

New Queensland Acacias.

By

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and

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PLATES XVI—XIX.)

(Communicated by C. T. White before the Royal Society of Queensland, 30th August, 1926.)

UNINERVES—RACEMOSÆ.

1. *Acacia angusta*, n. sp.

(Plate XVI., figs. 1-6.)

Frutex gracilis Mallee similis, ramis pendulis rubidis; ramulis teretibus vel plus minus angularibus, partibus junioribus paulo pruinosa-tomentosis, phyllodiis linearibus tenuibus rectis uninerviis 10-20 cm. longis 2 mm. latis; glandulis duabus marginalibus; racemis axillaribus simplicibus paulo tomentosus circiter 1" longis; floribus glabris 12-20 in capitulo, plerumque 5-meris; sepalis lineari-spathulatis corollam dimidio aequantibus; petalis latis laevibus liberis uninerviis; ovario hirsuto; legumine non viso.

A tall, glabrous, weak-growing, Mallee-like shrub, with slender stems not more than one inch in diameter, and somewhat pendulous branches. Branchlets reddish, terete to somewhat angular, the very young tips slightly hoary-tomentose. Phyllodia linear, thin and straight, terminating in a fine point, uninerved, 10-20 cm. long, 2 mm. broad, usually with a large gland near the base, and a smaller one about the centre of the phyllode. Racemes axillary, simple, slightly tomentose, about one inch long. Flowers glabrous, 12-20 in the head, pale-coloured, mostly 5-merous. Sepals linear, spathulate, half as long as the corolla. Petals broad, smooth, free, uninerved. Ovary hirsute. Pod not seen.

Range.—The Virgin, Springsure, Queensland, J. L. Boorman, 3rd August, 1913. The type.

* As is well known, the late Mr. J. H. Maiden was the leading authority on the two large Australian genera *Eucalyptus* and *Acacia*. During the last years of his life he received considerable help in this work from Mr. W. F. Blakely, and the present Paper is one of a series that Mr. Maiden and Mr. Blakely were preparing in collaboration shortly before the former's death. The Paper consists of descriptions of seven new species and one new variety, mostly received by Mr. Maiden from Queensland correspondents.—C. T. WHITE.

Affinities.—1. With *A. neriifolia* A. Cunn., especially the very narrow form. The phyllodes, however, are uniformly narrower, more glabrous and different in shape. The inflorescence is also much shorter, while the flowers are smaller and paler and fewer in the head.

2. With *A. Dietrichiana* F.v.M. The phyllodes of both species are very similar, but there appears to be only one marginal gland on the phyllodes of *A. Dietrichiana*, while the branches are viscid, and the inflorescence consists mainly of single heads, not definitely racemose as in *A. angusta*.

2. *A. semirigida*, n. sp.

(Plate XVI., figs. 7-14.)

