Notes on miscellaneous Acacia species from Tropical Africa

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ABSTRACT

Information relating to a number of miscellaneous Acacia species from tropical Africa, is presented. Two new species, A. manubensis and A. pseudonigrescens, are described.

While continuing studies on the tropical African Acacias, attention was drawn to several matters which required investigation. A number of decisions requiring explanation in print form the subject of this paper.

ACACIA ANDONGENSIS WELW EX HIERN

Welwitsch 1814 from Pungo Andongo in Angola, the type specimen of A. andongensis Welw. ex Hiern, Cat. Afr. Pl. Welw. 1: 314 (1896), is a fruiting specimen. The isotype in the British Museum (Natural History) reveals that the young branchlets are armed with paired, broad-based, recurved prickles and that the leaves have up to 9 pinnae pairs and up to 19 pairs of leaflets per pinna. The leaf-rhachides are unarmed and there is a small gland at the junction of the top, or the top 3, pinnae pairs. The leaflets are oblong or linear-oblong, up to 7.5×2 mm, discolorous, with a basal tuft of pubescence on the lower surface to one side of the midrib. The inflorescence axes are fairly densely pubescent and the remains of the calyces (just visible at the point of attachment of some of the pods) are sparingly pubescent. The pods are up to 17 cm long and 2,5-2,7 cm wide, glabrous apart from some indumentum on the stipe.

A. andongensis is clearly very closely related to A. goetzei Harms subsp. microphylla Brenan, but it apparently differs from the latter solely in having sparingly pubescent calyces. Pubescent inflorescence axes do occur in A. goetzei, for example, Tweedie 1800 (K) from 30 km north of Kitale on the road to Suam bridge, Trans-Nzoia district, Kenya. Similarly, pubescent stipes also occur, for example, Batty 929 (K) from 16 km from Morogoro along the Iringa road in Tanzania. So far, however, sparingly pubescent calyces have not been definitely recorded in A. goetzei.

Although A. andongensis and A. goetzei are extremely closely related and are probably not really specifically distinct, it is considered prudent at this stage to maintain the two as distinct species, particularly as A. andongensis is the earlier name and must be adopted if A. andongensis and A. goetzei are shown to be conspecific. The alleged distinctions recorded between A. andongensis and A. goetzei in the key to species in Consp. Fl. Angol. 2: 269 (1956) unfortunately do not prevail. It is perhaps significant that A. andongensis is still known only from the type collection. More material of A. andongensis from the type locality is desired to enable the identity of the species to be positively established. It seems reasonably certain, however, that further material will reveal that the sparingly pubescent calvees of Welwitsch 1814 represent a local variant which is not worthy of formal taxonomic recognition, and that the name A. andongensis will have to supplant the more familiar A. goetzei.

ACACIA ETBAICA SCHWEINF, VAR. HIRTA A. CHEV.

Chevalier 8992 and 9050 from the Central African Republic, the syntypes of A. etbaica Schweinf. var. hirta A. Chev., in Bull. Soc. Bot. Fr. 74: 959 (1927), are housed in the Paris herbarium and both are flowering specimens. The young branchlets are pubescent, the bark is reddish-brown and flaking minutely, and the paired stipular spines are straight and up to 1 cm long. The leaves have up to 14 pinnae pairs and the petioles, rhachides and rhachillae are sparingly to fairly densely pubescent. The leaflets are in up to 24 pairs per pinna, up to 3.75×1 mm, discolorous, glabrous apart from the conspicuous marginal cilia. The flowers are in round heads on fairly densely pubescent peduncles, and the involucels are up to one-third of the way up the peduncle. The calyx is pubescent apically, while the corolla is glabrous.

Although bearing a superficial resemblance to A. etbaica, Chevalier 8992 and 9050 are in fact both referable to A. gerrardii Benth. var. gerrardii. A. etbaica is not recorded from west Africa. This opportunity is now taken of reducing A. etbaica var. hirta to synonymy under A. gerrardii var. gerrardii.

A. gerrardii Benth. var. gerrardii.

Brenan in Kew Bull. 12: 369 (1958). Type: Natal, *Gerrard* 1702 (K, holo.!, BM!, TCD!).

A. etbaica Schweinf. var. hirta A. Chev. in Bull. Soc. Bot. Fr. 74: 959 (1927) synon. nov. Syntypes: Central African Republic, Lac Iro, Chevalier 8992 (P!); Chevalier 9050 (P!).

ACACIA FISCHERI HARMS

The two syntypes of *A. fischeri* Harms, in Bot. Jahrb. 51: 365 (1914), namely, *Fischer* 157 and *Stuhlmann* 672 from Tanzania, were both destroyed in the Berlin herbarium during the last war, and all attempts to trace isosyntypes have so far proved fruitless. In the British Museum (Natural History) there is a sketch of the Berlin specimen of *Fischer* 157, but unfortunately the sketch is rather poor and does not really enable the species to be identified. In the British Museum, however, there is also a flowering specimen of *A. fischeri*, namely, *B. D. Burtt* 1131 from near Salia in the Kondoa district of Tanzania. It carries the comment "Det. in Dahlem Herb. 5/12/1928 by Dr Harms & B.D.B." In the absence of any isosyntypes, *Burtt* 1131 in the British Museum is selected as the neotype of *A. fischeri*.

