{4}$  in. broad, much narrowed at the base, hard, obliquely veined. Seeds obliquely transverse, not seen perfect.

**Queensland.** Port Bowen, *R. Brown*, *A. Cunningham*; Rockhampton, *Dallachy*; Cameron's Brush, *Leichhardt?* (specimen not in fruit).

Var. (?) *macrocarpa*. Pods 3 to 5 in. long,  $\frac{3}{4}$  to 1 in. broad, much undulate.—Keppel Bay, Shoalwater Bay, and Broad Sound, *R. Brown*.



292. **A. Bidwilli**, *Benth. in Linnæa*, xxvi. 629. Glabrous; branches mostly terete. Pinnæ 15 to 20 pairs, the common petiole 2 to 3 in., the partial rhachis  $\frac{1}{2}$  to 1 in. long; leaflets 15 to 25 pairs, oblong, obtuse, rigid, scarcely 1 line long. Stipules spinescent and sometimes 2 to 3 lines long, usually very small or quite obsolete. Peduncles solitary, with an annual deciduous 4-lobed bract about the middle, bearing a globular head of about 20 or rather more 4-merous flowers and sometimes 1 or 2 lower down the peduncle, each flower often 2 lines long. Calyx shortly toothed. Petals smooth, united above the middle. Pod straight, 3 to 6 in. long, about  $\frac{1}{2}$  in. broad, narrowed at the base; valves coriaceous, somewhat convex, reticulate lengthwise. Seeds large, ovate, longitudinal; funicle slightly thickened from the base upwards, very shortly inflexed or folded under the seed.

**N. Australia.** Whitsunday and Gloster Islands, *Henne*.

**Queensland.** Wide Bay, *Bidwill*; Rockhampton, *Dallachy*; Port Denison, *Fitzalan*.

Var. (?) *major*. Leaflets sometimes 2 lines long. Seeds broader. Flowers unknown.—Ridges of the Victoria river, *F. Mueller*. To this belong the fruiting specimens referred to *A. pallida*, *F. Muell.* in Journ. Linn. Soc. iii. 147.

The flowers of this species have at first sight some resemblance to those of some *Albizias*, but the stamens are quite free, although inserted on a small prominent disk under the ovary, not united in a tube round the ovary, as in all the *Inga*-flowered genera.

174. **A. bivenosa**, DC. *Prod.* ii. 452. A large bushy shrub, glabrous and often glaucous, or the upper leaves and inflorescence of a golden-yellow. Phyllodia from obovate to oblong-lanceolate, obtuse and mostly with a callous recurved point,  $1\frac{1}{2}$  to 3 in. long in the commonest form, 1 to  $1\frac{1}{2}$  in the short-leaved varieties, narrowed at the base, coriaceous, with 2 more or less prominent nerves, penniveined and with nerve-like margins. Racemes of few globular heads with a flexuose rhachis and short peduncles, or reduced to a single peduncle with a single head, of 20 to 30 flowers, not very small and mostly 5-merous. Calyx sinuate-toothed and petals smooth as in *A. salicina*. Pod elongated, nearly straight, flat, coriaceous, about 3 lines broad. Seed not seen perfect.—*A. binervosa*, DC. *Mem. Leg.* 448; *A. xanthina*, Benth. in Hook. *Lond. Journ.* i. 355; Meissn. in *Pl. Preiss.* i. 16; *A. elliptica*, A. Cunn.; Benth. in Hook. *Lond. Journ.* i. 347.

**N. Australia.** N.W. coast, Admiralty Bay, *Baudin's Expedition*; Bay of Rest and Dampier's Archipelago, *A. Cunningham*; Depuech Island, *Bynoe*; Hearson Island, *Nichol Bay*, *P. Gregory's Expedition*.

**W. Australia.** Swan River, *Baudin's Expedition*, *Drummond*, 1st *Coll.* n. 283, *Preiss.* n. 928; Sharks Bay, *Milne*; Dirk Hartog's Island, *A. Cunningham*.

There are two forms, one (*A. elliptica*, A. Cunn.) more glaucous with short obovate oblong phyllodia faintly 2-nerved, the other (*A. xanthina*, Benth.) with longer phyllodia more prominently nerved and often of a golden colour. Both are in the Paris herbarium, from Baudin's Collection, and we have both from the N.W. coast, as well as from the west, the yellow one chiefly from Swan River; and, different as they look, some specimens are quite intermediate or combine the two.



218. **A. brevifolia**, *Benth.* Glabrous and somewhat glaucous, with angular branchlets. Phyllodia obliquely oblong, somewhat falcate, very obtuse with a small callous point, narrowed at the base,  $1\frac{1}{2}$  to 2 in. long,  $\frac{1}{2}$  to  $\frac{3}{4}$  in. broad, very coriaceous with several prominent nerves, the intermediate veins irregularly reticulate or longitudinal. Spikes short, oblong-cylindrical, pedunculate. Flowers mostly 5-merous. Calyx short, sinuate-toothed. Petals smooth. Pod flat, thick, almost woody, with oblique veins and thickened margins, very obtuse,  $1\frac{1}{2}$  in. long, nearly 4 lines broad, abruptly contracted below the middle into a broad stipes. Seeds oblique, but not seen ripe.—*A. leptophleba* (referred by me to *A. aulacocarpa*), var. *brevifolia*, F. Muell. in Journ. Linn. Soc. iii. 144.

**Queensland.** Desert of the Suttor, *F. Mueller.* Allied to *A. leptophleba* and *A. limbata*, but differing in flower from the former and in fruit from the latter, and the venation of the phyllodia does not agree with either.

186. **A. coriacea**, DC. *Mem. Leg.* 446, and *Prod.* ii. 451. Ashy-grey, with the young shoots silky-hoary or almost golden; branchlets terete. Phyllodia long-linear, straight or curved, obtuse, narrowed towards the base, often  $\frac{1}{2}$  ft. long or more, 1 to  $2\frac{1}{2}$  lines wide, thickly coriaceous, with numerous fine and closely packed longitudinal nerves, only visible under a lens. Peduncles usually in pairs,  $\frac{1}{4}$  to  $\frac{1}{2}$  in. long, bearing each a globular head of 20 to 25 flowers, mostly 5-merous, hoary-pubescent in the bud. Calyx  $\frac{3}{4}$  line long, tubular, with ciliate lobes. Petals rather longer, united above the middle. Pod 6 to 9 in. long, moniliform; valves coriaceous, very convex, 4 to 5 lines broad, oblong and striate over the seeds, much contracted between them. Seeds longitudinal, distant; funicle folded and dilated under the seed, but not seen perfect.

**N. Australia.** Bay of Rest, N.W. coast, *A. Cunningham*; Depuech island, *Bynoe*; Nichol Bay, *F. Gregory's Expedition*.

**W. Australia.** Sharks Bay, *Baudin's Expedition*; Dirk Hartog's Island and Sharks Bay, *Mulne*.

N5B

MIMOSACEAE

*Acacia dacrydioides*  
Tindale



168. **A. deltoidea**, *A. Cunn. in G. Don, Gen. Syst.* ii. 401. A much-branched shrub, glabrous or pubescent when young, with terete branches. Phyllodia numerous, obliquely triangular-ovate, acute, mucronate, 2 to 3 lines long and almost as broad, thick, several-nerved, the upper margin much curved but without any gland-bearing angle. Stipules setaceous, persistent. Peduncles slightly exceeding the phyllodia, bearing each a small globular head of numerous (30 to 50) very small flowers, mostly 5-merous. Calyx deeply divided into narrow thin lobes. Petals slightly thickened and pubescent at the tips, cohering above the middle. Stamens few. Pod elongated, slightly curved, flat, coriaceous, glandular-hispid, nearly 4 lines broad. Seeds not seen.

**N. Australia.** Greville Island, Montague Sound, and Barren Islands, Regent's Inlet, N.W. coast, *A. Cunningham*.

247. **A. delibrata**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 374.

Branchlets slender, slightly angular, silky-pubescent when young. Phyllodia linear-lanceolate, falcate, narrowed at both ends, 4 to 6 in. long, 2 to 5 lines broad in the middle, rather thin, sprinkled with loose silky hairs, with about 8 fine but prominent nerves, and finer less conspicuous and not very numerous longitudinal veins between them occasionally anastomosing. Flowers not seen. Fruiting-spikes with a rachis of 1 to 1½ in. Pod elongated, straight, flat with thickened margins, about 3 lines broad, the coriaceous valves rather convex over the seeds, narrowed between them. Seeds not seen, but probably longitudinal.

**N. Australia.** York Sound and Port Warrender, N.W. coast, *A. Cunningham*. The specimens are very imperfect, but do not match with any other we have. The fruit is nearly that of *A. torulosa*, but very much flatter and the phyllodia much thinner, etc. The bark of the old branches appears to peel off in shreds.