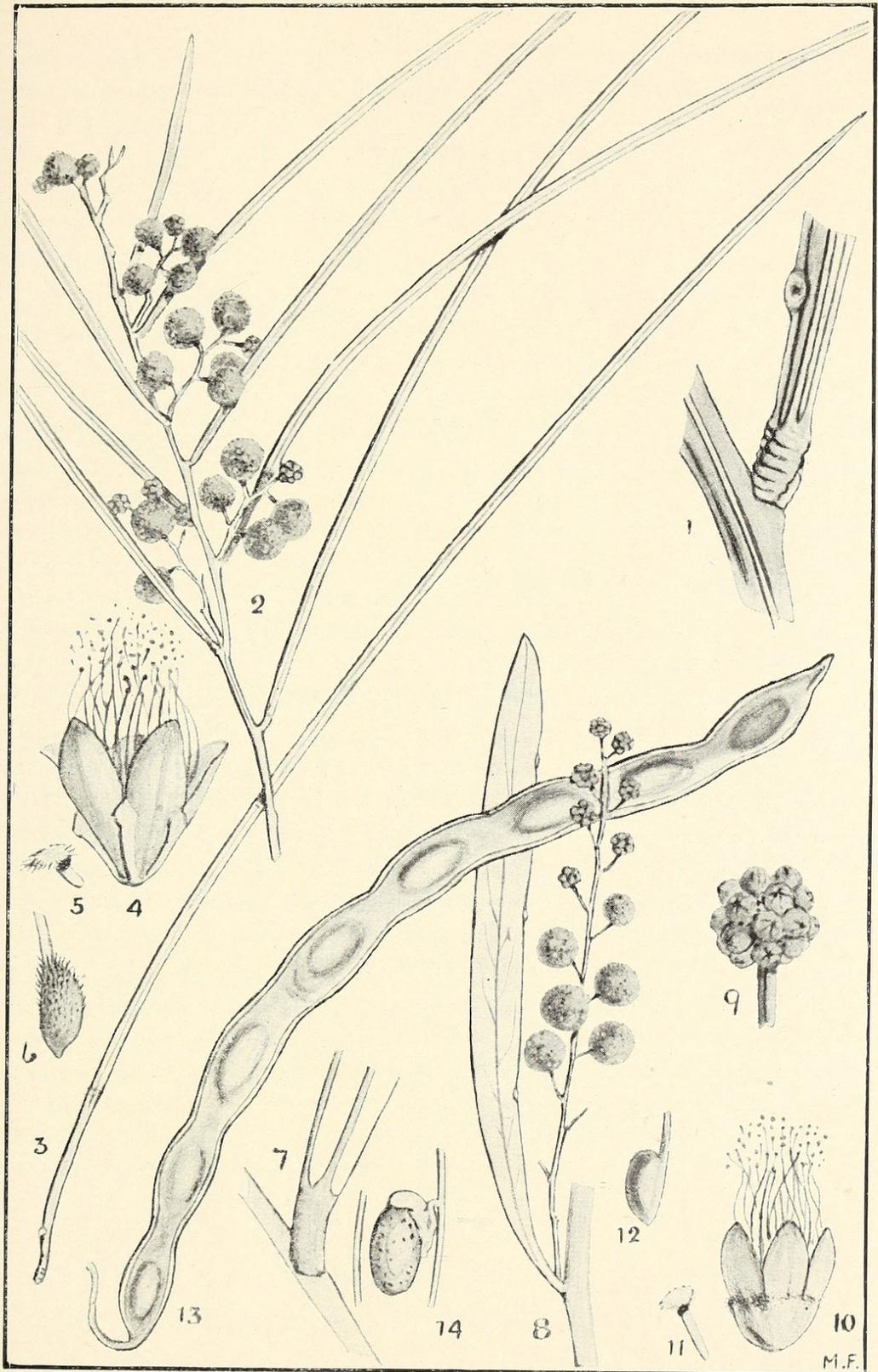
Frutex altus glaber; ramulis acute angularibus; phyllodiis rigidis angusto-lanceolatis acutis 4-9 cm. longis, 4-8 mm. latis, nervis marginalibus prominentibus, superiore glandulas 1-3 prominulas gerente, costa plerumque margini superiori propiore; racemis axillaribus glabris phyllodiis brevioribus, capitula 10-20 pallidissima ca. 20 florum 5 merorum gerentibus; calyce cupulari sinuolato plus minus ciliato; petalis liberis paulo hirsutis; ovario glabro; legumine stipitato plerumque recto; valvis tenuibus inter semina attenuatis 8-12 cm. longis, 10-12 mm. latis; seminibus oblongis minutis punctis notatis rugosis; funiculo filiformi in arillum clavatum dilatato.

A tall, glabrous shrub; branchlets acutely angular. Phyllodia rigid, narrow-lanceolate, acute, minutely punctate, uninerved, 4-9 cm. long, 4-8 mm. broad, narrowed at the base, with prominent marginal nerves, and obscure lateral veins, the upper margin bearing 1-3 fairly prominent glands, the lower gland usually about 2 cm. from the base; midrib not quite central, usually closer to the upper margin. Racemes glabrous, axillary, shorter than the phyllodia, 3-6 cm. long, bearing 10-20 very pale flower-heads of about 20, mostly 5-merous, flowers; peduncles compressed to slightly angular, 5-8 mm. long. Bracts capitate, ciliate. Calyx cupular, sinuolate, the border more or less ciliate. Petals free, slightly hirsute, longer than the calyx. Ovary glabrous. Pod stipitate, straight or curved, pale brown and shining, valves thin, contracted between the seeds, the margins nerve-like, up to 12 cm. long, 10-12 mm. broad. Seeds placed longitudinally, oblong, black, minutely pitted rugose, the funicle filiform for more than half its length, with one fold about the centre of the seed, the basal portion dilated into a short, thick, club-shaped aril over the end of the seed.

Range.—In a gully near Dairy Mountain, Eidsvold, Queensland, *Dr. T. L. Bancroft*, No. 24. The type. Stannary Hills, *Dr. T. L. Bancroft*, per C. T. White.

Affinities.—1. With *A. adunca* A. Cunn., from which it is distinguished by its broader phyllodes, more numerous glands, which are also of a different shape, paler flowers, broader pods and differently marked seeds.

2. With *A. neriifolia* A. Cunn., which is perhaps its closest affinity, and from which it may be distinguished by being strictly glabrous, having fewer and paler flowers, different shaped calyx, and pitted seeds.



Acacia angusta n. sp., 1-6.

Acacia semirigida n. sp., 7-14.

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3. *A. pustula*, n. sp.

(Plate XVII., figs. 8-12.)