270. *A. dimidiata*, Benth. in Hook. *Land. Journ.* i. 381. Hoary with a minute pubescence or nearly glabrous; branchlets scarcely angular. Phyllodia broadly and obliquely ovate-rhomboid, obliquely truncate at the base, usually 3 to 4 in. long, 2 to 3 in. broad, but on some barren shoots twice or three times that size, with 4 or 5 prominent nerves more or less confluent with the lower margin at the base, and pinnately net-veined between them. Spikes sessile or shortly pedunculate, usually in pairs, 1 to 2 in. long. Flowers mostly 5-merous. Calyx angular, lobed, readily separating into distinct sepals. Petals united below the middle. Pod linear, nearly straight, 2 to 6 in. long, 2 to 3 lines broad; valves coriaceous, very convex. Seeds longitudinal, ovoid-oblong; funicle short, thickened into a turbinate or obliquely cup-shaped aril at the base of the seed.—*A. dolabriformis*, A. Cunn. in Hook. *lc.* Pl. t. 169, not of Wendl.

**N. Australia.** Various parts of the N. coast, *A. Cunningham*; Victoria river and M'Adam Range, *F. Mueller*; Port Essington, *Armstrong*, and probably the same species, in leaf only, islands of the Gulf of Carpentaria, *R. Brown*.



238. **A. drepanocarpa**, *F. Muell. in Journ. Linn. Soc.* iii. 137. A glabrous shrub, the young shoots resinous, branchlets slender, slightly angular. Phyllodia narrow-linear, straight or slightly curved, obtuse, narrowed towards the base, 2 to 4 in. long, 1 to 2 lines broad, with a slightly prominent central nerve and 1 or 2 finer veins on each side. Spikes slender, not very dense,  $\frac{1}{2}$  to  $\frac{3}{4}$  in. long, shortly pedunculate. Flowers mostly 5-merous. Calyx thin, with narrow lobes, half as long as the corolla. Petals connate to the middle, with prominent midribs as in *A. xylocarpa*. Pod erect, linear,  $1\frac{1}{2}$  to 3 in. long,  $1\frac{1}{2}$  to 2 lines broad, flat but thick with much raised margins and obliquely veined between them, the almost woody valves rolling back elastically as in *A. gonocarpa*. Seeds oblique; funicle straight, gradually thickened from the base, narrow-turbinate and cup-shaped under the seed.

**N. Australia.** Rocks of the S.W. shore of the Gulf of Carpentaria, *F. Mueller*; Whitsunday and Palm Islands, *Henne*. Differs from *A. gonocarpa*, as *A. arida* does from *A. xylocarpa*, in its broader and flatter phyllodia.

NIG

MIMOSACEAE

*Acacia dunnii*  
(Maiden) Turrill

NIG

MIMOSACEAE

*Acacia eriopoda*  
maiden and  
Blakely.



290. **A. farnesiana**, Willd. *Sp. Pl.* iv. 1083. A much-branched shrub, attaining a considerable size, quite glabrous or slightly pubescent on the petioles and peduncles. Pinnæ 4 to 6 or rarely more pairs; leaflets usually 10 to 20 pairs, linear, about 2 lines long or on luxuriant shoots often much longer. Stipules converted into slender straight thorns, very variable

in length, occasionally  $\frac{1}{2}$  in. long, and sometimes all very minute or almost none, the plant otherwise unarmed. Peduncles usually 2 or 3 together in the older axils, each bearing a globular head of numerous 5-merous flowers. Bracts small, close under the flower-head. Calyx above half as long as the corolla. Pod thick, irregularly cylindrical or spindle-shaped, 2 to 3 in. long, indehiscent, filled with a pithy substance in the midst of which lie the seeds. Seeds obliquely transverse, with short funicles.—DC. *Prod.* ii. 461; *Vachellia farnesiana*, W. and Arn. *Prod.* 272, with the synonymy adduced; Wight,  *Ic. t.* 300; *A. lenticellata*, F. Muell. in *Journ. Linn. Soc.* iii. 147.

**N. Australia.** N.W. coast, *A. Cunningham*; Nichol Bay, *F. Gregory's Expedition*; Sturt's Creek and McArthur river, *F. Mueller*; Albert river, *Henne*.

**Queensland.** Port Denison, *Fitzalan*; in the interior, *Mitchell*.

**N. S. Wales.** In the interior, *A. Cunningham*; Darling river to Cooper's Creek, common, *Victorian and Howitt's Expeditions*.

The species is very common in tropical countries in the New and the Old World, much planted for ornament or for the perfume extracted from its flowers, and readily spreading. Believed by some to be of American origin, by others to be truly indigenous also in Africa and Asia, and has every appearance of being so in Australia.

NIB

MIMOSACEAE

Acacia froggattii

Maiden.

67. **A. galioides**, *Benth. in Hook. Lond. Journ. i. 344.* Pubescent or tomentose, with verticillate finely subulate phyllodia, as in *A. lycopodiifolia*, but the phyllodia are more slender, slightly striate only, not sulcate with prominent nerves, 2 to 5 lines long, recurved at the end but apparently without viscid points. Flowers mostly 5-merous, in globular heads on peduncles exceeding the leaves, as in that species, but the calyx is at least one-third as long as the corolla, and the pod is always borne on a stipes of 2 to 3 lines.

**N. Australia.** Victoria river, *F. Mueller*; islands of the Gulf of Carpentaria, *R. Brown* and a variety with rather stouter phyllodia, Sweers Island, *Henne*.



NIB

MIMOSACEAE

*Acacia gardneri*

maiden on  
blak

220. **A. gonoclada**, *F. Muell. in Journ. Linn. Soc.* iii. 140. Glabrous and glaucous, brachlets stout, with 2 or 3 much raised acute angles. Phyllodia lanceolate-oblong, slightly falcate, obtuse with oblique glandular tips, obliquely narrowed towards the base, 3 to 4 in. long, 4 to 8 lines broad, coriaceous, with 2 or 3 more prominent nerves almost confluent with the lower edge near the base, and numerous fine parallel veins scarcely anastomosing and not very closely packed. Spikes shortly pedunculate, oblong-cylindrical, dense, about  $\frac{1}{2}$  in. long. Flowers mostly 5-merous. Calyx half as long as the corolla, shortly toothed. Petals distinct, smooth, without prominent midribs. Pod narrow-linear, straight, 1 to  $1\frac{1}{2}$  in. long,  $1\frac{1}{2}$  lines broad, thin and flat with nerve-like margins. Seeds longitudinal; funicle dilated and folded under the seed, but not ripe in our specimens.

**N. Australia.** Victoria river, *F. Mueller*. Allied in some respects to *A. Cunninghamii*, but with the straighter more coriaceous phyllodia of the preceding species.

236. **A. gonocarpa**, *F. Muell. in Journ. Linn. Soc.* iii. 136. A shrub of 4 or 5 ft., young shoots viscid, with slender flattened or angular branchlets, at length terete. Phyllodia very narrow-linear, but flat, with a small callous or hooked point, mostly  $1\frac{1}{2}$  to 2 or rarely 3 in. long, prominently 1-nerved. Spikes shortly pedunculate, solitary or in pairs,  $\frac{1}{4}$  to  $\frac{1}{2}$  in. long, very slender, but with numerous closely packed very small flowers, mostly 5-merous. Sepals very narrow, linear, thin and distinct. Petals thin, cohering to the middle. Pod hard and woody,  $1\frac{1}{2}$  to 2 in. long, about 3 lines broad; valves opening elastically from the end downwards as in *A. xylocarpa*, but with raised acute longitudinal angles as in *A. tetragonocarpa*. Seeds not seen, the pod obliquely partitioned for their reception as in *A. xylocarpa*.

**N. Australia.** Arnheim N. Bay, *R. Brown*; rocky shores of the Gulf of Carpentaria, *F. Mueller*.



NIB

MIMOSACEAE

Acacia gracillima  
Tindale.

188. *A. hemignosta*, *F. Muell. in Journ. Linn. Soc.* iii. 134. A tall shrub or small tree, more or less glaucous or pale; branchlets slender, slightly striate. Phyllodia falcate-lanceolate or oblong, obtuse, much narrowed towards the base, 2 to 4 in. long and often  $\frac{1}{2}$  to  $\frac{3}{4}$  in. broad above the middle, thinly coriaceous, with 3 or sometimes 4 or 5 fine but slightly prominent nerves and more or less reticulate between them. Peduncles slender, 3 to 5 in. long, solitary or in terminal racemes through the abortion of the upper phyllodia, bearing each a small globular head of about 20 to 30 flowers, mostly 5-merous. Sepals very narrow, free. Petals smooth, glabrous. Pod flat, 2 to 4 in. long, about  $\frac{1}{4}$  in. wide; valves thin, the sutures bordered by an acute edge. Seeds orbicular; funicle oblique, not folded, filiform or very slightly thickened.

**N. Australia.** Cambridge Gulf, *A. Cunningham*; Albert, Victoria, Gilbert, and Roper rivers, *F. Mueller*.

NIB

MIMOSACEAE

*Acacia hemsleyi*  
maiden

NIB

MIMOSACEAE

Acacia hilliana  
Maiden.



66. **A. hippuroides**, *Heward*; *Benth. in Hook. Lond. Journ.* i. 344. Pubescent, with verticillate, subulate, sulcate phyllodia, as in *A. lycopodiifolia*, of which it may possibly prove a variety, but the phyllodia are much longer, attaining 5 or 6 lines, straight not recurved at the end, and the calyx, thinly membranous, is at least one-third as long as the corolla. Petals striate and pod sessile, as in *A. lycopodiifolia*.

**N. Australia.** Usborne's Harbour, N.W. coast, *Voyage of the Beagle*; Attack Creek, *M'Douall Stuart's Expedition*.

A fragment from M'Douall Stuart's Expedition differs in the phyllodia more rigid and short, but with the same straight points, the stems more viscid, awnless, pubescent, and especially in the extreme tenuity of the calyx, which it is rather difficult to find, and in the petals membranous and smooth, as in *A. cedroides*, but broader and glabrous.

269. **A. holosericea**, *A. Cunn. in G. Don, Gen. Syst. ii. 407.* Hoary or white with a close silky pubescence; branchlets with 3 much raised angles. Phyllodia obliquely oval-oblong, obtuse or mucronate, 4 to 6 in. long, 1 to 3 in. broad, or the lower ones much larger, with 3 or 4 prominent nerves confluent with the lower margin at the base, and pinnately net-veined

between them. Spikes sessile, often 2 in. long or more. Flowers mostly 5-merous. Calyx small, shortly lobed, pubescent. Petals pubescent, united at the base. Pod long-linear, irregularly or spirally twisted, 2 to 2½ lines broad; valves convex. Seeds ovate, longitudinal; funicle folded and dilated into a cup-shaped or turbinate aril at the base.—*A. neurocarpa*, *A. Cunn. in Hook. Ic. Pl. t. 168.*

**N. Australia.** Cambridge Gulf, N.W. coast, *A. Cunningham*; Nichol Bay, *F. Gregory's Expedition*; Victoria river, *F. Mueller*; Attack Creek, *M. Douall Stuart*; islands of the Gulf of Carpentaria, *R. Brown*.

**Queensland.** Endeavour river, *Banks and Solander*; Rockhampton and Port Denison, *Thozet, Dallachy*, and others; Edgecombe Bay, *Dallachy*.

Var. *pubescens*, *F. Muell.* Everywhere softly pubescent, even the pod.—Victoria river, *F. Mueller*.

271. **A. humifusa**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 382. Diffuse or prostrate, softly pubescent or tomentose; branchlets nearly terete. Phyllodia broadly and obliquely ovate-rhomboid or almost orbicular,  $1\frac{1}{2}$  to 2 in. long and nearly as broad, or in luxuriant shoots nearly twice that size, often undulate, with 3 to 5 nerves more or less confluent with the lower margin at the base, and pinnately reticulate between them. Spikes sessile, oblong, dense, scarcely exceeding  $\frac{1}{2}$  in. Flowers mostly 5-merous. Calyx deeply lobed, pubescent. Petals densely pubescent, united at the base. Pod linear, nearly straight, thick, and nearly terete,  $1\frac{1}{2}$  to 3 in. long,  $2\frac{1}{2}$  to 3 lines broad, coriaceous, pubescent. Seeds oblong, longitudinal; funicle with the last 1 or 2 folds thickened into an obliquely cup-shaped aril at the base of the seed.

**N. Australia.** Victoria river, *F. Mueller*; islands of the Gulf of Carpentaria, *R. Brown*.

**Queensland.** Endeavour river, *Banks and Solander*; Cape Cleveland, *A. Cunningham*; Lizard Island, *M'Gillivray*; Albany Island, *W. Hill*.

NIB

MIMOSACEAE

*Acacia inequilatera*

Domin.



NIS

MIMOSACEAE

Acacia kelleri

F. Muell.

NIB

MIMOSACEAE

Acacia kimberleyensis  
W.V. Fitzg.

268. **A. latifolia**, *Benth. in Hook. Lond. Journ. i. 382.* Glabrous and glaucous; branchlets with 2 or 3 very much raised acute or almost winged angles. Phyllodia obliquely ovate-rhomboid or falcate, 3 to 6 in. long,  $1\frac{1}{2}$  to 2 in. broad, with 3 to 5 nerves confluent at the base at or near the lower margin, which is often slightly decurrent, pinnately net-veined between them. Spikes pedunculate, loose, 1 to 2 in. long. Flowers mostly 4-merous. Calyx very short, broad, truncate or obscurely toothed. Petals smooth, above 1 line long, united at the base but readily separating. Pod shortly stipitate, linear, straight or curved, 2 to 4 in. long, nearly 3 lines broad, flat with nerve-like margins, but not seen ripe. Seeds oblong, longitudinal; funicle scarcely folded, thickened into an oblique lateral aril.

**N. Australia.** Islands of the Gulf of Carpentaria, *R. Brown*; Arnhem's Land, *F. Mueller*.

NIG

MIMOSACEAE

Acacia lentiginosa



216. **A. leptophleba**, F. Muell. in Journ. Linn. Soc. iii. 143. Nearly glabrous and probably resinous; branchlets slightly angular. Phyllodia obliquely oblong-falcate, obtuse with an oblique callous or glandular point, narrowed at the base, 2 to 2½ in. long, about ½ in. broad in our specimens, coriaceous, undulate, with 3 or more slightly prominent nerves and thickened nerve-like margins, the intermediate fine veins more or less anastomosing, almost reduced to closely packed longitudinal parallel veins. Spikes pedunculate, solitary or in pairs, 1 to 1½ in. long. Flowers dense, mostly 5-merous. Calyx fully half as long as the corolla, thin, deeply lobed or divided to the base into narrow sepals. Petals thin, the midribs much less prominent than in *A. stigmalophylla*. Pod unknown.

**N. Australia.** Sturt's Creek, F. Mueller. I had, in the above quoted paper, referred these specimens to *A. aulacocarpa*, but having now been able to match much more accurately the flowering and fruiting specimens of that species, I find I was in error. The present species is much nearer to *A. stigmalophylla*, from which, in the absence of the fruit, it is distinguished by the more coriaceous phyllodia, larger flowers, deeply lobed calyx, and smoother petals.

255. **A. leptocarpa**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 376.  
Usually glabrous; branchlets at first slightly angular, but soon terete. Phyl-  
lodia falcate-lanceolate, narrowed at each end, 4 to 6 in. long, 4 to 8 lines  
broad, with 3 or more fine slightly prominent nerves and very fine parallel  
ones between them, rarely anastomosing, and not nearly so close as in several  
allied species, the interval between each several times the breadth of the vein.  
Spikes  $1\frac{1}{2}$  to 2 in. long, solitary or in pairs. Flowers mostly 5-merous,  
usually glabrous, not very close. Calyx short, sinuate-toothed. Petals  
smooth, united at the base. Pod linear, straight or nearly so, several in.  
long,  $1\frac{1}{2}$  to 2 lines broad; valves coriaceous, convex over the seeds, contracted  
between them. Seeds longitudinal; funicle with the last 2 or 3 folds dilated  
into an oblong cup-shaped aril, nearly as long as the seed, but embracing its  
base only.

**Queensland.** Cape York, *W. Hill*; Endeavour river and Cape Flinders, *A. Cunning-  
ham*; Shoalwater Bay, *R. Brown*; Port Denison, *Fitzalan*.

N13

MIMOSACEAE

Acacia lycopodiifolia  
A. Cunn.

211. **A. linarioides**, Benth. in Hook. Lond. Journ. i. 371. Glabrous or slightly pubescent and viscid, with terete branchlets. Phyllodia rather crowded, linear, obtuse with a small rigid but not pungent point,  $\frac{3}{4}$  to  $1\frac{1}{2}$  in. long, not above 1 line broad, obscurely 1-nerved. Spikes slender but rather dense, shortly pedunculate and exceeding the phyllodia. Flowers mostly 5-merous. Sepals small, thin, free or slightly connate at the base. Petals connate to the middle, with thickened tips. Pod linear, slightly curved,  $1\frac{1}{2}$  lines broad at the seeds and contracted between them, the valves convex, rigid, obscurely striate, with thickened nerve-like margins. Seeds oblong, longitudinal; funicle with the last 2 or 3 folds thickened into an irregularly cup-shaped aril under the seed.