Arbor parva glabra 30-40' alta; ramulis angularibus; phyllodiis uninerviis angustis oblongis falcatis vel angusto-lanceolatis, 7-12 cm. longis, 4-7 mm. latis, tenuibus non rigidis, venis lateralibus paulo penninerviis; costa utrinque prominente; glandula vix centrali, magna orificio magno; racemis phyllodiis brevioribus; floribus 5-meris; calyce paulo cupulare, lobis obtusis, ciliatis; petalis latis, lanceolatis paulo hirsutis; ovario glabro; legumine non viso.

A small, glabrous tree, 30-40 feet high, up to 12 inches in diameter. Bipinnate leaves from reversion shoots (suckers) numerous. Pinnae in three pairs, 3-4 cm. long, usually with a large gland opposite each pair, but sometimes wanting in the upper pairs. Leaflets 3 to 8 pairs, glabrous, pale green on both sides, oblong to slightly oblique, the lower leaflets 1-2 nerved, the upper ones sometimes triplinerved, with a gland opposite each pair, the main nerve closer to the upper margin, 5-12 mm. long, 2-4 mm. broad. Intermediate phyllodia from reversion shoots (suckers) evolved from the last pinnae, broad-lanceolate, penninerved, tapering into the petiole, the midrib nearer the lower margin, the upper margin bearing two, but usually one, conspicuous pimple-like gland on the lower half, 5-10 cm. long, 1-2 cm. broad. Adult phyllodia uninerved, narrow oblong to narrow-lanceolate, 7-12 cm. long, 4-7 mm. broad, thin, not rigid, the lateral veins more or less penninerved, the marginal nerves scarcely conspicuous, midrib prominent on both sides, gland towards the middle, rather large, pimple-like, with a large orifice. Racemes shorter than the phyllodia with 10-20 globular heads of 18-25, mostly 5-merous, flowers. Calyx somewhat cupular, with obtusely, slightly thickened, ciliate lobes. Petals broad, lanceolate, slightly hairy, longer than the calyx. Ovary smooth. Pod not seen. So named from the prominent marginal gland.

Range.—Eidsvold, Queensland, Dr. T. L. Bancroft, Nos. 13, 22, March to August, 1918. Brian's Pastures, Gayndah, S. A. Lundeman, July 1903.

Affinity.—With *A. neriifolia* A. Cunn., with which it has been confused, but *A. pustula* is strictly glabrous in all its characters, with the exception of the petals, whereas the phyllodes and inflorescence of *A. neriifolia* are silky pubescent. Although the phyllodes of both species are somewhat alike, they can be distinguished from each other by the absence of the large basal gland in *A. pustula*.

4. *A. attenuata*, n. sp.

(Plate XVII., figs. 1-7.)

Frutex parvus glaber, ramis angularibus et foliis heteromorphis; phyllodiis uninerviis rigide coriaceis oblongis vel fere spathulatis obtusis 6-13 cm. longis, 8-20 mm. latis in petiolum elongatum attenuatum; glandula basin versus; racemis axillaribus phyllodia aliquando superantibus; floribus 5-meris; calyce breviter lobato apice dense ciliato; petalis liberis glabris calycem duplo superantibus; ovario glabro; legumine immaturo plano ad 10 cm. longo, 1-1.5 cm. lato, inter semina paulo attenuato.

A small, glabrous shrub with angular branches and strongly heteromorphic leaves, the bipinnate foliage borne on the adult euphyllodineous plants, and even on the flowering branches. Bipinnate leaves, pinnae in 2-3 pairs, 4-8 cm. long; petiole compressed to semi-terete below the first pair of pinnae, with a linear gland a short distance from the base, the rachis deeply channelled on the upper surface, convex beneath; glands obscure or none; terminal seta small, acute. Leaflets 5-16 pairs, glabrous, very shortly petiolate, oblong to somewhat oblique, mucronulate; imperfectly and obscurely bi- or triplinerved; terminal seta of each pair of pinnae acute and somewhat gland-like. Phyllodia uninerved, rigidly coriaceous, oblong to almost spatulate, obtuse, or with a very small, curved mucro, 6-13 cm. long, 8-20 mm. broad in the middle, much narrowed into the somewhat elongated petiole, with a small marginal gland close to the base, the midrib confluent with the lower margin, the nerve-like margins and midrib conspicuous, lateral veins obscurely penninerved. Racemes axillary, glabrous, sometimes exceeding the phyllodia, with 4-12 rather large, globular heads on long peduncles, of about 20 5-merous flowers. Calyx divided nearly to the middle into five thick, linear, densely ciliate lobes, which probably separate to the base on maturity. Petals free, glabrous, thick, lanceolate, more than twice the length of the calyx. Ovary glabrous. Pod not seen in a fully ripe state, flat, up to 10 cm. long, 1-1.5 cm. broad; slightly contracted between the longitudinal seeds, valves thin; funicle filiform with one fold exceeding the seed.

Range.—Beerwah, 47 miles north of Brisbane, near Glasshouse Mountain, C. T. White, No. 1816, September, 1922.