**N. Australia.** Cavern Island, Gulf of Carpentaria, R. Brown. This species has the small 5-merous flowers and nearly the phyllodia of *A. lysiphloea*, with the pod more allied to that of *A. longifolia* and its allies, but more rigid.



NIB

MIMOSACEAE

*Acacia monticola*

5 m. Black

NIB

MIMOSACEAE

Acacia numerosa

NIB

MIMOSACEAE

*Acacia nuperrima*  
E. G. Baker

262. **A. oncinocarpa**, Benth. in Hook. Lond. Journ. i. 378. Glabrous, or slightly hoary with a very minute mealy pubescence; branchlets terete. Phyllodia lanceolate-falcate, rather obtuse, but narrowed at both ends, 4 to 6 in. long, 6 to 8 lines broad, rather thin, with 5 to 7 fine, but rather prominent nerves, the lower ones often confluent with the lower margin of the base, and numerous fine parallel veins between them. Spikes slender, in pairs or clusters, pedunculate, 1 to 1½ in. long. Flowers often distant, small, mostly 5-merous or 6-merous. Calyx thin, loose, sinuate-toothed, more than half as long as the corolla. Petals smooth, united to the middle. Pod flat, but thick, hard and woody, straight except a hooked obtuse point, about 4 lines broad, much narrowed towards the base, obliquely veined. Seeds oblong, obliquely transverse; funicle slightly flexuose, thickened nearly from the base into a narrow-turbinate aril under the seed.

**N. Australia.** Melville Island, *Herb. Fraser*; Sims' Island, *A. Cunningham*. Near *A. lorocarpa*, with broader phyllodia and remarkable for the hooked pod.



MIMOSACEAE

*Acacia orthotricha*

Pedley.

?

235. **A. xylocarpa**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 370. A shrub of 2 to 4 ft., glabrous and slightly viscid; branchlets terete. Phyllodia linear-subulate, not pointed, 2 to 4 in. long, rather rigid, terete or rarely flattened to nearly 1 line in breadth, obscurely 1-nerved. Spikes mostly in pairs, shortly pedunculate, slender but closely packed,  $\frac{1}{2}$  to  $\frac{3}{4}$  in. long when fully out. Flowers mostly 5-merous. Calyx shortly lobed, about half as long as the corolla. Petals united to the middle, with prominent midribs. Pod nearly terete or slightly flattened,  $1\frac{1}{2}$  to 3 in. long, shortly acuminate, 3 to 4 lines broad and thick near the end, gradually tapering to the base; valves hard, almost woody, striate lengthwise, opening elastically from the end downwards. Seeds oblique; funicle straight, gradually and slightly thickened from the base upwards.—*A. orthocarpa*, F. Muell. in Journ. Linn. Soc. iii. 136.

**N. Australia.** Dampier's Archipelago and Water Island, N.W. coast, *A. Cunningham*; Nichol Bay, *F. Gregory's Expedition*; Upper Macarthur river, Gulf of Carpentaria, *F. Mueller*.

Var. (P) *tenuissima*. Phyllodia longer and more slender. Spikes short. Pod unknown.—*A. tenuissima*, F. Muell. in Journ. Linn. Soc. iii. 135.—Sturt's Creek, *F. Mueller*.

NIB

MIMOSACEAE

*Acacia pachycarpa*  
F. Muell.

N113

MIMOSACEAE

Acacia pachyphloia  
W. V. Fitzg



293. **A. pallida**, *F. Muell. in Journ. Linn. Soc.* iii. 147 (*partly*). A tree, quite glabrous, but the foliage of a very pale or glaucous hue. Pinnæ 3 to 10 pairs, the common petiole usually 1 to 2 in. but in the larger leaves 4 to 6 in. long; leaflets 10 to 20 pairs, oblong, coriaceous, rigid, mostly 3 to 4 lines long. Stipules spinescent, with thickened bases or sometimes none. Peduncles solitary, 1 to  $1\frac{1}{2}$  in. long, with an annular 4-lobed deciduous bract about the middle as in *A. Bidwilli*, bearing a globular head of about 20 flowers, smaller than in that species, and mostly, if not all, 5-merous. Calyx very short, sinuate-toothed. Corolla scarcely  $1\frac{1}{2}$  lines long, shortly lobed. Pod unknown.

**N. Australia.** M'Adam range, Fitzmaurice river, *F. Mueller.* No. 75

NIB

MIMOSACEAE

Acacia perryi  
Pedley

NIB

MIMOSACEAE  
Acacia pellita  
O. Schwarz

15. **A. phlebocarpa**, F. Muell. in *Journ. Linn. Soc.* ii. 119. A glabrous somewhat viscid shrub of 2 to 5 ft.; branches nearly terete. Phyllodia narrow-lanceolate, rigid, tapering into a pungent point, 1 to  $1\frac{1}{2}$  in. long, mostly 2 to 3 lines broad, narrowed at the base, with several parallel nerves occasionally anastomosing, 1 to 3 more prominent. Stipules small. Peduncles solitary, attaining  $\frac{1}{2}$  in. when in fruit. Flowers 5-merous, but only seen withered. Calyx turbinate, lobed, half as long as the corolla. Petals apparently striate. Pod curved, hard, rather flat, with much thickened margins and obliquely veined between them, depressed between the seeds. Seeds rounded, compressed, oblique; funicle with the last 2 or 3 folds much dilated into a cup-shaped apparently 2-lobed aril, enclosing the base of the seed.

**N. Australia.** Rocky places at the sources of Seven Eiau river, Gulf of Carpentaria, F. Mueller. The species appears to be closely allied to *A. lanigera*.

205. **A. sericata**, *A. Cunn.*; *Benth. in Hook. Lond. Journ. i. 380.*  
Pale, with a very minute almost mealy down, or glabrous and glaucous;  
branchlets terete or nearly so. Phyllodia broadly falcate, obtuse but nar-  
rowed at both ends, mostly 3 to 4 in. long, 1 to 1½ in. broad in the middle,  
or on barren shoots much longer and narrower, with 3 or 4 principal nerves,  
of which 1 or 2 confluent with the lower margin of the base, transversely re-  
ticulate between them, the outer or upper margin often sinuate. Flowers  
not seen. Pod very flat, glaucous, 3 to 5 in. long, 1 to 1½ in. broad, sutures  
bordered with a narrow edge; valves coriaceous, hard when ripe, with raised  
reticulations. Seeds transverse, not seen perfect.—*A. platycarpa*, F. Muell.  
in Journ. Linn. Soc. iii. 145.

**N. Australia.** Montagu and York Sounds, N.W. coast, *A. Cunningham* (foliage with  
the valves of a ripe fruit); Victoria river (foliage only) and Gulf of Carpentaria (specimens  
with unripe fruits), *F. Mueller*.



258. **A. plectocarpa**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 375. Glabrous and often somewhat glaucous, with acutely angular branchlets. Phyllodia usually falcate-lanceolate, narrowed at both ends, 4 to 6 in. long, 4 to 8 lines broad, resembling those of *A. julifera*, but varying from 2 or 3 in. long, coriaceous and nearly straight to above 6 in. long, narrow-linear and thin, about 3 nerves fine but more or less prominent, and numerous closely packed very fine parallel veins between them. Spikes slender, not very dense, about 1 in. long, the upper ones often forming a terminal leafy panicle. Flowers small, mostly 5-merous. Calyx short, minutely toothed. Petals smooth. Pod linear, not very long, usually 3 to 4 lines broad, coriaceous, at first flat, with straight slightly thickened margins, but becoming often very much undulate between them, and occasionally varying from under 3 lines broad and quite thin, to almost as broad and thick as in *A. pachycarpa*. Seeds ovate, obliquely transverse, the last 2 or 3 folds of the funicle dilated into an aril under the seed.

**N. Australia.** Cambridge Gulf and Regent's River, N.W. coast, *A. Cunningham*; islands of the Gulf of Carpentaria, *R. Brown*; Sturt's Creek, Roper, Seven-Emu, and Fitzmaurice rivers, *F. Mueller*.

162. **A. pyrifolia**, DC. *Mem. Leg.* 447, and *Prod.* ii. 452. A glabrous shrub, often glaucous, with slightly flattened branches. Phyllodia broadly ovate, with a pungent point, 2 to 3 in. long and almost as wide in perfect-specimens, but often not half that size, thinly coriaceous, 1-nerved, penniveined. Stipules spinescent. Racemes numerous, often more than twice as long as the phyllodia, with 10 to 12 or more rather small but dense globular heads of very numerous flowers, often above 100, mostly 5-merous. Sepals distinct, linear-clavate. Pod flat, more or less curved or circinate, 2 to 3 in. long when perfect, 4 to 6 lines broad, often slightly contracted between the seeds, with rather thick margins; valves convex over the seeds. Seeds ovate, rather thick; funicle thickened and much folded under them.—F. Muell. *Fragm.* iii. 17.

**N. Australia.** Dampier's Archipelago, *A. Cunningham*; Nichol Bay, *F. Gregory's Expedition*.

**W. Australia.** Sharks Bay, *Baudin's Expedition*.

The large phyllodia and spinescent stipules distinguish this from all others with long racemes of globular heads.

263. **A. retinervis**, *Benth. in Hook. Lond. Journ.* i. 379, partly. Glabrous or slightly hoary, with nearly terete branchlets. Phyllodia falcate-lanceolate, narrowed at both ends, 3 to 6 in. long, 4 to 6 lines broad, with 3 to 7 fine slightly prominent nerves, the intermediate veins longitudinal, very fine, crowded and much anastomosed, forming a dense closely packed network only visible under a lens. Spikes in pairs or clusters, shortly pedunculate, slender but very dense,  $\frac{1}{2}$  to  $\frac{3}{4}$  in. long. Flowers small, mostly 5-merous. Calyx with narrow spatulate ciliate lobes, above half the length of the corolla. Petals united to the middle, with prominent midribs. Pod unknown.

**N. Australia.** Cape Pond, N.W. coast, *A. Cunningham*. The general aspect is that of several falcate *Julifloræ*, but I cannot match the venation with that of any other species. The fruiting specimens I formerly referred here, have the veins much less anastomosed and belong to *A. lunida*.

207. **A. retivenia**, *F. Muell. Fragm.* iii. 128. Densely clothed with a whitish woolly almost fleecy or velvety tomentum. Phyllodia obliquely obovate or orbicular, very obtuse,  $1\frac{1}{2}$  to 2 in. long, thick and soft, with about 4 prominent nerves and transverse reticulations. Upper phyllodia (in the only 2 branchlets seen) very much reduced, with dense globular flower-heads in their axils, on short thick tomentose peduncles. Flowers numerous, 5-merous, the buds shorter than the acute bracts, but not seen full-grown. Calyx thin, shortly lobed and ciliate. Pod unknown.

**N. Australia.** Short's Range, *M'Douall Stuart*.

205. **A. sericata**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 380.  
Pale, with a very minute almost mealy down, or glabrous and glaucous;  
branchlets terete or nearly so. Phyllodia broadly falcate, obtuse but nar-  
rowed at both ends, mostly 3 to 4 in. long, 1 to 1½ in. broad in the middle,  
or on barren shoots much longer and narrower, with 3 or 4 principal nerves,  
of which 1 or 2 confluent with the lower margin of the base, transversely re-  
ticulate between them, the outer or upper margin often sinuate. Flowers  
not seen. Pod very flat, glaucous, 3 to 5 in. long, 1 to 1½ in. broad, sutures  
bordered with a narrow edge; valves coriaceous, hard when ripe, with raised  
reticulations. Seeds transverse, not seen perfect.—*A. plutycarpa*, *F. Muell.*  
in *Journ. Linn. Soc.* iii. 145.

**N. Australia.** Montagu and York Sounds, N.W. coast, *A. Cunningham* (foliage with  
the valves of a ripe fruit); Victoria river (foliage only) and Gulf of Carpentaria (specimens  
with unripe fruits), *F. Mueller*.



180. **A. Simsii**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 368. A tall glabrous shrub with slender branches scarcely angular. Phyllodia linear or lanceolate, usually falcate, obtuse or mucronate, much narrowed towards the base, 2 to 5 in. long,  $1\frac{1}{2}$  to 2 or rarely 3 lines broad, in the ordinary form with 3 or sometimes only 2 prominent nerves, smooth and finely veined between them. Peduncles solitary or in pairs, slender, rarely above 3 lines long, bearing each a globular head of 20 to 30 flowers, mostly 5-merous. Calyx nearly half as long as the corolla, lobed and readily separating into distinct sepals. Petals smooth, distinct. Pod straight, flat or undulate, acuminate, 2 to 3 lines broad. Seeds compressed-globular, longitudinal; funicle with the last fold shortly thickened into a clavate aril about half as long as the seed, with a short filiform fold below it.

**N. Australia.** Islands of the Gulf of Carpentaria, *R. Brown, Henne.*

**Queensland.** Bay of Inlets, *Banks and Solander*; rocky hills, Cleveland Bay, *A. Cunningham*; Cape Upstart, *Burdekin Expedition*; Port Denison, *Fitzalan*; Edgecumbe Bay, *Dallachy*; bed of the Belyando, *Mitchell*, also in *Leichhardt's* Collection.

Var. *multisiliqua*. Phyllodia shorter, rather broader, and nearly straight, with 3 prominent nerves and scarcely veined between them. Pod narrow.—On first seeing R. Brown's specimens from the Carpentaria Islands, they looked so different from the ordinary form that I was inclined to adopt them as a distinct species under Brown's name of *A. multisiliqua*, but I have since found that the two forms pass one into the other there as in other localities, and both phyllodia may be found even on the same specimen on different branches, depending perhaps sometimes on differences in comparative luxuriance.

N13

MIMOSACEAE

Acacia stenophylla

214. **A. stigmatophylla**, *A. Cunn.*; *Benth. in Hook. Lond. Journ. i.* 377. Glabrous or scarcely hoary-pubescent when young; branchlets rather slender, acutely angled or compressed when young, soon becoming terete. Phyllodia obliquely narrow-oblong or slightly falcate, narrowed at each end, tipped with a prominent nerve or broad callous point,  $1\frac{1}{2}$  to 3 in. long, 3 to 4 lines broad, undulate, coriaceous, with 3 to 5 fine but prominent nerves and very fine (sometimes obscure), longitudinal, more or less anastomosing, closely-packed veins between them. Spikes shortly pedunculate,  $\frac{1}{2}$  to  $\frac{3}{4}$  or at length 1 in. long, slender, often clustered in the upper axils, forming a terminal leafy panicle. Flowers small, mostly 5-merous. Calyx loosely campanulate, sinuate-toothed, slightly ciliate, half as long as the corolla. Petals with prominent midribs, giving the buds a strongly striate appearance. Pod unknown.

**N. Australia.** Brunswick Bay, N.W. coast, *A. Cunningham*; Victoria river, *F. Mueller*.

212. **A. stipuligera**, *F. Muell. in Journ. Linn. Soc.* iii. 144. Softly tomentose or pubescent; branchlets nearly terete. Phyllodia obliquely falcate, oblong or lanceolate, shortly narrowed at each end, with a small callous or hooked point, 1 to 2 in. long, 3 to 7 lines broad, coriaceous, with 2, 3, or 4 very prominent nerves and nerve-like margins and numerous anastomosing more or less longitudinal veins, the principal nerves often scabrous with resinous exudations. Stipules brown, small, but more conspicuous than in any other *Julifloræ* except *A. conspersa*. Spikes nearly sessile, solitary or in pairs, 1 to nearly 2 in. long, dense and tomentose. Flowers mostly 5-merous. Calyx half as long as the corolla, thin with spatulate lobes, readily separating into distinct sepals. Petals united to the middle, tomentose. Pod (only seen one loose one) long, linear, slightly twisted, not  $1\frac{1}{2}$  lines broad, coriaceous, with nerve-like margins.

**N. Australia.** Sources of the Victoria river, *F. Mueller*; in the interior, lat. 18°, "Scrub-Wattle," *M'Douall Stuart*.

291. **A. suberosa**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 499. Branches terete or nearly so, more or less hirsute, the older ones with a slightly corky bark. Pinnæ 1 or 2 pairs, the common petiole about  $\frac{1}{4}$  in., the partial rachis nearly  $\frac{1}{2}$  in. long; leaflets 8 to 12 pairs, oblong-linear, thick and rigid, obtuse, 1 to 2 lines long, more or less hirsute or ciliate. Stipules spinescent, short, slender, and straight. Flowers not seen, except some fragmentary remains on a short thick peduncle. Pod flat, but rather thick, with convex valves, about 3 in. long,  $\frac{1}{4}$  to nearly  $\frac{1}{2}$  in. broad, pubescent. Seeds longitudinal, broadly ovate, woolly-pubescent. Funicle folded and slightly thickened under the seed.