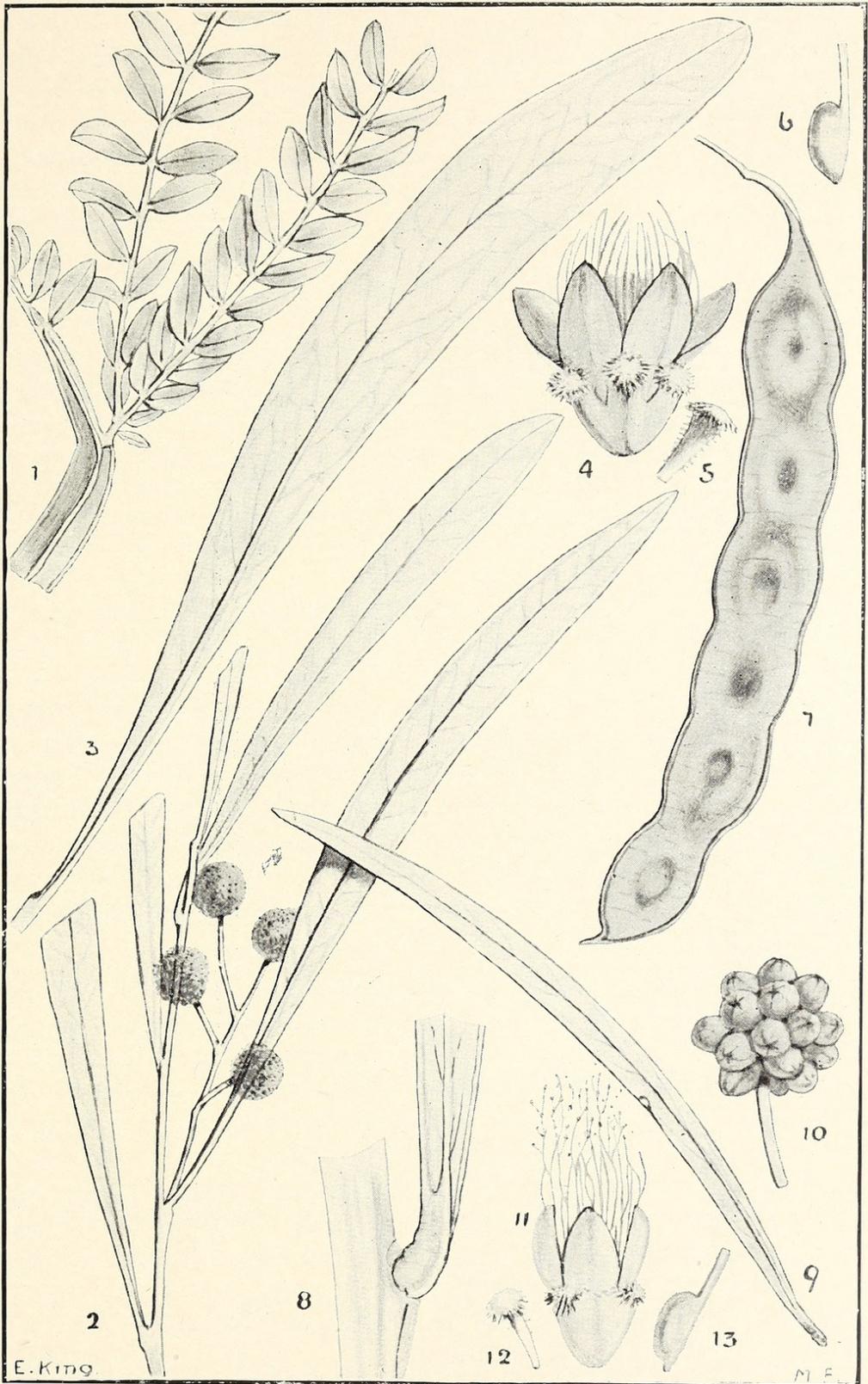
Affinity.—With *A. rubida* A. Cunn., with which it bears a very strong resemblance in its heteromorphic leaves, but differs mainly from that species in the more attenuated phyllodes, with the relatively smaller, different-shaped and strictly basal gland; in the large flowers, different shaped calyx, glabrous petals and much broader pod.

5. *A. semilunata*, n. sp.

(Plate XVIII., figs. 1-10.)

Frutex compactus 6-12' altus, ramulis semi-teretibus breviter pilosis; phyllodiis angusto-oblongis ad semi-lunatis mucronulatis 1.5-2.5 cm. longis, 4-7 mm. latis; petiolo brevi piloso; glandula parva infra medium phyllodii; racemis axillaribus terminalibus glabris 4-8 cm. longis; floribus sulphureis 5-meris; calyce cupulari sinuolato ciliato petalis brevioribus; petalis liberis laevibus; ovario glabro; legumine lineari contracto 5-8 cm. longo, 4-5 mm. lato; seminibus longitudinalibus oblongis nitentibus nigris.