**N. Australia.** Vansittart Bay and Careening Bay, *A. Cunningham*; Glenelg river, *J. Martin*.



69. **A. subternata**, *F. Muell. in Journ. Linn. Soc. iii. 124.* A glabrous shrub of 3 to 5 ft.; branchlets angular, sulcate, slightly viscid when young. Phyllodia mostly in clusters of 2, 3 or 4, linear-terete or very slightly compressed, with short recurved or hooked points, 3 to 6 lines long, without prominent nerves and scarcely furrowed. Stipules minute or none. Peduncles scarcely longer than the phyllodia, bearing each a globular head of numerous flowers, mostly 5-merous. Sepals rather rigid, linear-spathulate, fully half as long as the corolla, united in a 5-nerved cup at the base. Petals slightly striate, united to the middle. Pod flat, rigidly coriaceous, much narrowed into a long stipes, about 2 lines broad in the upper part, somewhat viscid, very obliquely striate, with thickened margins and oblique partitions between the seeds. Seeds oblong, obliquely transverse; funicle straight, gradually thickened from the base to the end.

**N. Australia.** Table land, Upper Victoria river, *F. Mueller.* Some young specimens of *Leichhardt's* appear to be referable to the same species.

169. **A. stipulosa**, *F. Muell. in Journ. Linn. Soc.* iii. 119. Glandular-pubescent or hirsute; branches terete. Phyllodia obliquely ovate-falcate or almost triangular, tapering into a pungent point, 2 to 3 or rarely 4 lines long and almost as broad, thick and faintly several-nerved, the upper angle very obtuse, with a small gland about the middle or often none. Stipules setaceous, spreading. Peduncles usually exceeding the phyllodia, pubescent, bearing each a dense head of numerous (above 30) flowers, mostly 5-merous but sometimes 6- to 8-merous. Calyx thin, siriate, pubescent, as long as the corolla, at length separating into distinct sepals. Petals narrow, cohering. Stamens very numerous. Pod linear, curved, flat, glandular-hispid, 2 to 3 lines broad, scarcely contracted between the seeds. Seeds very oblique; funicle with the last 3 folds dilated into an almost membranous aril at the base of the seed.

**N. Australia.** Upper Victoria river and Sturt's Creek, *F. Mueller*. Very near *A. deltoidea*, differing chiefly in the flowers twice as large, and in the proportion of the calyx and corolla.

NIB

MEMOSACEAE

Acacia tanumbarinense  
maiden.

235. **A. xylocarpa**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 370. A shrub of 2 to 4 ft., glabrous and slightly viscid; branchlets terete. Phyllodia linear-subulate, not pointed, 2 to 4 in. long, rather rigid, terete or rarely flattened to nearly 1 line in breadth, obscurely 1-nerved. Spikes mostly in pairs, shortly pedunculate, slender but closely packed,  $\frac{1}{2}$  to  $\frac{3}{4}$  in. long when fully out. Flowers mostly 5-merous. Calyx shortly lobed, about half as long as the corolla. Petals united to the middle, with prominent midribs. Pod nearly terete or slightly flattened,  $1\frac{1}{2}$  to 3 in. long, shortly acuminate, 3 to 4 lines broad and thick near the end, gradually tapering to the base; valves hard, almost woody, striate lengthwise, opening elastically from the end downwards. Seeds oblique; funicle straight, gradually and slightly thickened from the base upwards.—*A. orthocarpa*, F. Muell. in Journ. Linn. Soc. iii. 186.

**N. Australia.** Dampier's Archipelago and Water Island, N.W. coast, *A. Cunningham*; Nichol Bay, *F. Gregory's Expedition*; Upper Macarthur river, Gulf of Carpentaria, *F. Mueller*.

Var. (?) *tenuissima*. Phyllodia longer and more slender. Spikes short. Pod unknown.—*A. tenuissima*, F. Muell. in Journ. Linn. Soc. iii. 135.—Sturt's Creek, *F. Mueller*.

249. **A. torulosa**, Benth. in Journ. Linn. Soc. iii. 139. A tall shrub or small tree, glabrous, with angular branchlets. Phyllodia linear-lanceolate, falcate, with an oblique glandular point, narrowed towards the base, 4 to 8 in. long, 3 to 4 lines wide, coriaceous, with 3 to 5 prominent nerves and numerous very fine parallel ones between them. Spikes solitary or in pairs or threes, very shortly pedunculate,  $\frac{1}{2}$  to  $\frac{3}{4}$  in. long, slender but rather dense. Flowers small, mostly 5-merous. Sepals narrow-linear, spatulate, ciliate, free or slightly united at the base. Petals united to the middle. Pod long, remarkably moniliferous, the valves thickly coriaceous, convex, oblong, and about 3 lines broad over the seeds, much contracted between them. Seeds oblong, longitudinal; funicle short, the last fold expanded into a small obliquely cup shaped aril under the seed.

**N. Australia.** Sandy banks of Roper and Nicholson rivers, Gulf of Carpentaria, F. Mueller.

**Queensland.** Dayman's Island, Endeavour Straits, W. Hill.

Scarcely to be distinguished from *A. julifera*, *A. plectocarpa*, and some others, except by the fruit.



172. **A. translucens**, *A. Cunn. in Hook. Ic. Pl. t. 160.* A bush shrub or small tree, glabrous or the young shoots pubescent; branchlets terete or slightly angular. Phyllodia from obliquely obovate to narrow-oblong or almost linear, incurved, usually much undulate, mostly about  $\frac{1}{2}$  in. but the lower ones sometimes 1 in. long, obtuse with an oblique or recurved terminal gland, coriaceous, obscurely several-nerved. Peduncles rigid,  $\frac{1}{2}$  to 1 in. long, bearing each a dense globular head of numerous flowers, mostly 5-merous.

Calyx broad, eup-shaped, shortly toothed, scarcely half as long as the corolla. Petals striate, but smaller and less rigid than in *A. impressa*. Pod 1 to  $1\frac{1}{2}$  in. long, flat but thick and almost woody, obtusely hooked at the end, about 2 lines broad above the middle and gradually narrowed into a long stipes, obliquely veined, partitioned inside between the seeds. Seeds oblong, oblique; funicle slightly folded and gradually dilated into a cup-shaped aril at the base of the seed.

**N. Australia.** Montague Sound and Bay of Rest, N.W. coast, *A. Cunningham*; Sturt's Creek, *F. Mueller*; Islands of the Gulf of Carpentaria, *R. Brown, Henne*. The pod is that of some *Julifloræ*, but has only been seen in the narrow-leaved specimens.

260. **A. tumida**, *F. Muell. in Journ. Linn. Soc.* iii. 144. A glabrous tree; branchlets terete or nearly so, often glaucous. Phyllodia falcate-oblong or lanceolate, much narrowed and very oblique at the base, usually 4 to 8 in. long, 1 to  $1\frac{1}{2}$  in. broad, with very numerous parallel veins or nerves, 5 to 9 of them more prominent, the others very fine, closely packed and very rarely anastomosing. Spikes slender but dense, solitary or in pairs, the upper ones often paniculate, mostly 1 to  $1\frac{1}{2}$  in. long when fully out. Flowers mostly 5-merous. Sepals linear-spathulate, ciliate, shortly connected at the base. Petals smooth. Pod falcate, with very coriaceous convex valves so as to be nearly terete,  $1\frac{1}{2}$  to 3 in. long, 3 to 4 lines broad, divided inside between the seeds. Seeds ovate, obliquely transverse; funicle short, the last fold dilated into a small turbinate aril under the seed.

**N. Australia.** Isle Lacroze, N.W. coast, *A. Cunningham*; rocky places, Victoria river, Point Pearce, and Sturt's Creek, *F. Mueller*; Attack Creek, *M<sup>c</sup>Douall Stuart*. The foliage is that of *A. crassicaarpa*, with the pod of *A. umbellata*.

215. **A. umbellata**, *A. Cunn.*; *Benth. in Hook. Lond. Journ.* i. 378.  
A tall shrub, young shoots slightly hoary or silky but soon glabrous; branchlets nearly terete. Phyllodia from oblong and scarcely falcate to obliquely oblong-rhomboidal or broadly falcate, obtuse with a broadly callos or glandular tip, 2 to 4 in. long,  $\frac{3}{4}$  to  $1\frac{1}{2}$  in. broad, very coriaceous, with numerous parallel nerves or veins, 5 to 9 more prominent and some of them confluent with the lower margin at the base, the others closely packed, fine and rarely anastomosing. Spikes sessile or nearly so, often clustered, rather dense, 1 to  $1\frac{1}{2}$  in. long. Flowers mostly 5-merous but sometimes 4-merous. Calyx pubescent, sinuate-toothed or shortly lobed. Petals with prominent midribs. Pod falcate or nearly straight, almost terete, with convex and coriaceous valves, as in *A. tumida*. Seeds ovate, oblique; funicle short, dilated into a small aril of 2 or 3 folds under the seed.

**N. Australia.** Islands of the Gulf of Carpentaria, *R. Brown*; Cleveland Bay and Cape Flinders, *A. Cunningham*; Seven-Eunu, and Robinson rivers, *F. Mueller*, probably also Depot Creek, *F. Mueller* (specimens in flower only). Allied in foliage to *A. stigmaphylla*, in fruit to *A. tumida*.

120. **A. sentis**, *F. Muell. in Journ. Linn. Soc. iii. 128, and Pl. Vict. ii. 18*. A divaricately-branched rigid shrub or small tree, branchlets nearly terete, glabrous or pubescent when young. Phyllodia lanceolate-oblong or linear, mostly oblique falcate or curved, 1-nerved and more or less penniveined, in some specimens  $\frac{3}{4}$  in. long and 2 or 3 lines broad, in others more than 2 in. long and about 1 line broad, usually glabrous, the marginal gland near the base or none. Stipules either subulate-spinescent or very small or none. Peduncles rather slender, solitary or in pairs, axillary or by the abortion of the phyllodia in terminal racemes, bearing each a small globular head of 20 to 30 flowers, mostly 5-merous. Sepals linear-spathulate, free. Petals smooth. Pod thin, flat,  $\frac{1}{2}$  to  $\frac{3}{4}$  in. broad. Seeds broadly ovate, longitudinal, along the centre of the pod; funicle transverse, gradually thickened from the base upwards, straight or shortly folded under the seed.—*A. Victoriae*, Benth. in *Mitch. Trop. Austr. 333*.

**N. Australia.** Victoria river and Plains of Promise, Gulf of Carpentaria, *F. Mueller*.

**Queensland.** Bargoo river, *Mitchell*.

**N. S. Wales.** From the Darling river to the Barrier range, *Victorian and other Expeditions*.

**Victoria.** Low sandhills and arid salt-bush plains towards the junction of the Murray and Darling, *F. Mueller*.

**S. Australia.** Base of Flinders range, towards Spencer's Gulf and in the interior, *F. Mueller*.

209. **A. Wickhami**, *Benth. in Hook. Lond. Journ.* i. 379. A glabrous shrub, often very glaucous or resinous; branchlets angular-striate. Phyllodia numerous, obliquely ovate or falcate-oblong, obtuse with a small oblique glandular point, rarely exceeding  $\frac{1}{2}$  in., coriaceous, undulate, with several nerves all very faint or 1 or 3 more prominent. Spikes pedunculate,  $\frac{1}{2}$  to  $\frac{3}{4}$  or rarely 1 in. long, densely cylindrical. --Flowers mostly 5-merous. --Calyx

thin, broadly sinuate-toothed, fully half as long as the corolla. Petals united below the middle, the midribs prominent. Pod flat, but thick and woody, obliquely veined, about 2 in. long, 2 lines broad above the middle, gradually tapering to the base. Seeds oblique, oblong; funicle straight, gradually thickened from the base into a narrow-turbinate aril, scarcely folded towards the end.

**N. Australia.** Swan Bay, N.W. coast, *Voyage of the Beagle*; table land between Victoria river and Sturt's Creek, *F. Mueller*; islands of the Gulf of Carpentaria, *R. Brown*, and adjoining mainland, *F. Mueller*. The more or less prominent nerves, the glaucous hue or resinous exudations, vary in different parts of the same specimen.



239. **A. arida**, *Benth. in Hook. Lond. Journ.* i. 370. Glabrous or minutely hoary; branchlets slender, terete or slightly compressed. Phyllodia narrow-linear, obtuse or with a callous point, narrowed at the base, 2 to 4 in. long, 1 to 2 lines broad, flat but thick, obscurely 3-nerved. Spikes shortly pedunculate, solitary or in pairs, slender and compact,  $\frac{1}{4}$  to  $\frac{1}{2}$  in. long. Flowers very small, mostly 5-merous. Calyx shortly lobed. Petals smooth, without prominent midribs. Pod thick but flat, nearly 4 in. long, 3 lines broad, narrowed to the base; valves hard, almost woody, rolling back elastically. Seeds not seen, but evidently oblique.

**N. Australia.** Parched desert shores of Cambridge Gulf, N.W. coast, *A. Cunningham*. Differs from *A. xylocarpa* chiefly in the broader flat phyllodia.

# 91. **ALBIZZIA**, Durazz.

Calyx campanulate or tubular, 5- or rarely 4-toothed. Corolla 5- or rarely 4-lobed, with a cylindrical tube. Stamens indefinite, usually numerous and long, united at the base in a tube enclosing the ovary. Pod linear or oblong, straight or nearly so, flat, thin, rarely coriaceous, indehiscent or opening without elasticity in 2 valves. Seeds usually orbicular, along the centre of the pod; funicle filiform.—Trees or shrubs, without prickles. Leaves twice pinnate, with a gland on the petiole below the pinnæ and others between or below some or all of the pinnæ and leaflets. Flowers in globular heads or rarely cylindrical spikes, usually hermaphrodite. Stamens white or pink, rarely yellow, much longer than in *Acacia*.

The genus is limited to the Old World, and is chiefly tropical. Of the four Australian species, one is widely dispersed over tropical Asia, the others are endemic. F. Mueller proposes to reunite this and *Pithecolobium* with *Acacia*, but that can scarcely be done without returning to the Linnean genus *Mimosa*, for *Pithecolobium* as to flower and fruit, and *Albizzia* as to flowers, are undistinguishable from *Inga*, whilst *Lysiloma* as closely connects *Acacia* with *Mimosa*. If the Linnean *Mimosa* is broken up into distinct genera, there is no character so constant and so easily recognized as that which separates *Acacia* from *Albizzia*. It is, however, very difficult to draw a definite line between *Albizzia* and *Pithecolobium*, which only differ in the fruit.

Flowers in cylindrical spikes on axillary peduncles . . . . . 1. *A. lophantha*.

Flowers in globular heads on axillary peduncles.

Leaflets 5 to 10 pairs, 2 to 3 lines long . . . . . 2. *A. basaltica*.

Leaflets 2 to 4 pairs,  $\frac{1}{2}$  to 1 in. long . . . . . 3. *A. Thozetiana*.

Flowers in small heads in large terminal panicles.

Panicle loose. Stamens about  $\frac{1}{4}$  in. long. Pod under 1 in. broad . . . . . 4. *A. procera*.

Flower-heads very numerous and crowded. Stamens about  $\frac{1}{2}$  in. long.

Pod  $1\frac{1}{2}$  to above 2 in. broad . . . . . 5. *A. canescens*.

*A. Lebeck*, Benth., allied to *A. canescens*, but more glabrous, with much larger flowers, not closely sessile, and the pod not so broad, etc., a tree widely dispersed over tropical Asia and Africa, has been introduced into the neighbourhood of Brisbane.

4. **A. procera**, Benth. in Hook. Lond. Journ. iii. 88. A tall tree, the young shoots slightly silky-pubescent, at length glabrous. Pinnæ usually 3 pairs, distant along a common petiole often  $\frac{1}{2}$  ft. long; leaflets 6 to 8 pairs, obliquely oval-oblong, usually obtuse, often nearly 1 in. long and  $\frac{1}{2}$  in. broad, very unequally narrowed at the base, penniveined but not very prominently so, minutely hoary-pubescent or glabrous above. Peduncles about 1 in. long, in clusters of 2 or 3, in a loose terminal panicle, each bearing a globular head of 15 to 20 sessile flowers, mostly 5-merous, and scarcely more than 3 lines long, including the stamens. Corolla slender, less than 2 lines long, divided to the middle. Pod 5 to 7 in. long, 9 to 10 lines broad, very flat and thin. Seeds very flat, orbicular.—*Mimosa procera*, Roxb. Pl. Corom. ii. 12, t. 121; *A. elata*, Roxb. Fl. Ind. iii. 546; *Acacia procera*, Willd. Sp. Pl. iv. 1063.

**N. Australia.** Gloucester Island, Henne. Widely distributed over S. E. India and the Archipelago. The Australian specimens are not complete, but, as far as they go, they do not appear to differ at all from the Indian ones.

NIG

MIMOSACEAE

*Cathormion umbellatum*  
(Vahl) Kosterman.

88. **DICHRSTACHYS**, W. and Arn.

(Caillea, Guillem. and Pers.)

Calyx 5-toothed. Petals 5, valvate, usually cohering. Stamens in the perfect flowers 10, free; anthers ovate, tipped with a deciduous gland. Ovary nearly sessile, with several ovules; style short or filiform, with a small terminal stigma. Lower flowers of the spike neuter, with long, linear, white or coloured staminodia, and a small rudimentary ovary. Pod linear, compressed, variously twisted, indehiscent or the valves irregularly separating from the persistent sutures.—Rigid shrubs, the branchlets occasionally spinescent. Leaves abruptly bipinnate, with a stipitate gland between the pinnæ of the lowest or of all the pairs; leaflets small. Stipules subulate or acuminate, often imbricate on the short flowering branches. Flowers sessile, in dense cylindrical spikes, either terminal or apparently axillary by the shortness of the branchlet, the upper flowers of the spike hermaphrodite and yellow, the lower ones neuter and white pink or purple.