A compact shrub, 6-12 feet high, with terete, reddish, branches, which are loosely invested with short white hairs, otherwise glabrous and echinate with the remains of the rudimentary common peduncles. Phyllodia narrow-oblong, mucronulate to semi-lunate, 1.5-2.5 cm. long, 4-7 mm. broad, the lower margin straight or nearly so, the upper arcuate, usually with a small depressed gland on the lower half; midrib central



Acacia attenuata n. sp., 1-7.

Acacia pustula n. sp., 8-12.

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or nearly so, continuous to the base; petiole small, distinct, usually pilose, also the base of the phyllode. Racemes axillary and terminal, usually simple, 4-8 cm. long, bearing 12-30 globular heads of 10-15 bright-yellow, 5-merous, glabrous flowers. Calyx patelliform, glabrous, except the sinuate ciliate border. Petals free, smooth and broad, slightly keeled, more than three times the length of the calyx. Bracts capitate, ciliate. Ovary glabrous. Pod glabrous, shortly stipitate, linear, convex, straight or curved, contracted between the seeds, 5-8 cm. long, 4-5 mm. broad. Seeds longitudinal, oblong, glossy black. Funicle thread-like for about half its length, with one short central fold, then gradually thickened into a club-shaped lateral aril over the end of the seed.

Range.—Knockbreak Station, *viâ* Chinchilla, Queensland, *Dr. T. L. Bancroft*, August, 1918. The type. Auburn River, between Taroom and Eidsvold, *Dr. H. I. Jensen*, August, 1922, per C. T. White. Texas, *J. L. Boorman*, September, 1910.

Affinity.—With *A. cultriformis* A. Cunn. There is a general similarity between the two species as regards the phyllodes, which are, however, more lunate and uniformly broad in *A. semilunata*, less glaucous, or not at all glaucous, while the branchlets of the latter are pilose and more terete than the branches of *A. cultriformis*. There are also certain morphological differences in the flowers of both species.

6. *A. jucunda*, n. sp.

(Plate XVIII., figs. 11-16.)

Frutex robustus 8-15' altus, surculis pruinosis, ramulis breviter pilosis; phyllodiis tenuibus obscuris oblongis vel angusto-lanceolatis plerumque mucronatis uninerviis fere glabris 4-6 cm. longis, 1.5-2.5 cm. latis; glandula marginali prope basin; racemis axillaribus glabris 3-9 cm. longis, capitula 10-30 globosa 15-20 florum 5-merorum gerentibus; calyce turbinato, lobis brevibus crassis ciliatis; petalis laevibus calyce multo longioribus; ovario glabro; legumine non viso.

A robust shrub, 8-15 feet high, the young tips hoary with a very short, soft, tomentum; branchlets slightly angular, and more or less invested with short, white hairs. Phyllodia thin, dull, oblong to narrow-lanceolate, mucronate, uninerved, glabrous or nearly so, 4-6 cm. long, 1.5-2 cm. broad, the margins nerve-like, scarcely prominent, midrib raised on both sides, scarcely central, usually closer to the upper margin; lateral veins very fine, penninerved; gland small, close to the base. Racemes axillary, rarely terminal, glabrous, 3-9 cm. long, bearing 10 to over 30 small, globular heads of 15-20, 5-merous flowers; peduncles short, slender, subtended by a small, acute bract. Bracts of the flowers capitate, ciliate. Calyx cupular to turbinate, faintly ribbed, almost truncate, with a ciliate border. Petals 5, free, glabrous, lanceolate, more than twice the length of the calyx. Ovary glabrous; pod not seen.

Range.—Knockbreak Station, *viâ* Chinchilla, Queensland, *Dr. T. L. Bancroft*, Nos. 25, 35, August, 1918, also at Lochaber Station, same district and collector.

It is one of those species which does not appear to set pods, as observed by *Dr. Bancroft* in his letter to me (*J.H.M.*) dated 13th November, 1923, as follows:—

“You will remember my number 25 *Acacia*, a form somewhat resembling *A. podalyriæfolia*, which you pronounced new, but could not name until you saw the

Pods. There was a scrub of it at Lochabar. Afterwards I found it at Knockbreak, and Mr. Sinclair promised to get pods. I want to tell you that this *Acacia* does not seem to make fruit; it seems to be a free suckering form. At Lochabar, where there is half an acre of a scrub of it, I marked with white rags several places where there were flowers. Afterwards I visited the place and saw the branches I had marked, but there were no pods. I think this was four years ago; at that time I dug up several small suckers and managed to strike one of them in sand and afterwards planted it in the garden; it has produced a beautiful bush and recently was loaded with flowers. It produced more flowers than those both at Lochabar and Knockbreak (both places visited by me recently). I should say it is worthy of cultivation, as the foliage is pretty and the flowers exceptionally beautiful. I watched my plant carefully for pods, but none were formed.

“At Knockback recently I marked several branches where there appeared indications that fruit was forming, but I have learned from Mr. Sinclair that pods were not formed. Now can you tell me whether it is likely that this *Acacia* will ever form fruit? Don't you think you could name it without seeing the pods? At Lochabar the plants there were very dry when I looked recently for indications of pods forming. The dry season (one might say) was the reason of the plant not forming seed. My bush, however, was in a good place and was watered; there were several indications that a pod was likely to form, but the raceme withered away. In the parcel of specimens I am sending the good ones are from my bush; the others, some from Lochabar and some from Knockbreak. It is a pity, after all these years of waiting and watching, that no pods can be obtained.”

Affinity.—With *A. podalyriæfolia* A. Cunn., from which it may be distinguished by being more glabrous and greener, by the narrower and longer phyllodes and basal gland, and in the glabrous racemes, smaller and glabrous flowers, and also in habit.

JULIFLORAE-RIGIDULAE.

A. stipuligera F.v.M., var. *glabrifolia*, n. var.

Young tips resinous, strictly glabrous, phyllodes glabrous, usually binerved. Jericho, Queensland, H. Deane, No. 212.

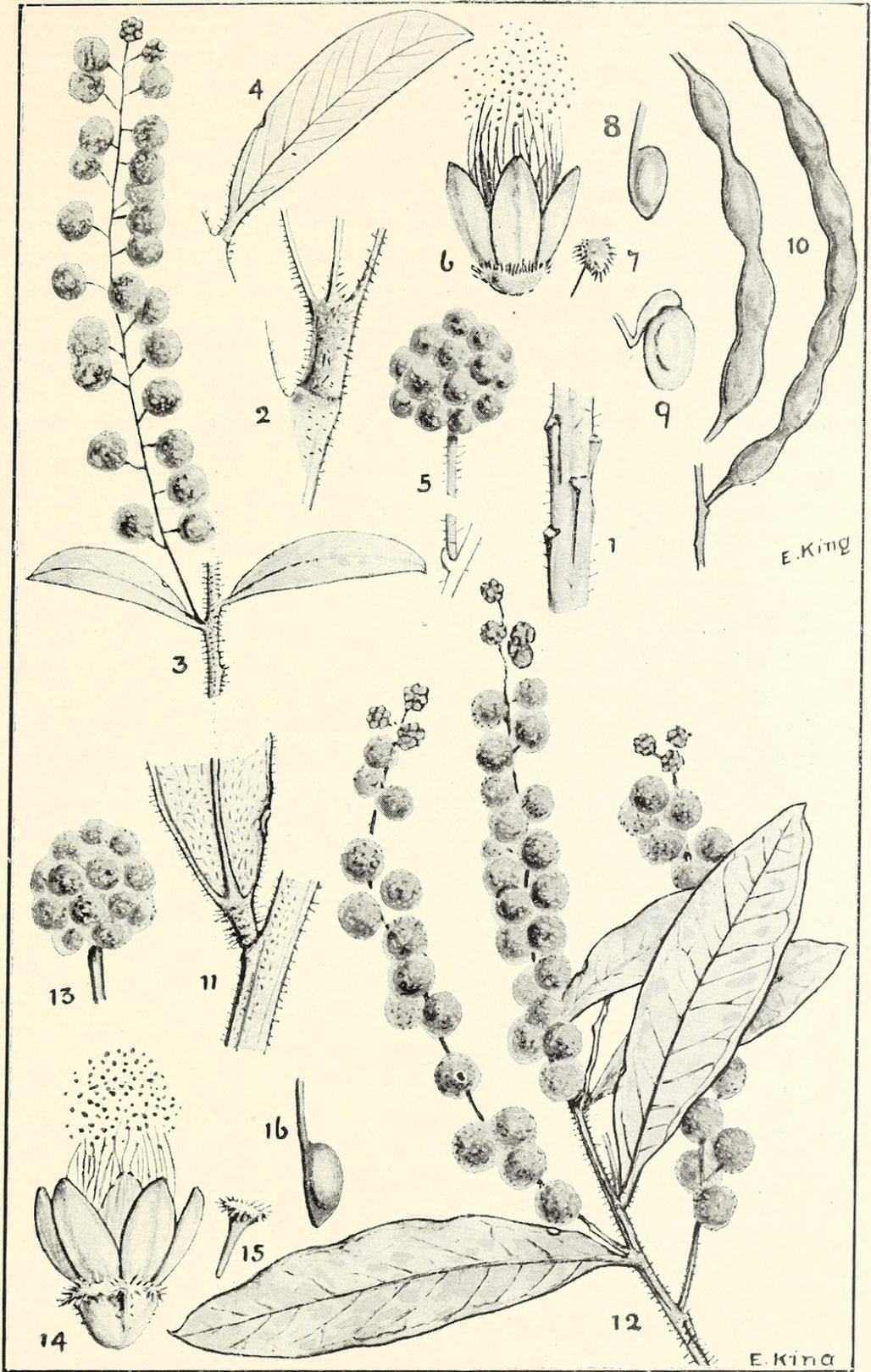
BIPINNATAE-BOTRYOCEPHALAE.