The genus extends over tropical Africa and Asia. Of the Australian species one is the common Indian one, the other is endemic. F. Mueller proposes to reunite it with *Neptunia*, but the difference in the pod is accompanied by too marked a difference in habit to be neglected, unless the whole of the *Mimoseæ* with definite stamens and gland-tipped anthers be united into one genus.

Pinnæ 8 to 10 pairs. Leaflets 12 to 20 pairs . . . . . 1. *D. cinerea*.  
Pinnæ 1 or 2 pairs. Leaflets 4 to 6 pairs . . . . . 2. *D. Muellieri*.



# 89. NEPTUNIA, Lour.

Calyx 5-toothed. Petals 5, valvate in the bud, cohering or free. Stamens in the perfect flowers 10 or (in the Australian species) 5, free; anthers ovate, tipped with a deciduous gland, very rarely wanting; pollen granular. Ovary stipitate, with 2 or several ovules; style filiform, with a truncate or concave stigma. Lower flowers of the head male or more frequently neuter, with long linear staminodia. Pod short and broad, flat, turned downwards, 2-valved, without pulp inside. Seeds transverse, flattened, ovate or orbicular, the funicle not dilated.—Procumbent or floating perennials or undershrubs. Leaves abruptly bipinnate, with small leaflets, either without glands or with a depressed gland below the pinnæ. Stipules membranous, obliquely cordate. Peduncles axillary, usually with 2 distant stipule-like deciduous bracteoles, and bearing a single globular or ovoid flower-head. Flowers small, sessile, mostly hermaphrodite, but a few of the lower ones either like the others but male by the abortion of the ovary, or neuter with a smaller calyx and corolla, and long linear almost petal-like staminodia.

A small genus, widely diffused over the tropical regions of the New and the Old World, extending also into N. America. The two Australian species are endemic, and differ from all others in their stamens always 5 only instead of 10.

Peduncles slender, 1 to 3 in. long. Ovules several. Pod oblong, with several seeds. . . . . 1. *N. gracilis*.  
 Peduncles very short. Ovules 2. Pod orbicular, 1-seeded. . . . . 2. *N. monosperma*.

NIG

MIMOSACEAE

*Neptunia dimorphantha*

Domin.

1. **N. gracilis**, *Benth. in Hook. Journ. Bot.* iv. 355. Stock perennial, often woody, with procumbent or ascending stems of about 1 ft. or rarely twice as long, glabrous or slightly pubescent. Pinnæ usually 1 or 2 pairs; leaflets 6 to 20 pairs, oblong-linear, falcate, 2 to 3 or rarely 4 lines long; glands none in the ordinary form, but small setaceous stipellæ under the pinnæ. Stipules leafy, obliquely cordate, acuminate. Peduncles 1 to 3 in. long, with 2 broad cordate bracteoles, one about the middle, the other much lower down, both very deciduous. Flower-head small, globular, with very few of the male or neuter flowers at the base and sometimes none at all. Hermaphrodite flowers smaller than in the extra-Australian species, always with 5 stamens only and few or sometimes none of the neuter ones at the base of the head. Gland of the anthers small, sometimes perhaps quite wanting. Ovules 6 to 8. Pod, when perfect,  $\frac{3}{4}$  in. long, about 4 lines wide, with 4 to 6 seeds.

**N. Australia.** Islands of the N. coast, *R. Brown*.

**Queensland.** Shoalwater Bay and Broad Sound, *R. Brown*; Moreton Bay, *C. Stuart*; near Warwick, *Beckler*; in the interior, on the Maranoa, etc., *Mitchell*, *Leichhardt*, and others.

**N. S. Wales.** Between the Darling and Cooper's Creek, *Neilson*.

*Var. major.* Larger and more erect. Leaves with a depressed gland below the lowest pair of pinnæ, but less conspicuous than in *N. monosperma*. Flowers rather large.—Bay of Inlets, *Banks and Solander*; Rockhampton and Burdekin river, *Herb. F. Mueller*.

*Var. villosula.* More or less pubescent. Pinnæ 3 or 4 pairs, without glands. Flower-heads rather large.—Sturt's Creek, *F. Mueller*; Gulf of Carpentaria, *Landsborough*; also *Neilson's* N. S. Wales specimens.

*Neptunia major*  
(Benth.) Windler

2. **N. monosperma**, *F. Muell. Herb.* Stems apparently herbaceous, but stouter and taller than in *N. gracilis* (except perhaps in the var. *major*). Pinnæ 2 or 3 pairs; leaflets 20 to 30 pairs, mostly 3 to 5 lines long; gland large, depressed below the lowest pair of pinnæ. Stipules and bracteoles very much smaller than in *N. gracilis* and very deciduous. Peduncles very short, rarely exceeding  $\frac{1}{2}$  in. Flowers small, all with 5 stamens only, with very few or scarcely any of the neuter ones at the base of the head. Ovules always 2 only. Pod nearly orbicular, 3, 4, or rarely 5 lines diameter, with a single seed.

**N. Australia.** Upper Victoria river, *F. Mueller*; Gulf of Carpentaria, *Landsborough, Henne.*  
**Queensland, Bowman.**



## 92. PITHECOLOBIUM, Mart.

(Cathormion, Hassk.)

Calyx campanulate or tubular. Corolla 5-lobed, with a cylindrical tube. Stamens indefinite, usually numerous and long, united at the base in a tube enclosing the ovary. Pod flattened, usually rather thick and much curved, annular or spirally twisted, either opening entirely or on the outer edge in 2 valves, or quite indehiscent, very smooth and often coloured inside or with a thin pulp. Seeds ovate or orbicular; funicle filiform.—Trees or rarely shrubs, without prickles. Leaves twice pinnate, usually with a gland on the petiole below the pinnæ, and others between or below some or all of the pinnæ and leaflets; leaflets few and rather large in all the Australian species. Flowers in globular or oblong heads or umbels, or rarely in cylindrical spikes, usually hermaphrodite and white, the stamens rarely red.

A considerable tropical genus, distributed over the New as well as the Old World. Of the three Australian species, one is also in the Indian Archipelago, the two others endemic, one as yet doubtful as to the genus, the pod being unknown. *Pithecolobium*, with the flowers and fruit of some sections of *Inga*, only differs from that genus in the twice-pinnate, not simply pinnate leaves. *Calliandra* and *Albizia* have the same flowers and only differ in the pod. *Acacia* is at once and constantly distinguished by the stamens never united in a tube round the ovary.

Flowers pedicellate in the head (umbellate).

Leaflets oblong or rhomboidal, acuminate. Pod twisted, 2-valved. 1. *P. pruinosum*.

Leaflets obliquely obovate, obtuse. Pod indehiscent, very hard, separating into distinct articles. . . . . 2. *P. moniliforme*.

Flowers sessile, the corolla  $\frac{1}{2}$  in. long. Leaflets acuminate. . . . . 3. *P. grandiflorum*.

2. **P. moniliferum**, Benth. in Hook. Lond. Journ. iii. 211. A tree, with the young shoots usually pubescent, at length glabrous. Pinnæ 1 or 2 pairs, the common petiole  $\frac{1}{2}$  to 1 in., each rhachis 1 to 2 in. long; leaflets 4 to 7 pairs, obliquely obovate or oval-oblong, obtuse, very oblique at the base, shining and reticulately penniveined above, opaque and less veined underneath, the terminal ones 1,  $1\frac{1}{2}$ , or nearly 2 in. long, the others smaller. Peduncles clustered in the upper axils, forming a short irregular terminal panicle. Flowers numerous, in globular umbels, the pedicels about  $1\frac{1}{2}$  in. long. Calyx nearly 1 line, corolla about 2 lines long, minutely silky-pubescent. Stamens more than twice as long, the united part nearly as long, as the corolla. Pod usually falcate, 3 to 4 in. long,  $\frac{3}{4}$  in. broad, very thick and hard, indehiscent but separating into closed 1-seeded articles. Seeds transverse, oblong, flat but thick; funicle very short.—*Inga monilifera*, DC. Prod. ii. 440; *Cathormiscum moniliferum*, Hassk. Retzia, 231.

**N. Australia.** Point Pearce, Victoria river, F. Mueller; islands of the Gulf of Carpentaria, R. Brown; along all the watercourses round the Gulf of Carpentaria, Leichhardt. The species was originally described from Timor, and is in several islands of the Indian Archipelago.

NIB

MIMOSACEAE

*Prosopis glandulosa*  
var. *glandulosa*