7. *A. glaucocarpa*, n. sp. (*A. polybotrya* Benth. var. *foliolosa* Benth.).
(Plate XIX.)

The variety name *foliolosa* cannot be taken up as it is preoccupied by *Acacia foliolosa* R. Grah., which equals *Albizzia myriophylla*.

Frutex altus vel arbor parva plus minus glaucus et pubescens; ramulis teretibus; pinnis 3-7 paribus 2-4" longis; foliis 12-25 paribus oblongis obtusis vel acutis; 5-14 mm. longis, 2-3 mm. latis; floribus in racemis axillaribus vel terminalibus, 15-20 in capitulo, 5-meris; pedunculis brevibus crassis tomentosissimis; calyce pruinoso lato-turbinato; sepalis brevibus dense ciliatis; petalis glabris liberis tenuibus uninerviis; ovario pruinoso; leguminibus glaucis 8-13 cm. longis, 1 cm. latis plerumque rectis inter semina contractis; seminibus ovatis 5-6 mm. longis, 3-4 mm. latis; funiculo crasso naviculari seminis apicem tegente.

A tall shrub or tree, more or less glaucous and minutely pubescent; branchlets terete and somewhat distantly striate. Pinnae 3-7 pairs or



E. King

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Acacia semilunata n. sp., 1-10.

Acacia jucunda n. sp., 11-16.

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more, 2-4 inches long, leaflets 12-25 pairs, oblong obtuse or very shortly acute, 5-14 mm. long, 2-3 mm. broad, the midrib nearer the upper margin, and sometimes there are 1-2 very fine spreading nerves on the lower portion, which are only present on the undersurface of the leaflet; gland usually conspicuous, orbicular, opposite the lower and upper pairs of pinnae; terminal seta short and thick. Flowers in axillary or terminal racemes, or when terminal the racemes more or less paniculate. Flowers 15-30 in the head, on short, stout, tomentose peduncles, subtended by small acute bracts, smaller and paler than in *A. polybotrya*, 5-merous. Calyx hoary, broadly turbinate, with short, obtuse, densely ciliate, thick lobes; bracts capitate, ciliate. Petals glabrous or nearly so, free, very thin, 1-nerved, twice the length of the calyx. Ovary hoary. Pods glaucous, 8-13 cm. long, 1 cm. broad, straight or curved, prominently contracted between the seeds; seeds longitudinal, ovate, 5-6 mm. long, about 4 mm. broad; funicle thick, navicular, capping the end of the seed.

Range.—At present it seems to be confined to Queensland, and is represented in the National Herbarium, Sydney, from the following localities:—Laidley, *C. T. White*, March, 1921; Eidsvold, *Dr. T. L. Bancroft*, March, 1918; Benarkin, *F. W. Weatherhead*, April, 1919; Planet Creek, *F. M. Bailey* July, 1904; Goodna, *C. T. White*, March, 1913; on bank of creek, Bogantungan, 220 miles west of Rockhampton, small trees 20-25 feet high, *R. H. Cambage*, No. 3982; southern parts of Queensland, *Bowman*, labelled *A. polybotrya* var.(?) in Mueller's handwriting. Bentham quotes the following localities:—Burnett River, *F. Mueller*; Ipswich, *Nernst*.

Affinity.—With *A. polybotrya*, but differing from that species in the more numerous and larger pairs of pinnæ, more numerous leaflets, paler and somewhat smaller flowers, longer, broader and more glabrous pods, and different shaped funicle. It usually flowers two or three months earlier than *A. polybotrya*; but both species appear to mature their pods about the same time.

EXPLANATION OF PLATES.

PLATE XVI.

Acacia angusta, n. sp.

(1) Lower portion of phyllodia showing the attachment and gland; (2) Twig showing phyllodes and inflorescence; (3) Phyllode; (4) Flower; (5) Bract; (6) Ovary.

Acacia semirigida, n. sp.

(7) Lower portion of phyllodia; (8) Twig showing phyllode and raceme; (9) Head of flowers; (10) Flower; (11) Bract; (12) Ovary; (13) Pod; (14) Seed and funicle.

PLATE XVII.

Acacia attenuata, n. sp.

(1) Bipinnate leaves; (2) Twig, showing phyllodes and raceme; (3) Phyllode; (4) Flower; (5) Bract; (6) Ovary; (7) Pod.

Acacia pustula, n. sp.

(8) Lower portion of phyllodia; (9) Phyllode; (10) Head of flowers; (11) Flower; (12) Bract; (13) Ovary.

PLATE XVIII.

Acacia semilunata, n. sp.

(1) Portion of branchlet showing the petiole scars; (2) Lower portion of phyllodia, showing attachment; (3) Twig, showing phyllodes and raceme; (4) Phyllode (enlarged); (5) Head of flowers; (6) Flower; (7) Bract; (8) Ovary; (9) Seed and funicle; (10) Pods.

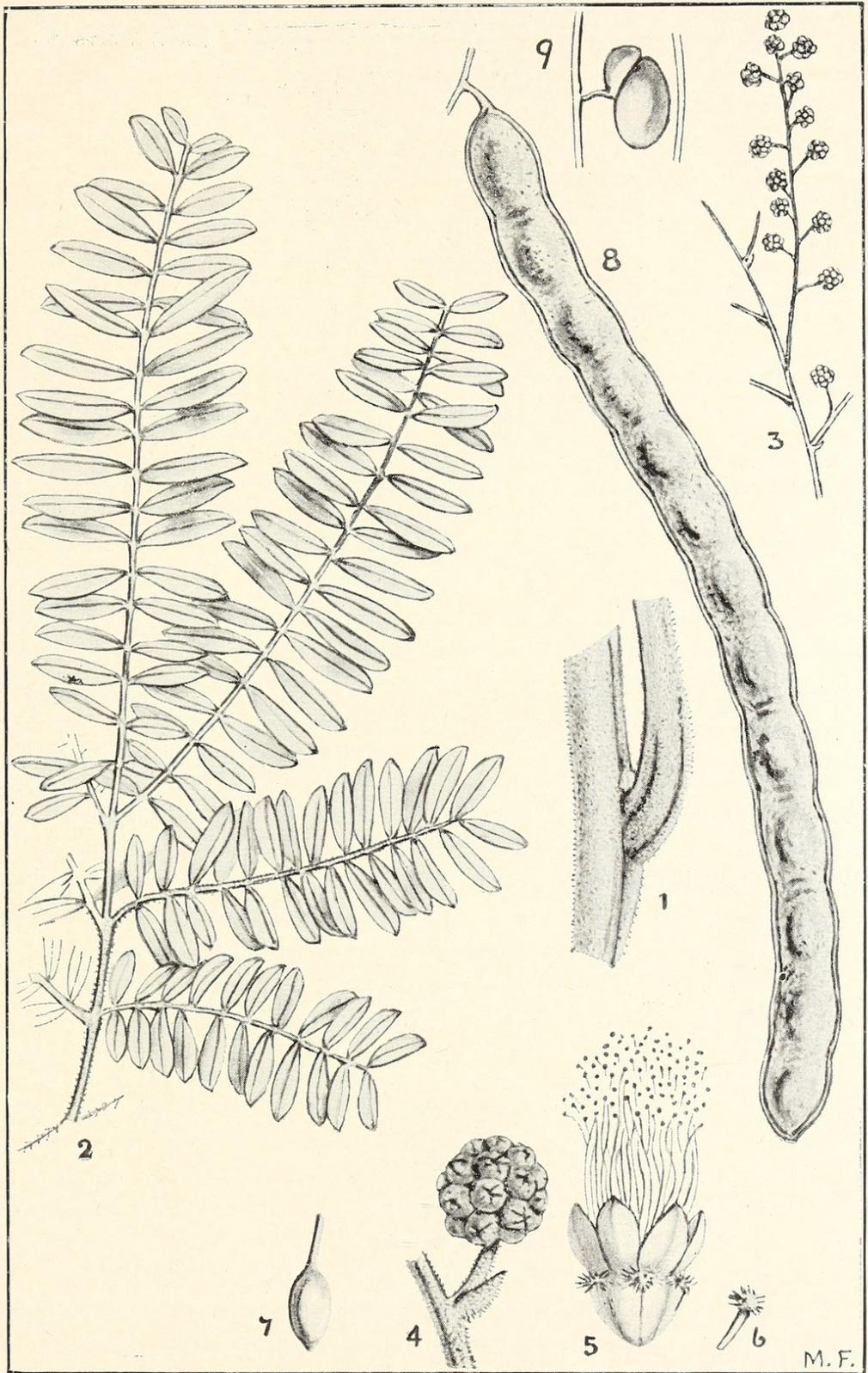
Acacia jucunda, n. sp.

(11) Lower portion of phyllodia, showing attachment; (12) Twig, showing phyllodes and racemes (natural size); (13) Head of flowers; (14) Flower; (15) Bract; (16) Ovary.

PLATE XIX.

Acacia glaucocarpa, n. sp.

(1) Petiole, showing attachment and vestiture (enlarged); (2) Pinnae or bipinnate leaves (natural size); (3) Raceme; (4) Head of flowers; (5) Flower; (6) Bract; (7) Ovary; (8) Pod (natural size); (9) Seed and funicle.



Acacia glaucocarpa n. sp.

[Face page 122.]



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