ACACIA GOSSWEILERI BAK.F.

E. G. Baker, in J. Bot. 66, Suppl. Polypet: 156 (1928), based his description of *A. gossweileri* on *Gossweiler* 1740 from Angola. The young branchlets of *Gossweiler* 1740 are armed with paired, broadbased, recurved prickles and the lower surfaces of the leaf-petioles, rhachides and some of the rhachillae are armed with numerous scattered, yellowish, recurved prickles up to 2,5 mm long. The petioles, rhachides and rhachillae are sparingly to densely clothed with a

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slightly golden, spreading indumentum. The petioles have a small gland on the upper surface and the rhachides have a small gland at the junction of the top 1-4 pinnae pairs. The leaves have up to 10 pinnae pairs and up to 16 leaflets per pinna. The leaflets on the holotype in the British Museum (Natural History) are all fairly uniform and are up to 6 × 2 mm, but on the isotype in the Kew herbarium, one leaf is much larger than the others and bears larger leaflets which are up to $10 \times 3,5$ mm. The leaflets are mostly linear-oblong or oblong, slightly falcate, asymmetric basally, rounded to subacute apically, discolorous, with a somewhat prominent venation beneath, with ciliate margins and pubescence on the proximal side of the midrib on the lower surface, especially basally. The inflorescence axes are up to 9 cm long (including the peduncle) and are sparingly clothed with spreading hairs. The flowers are sessile or almost so and the calyces and corollas are glabrous.

Gossweiler 1740 falls within the range of variation of A. goetzei Harms. A. goetzei is extremely variable vegetatively, especially in the indumentum and in leaflet shape and size, and the armature of the leaf-rhachis is also variable. As the leaflets in Gossweiler 1740 are mostly less than 3 mm wide and are oblong or linear-oblong, as the leaf-rhachides are armed, and as there is a small gland at the junction of the top 1–4 pinnae pairs, A. gossweileri is referred to synonymy under A. goetzei subsp. microphylla Brenan.

A. goetzei *Harms* subsp. microphylla *Brenan* in Kew Bull. 11: 204 (1956). Type: Malawi, Mombera district, Njakwa to Fort Hill, *Greenway* 6393 (K, holo.!).

A. gossweileri Bak. f. in J. Bot. 66, Suppl. Polypet: 156 (1928) synon. nov. Type: Angola, Benguela, Anha, rio Lutombi, Gossweiler 1740 (BM, holo.!; K!).

ACACIA LATHOUWERSII STANER

Bredo 1395 from Ishwa—Lac Albert in Zaire, the holotype of A. lathouwersii Staner, in Ann. Soc. Sci. Brux. 55 B: 311 (1935), is housed in the Jardin National de Belgique Bruxelles and consists of two twigs. The left-hand twig, which is the larger, bears flowers and pods, while the right-hand specimen bears flowers only. Some of the spinescent stipules on each twig are fused basally into deep reddish-brown to purplish, ± round "ant-galls" up to 3,5 cm in diameter. The bark on the twigs is yellowish and split transversely irregularly. The leaves are glabrous, have up to 12 pinnae pairs and the leaflets are glabrous throughout or minutely ciliate. The peduncles are glabrous and the involucels are basal. The flowers are whitish, the calyces are glabrous and up to 1,5 mm long, and the corollas are glabrous and up to 4 mm long. The pods are falcate, finely longitudinally venose, glabrous, attenuate at both ends and up to 5 mm wide.

Bredo 1395 is undoubtedly conspecific with A. drepanolobium Harms ex Sjöstedt. A. drepanolobium is a rather variable species particularly in the degree of pubescence, and A. lathouwersii appears to be simply a glabrous form of this species. This opportunity is now taken of reducing A. lathouwersii to synonymy under A. drepanolobium.

A. drepanolobium Harms ex Sjöstedt, Schwed. Zool. Exped. Kilimanjaro 8: 116–117, t. 6 fig. 7–8, t. 7 fig. 2–3 (1908). Type: Tanzania, Kilimanjaro, between Kwagogo and Moshi, Engler 1688 (B, holo. †, K, drawings!).

A lathouwersii Staner in Ann. Soc. Sci. Brux. 55 B: 311 (1935). synon. nov. Type: Zaire, Ishwa—Lac Albert, Bredo 1395 (BR, holo.!).

ACACIA MACALUSOI MATTEI

Mattei, in Boll. Orto Bot. Giard. Col. Palermo 7: 94 (1908), based his description of *A. macalusoi* on *Macaluso* 65 from Giumbo in the Somali Republic. Unfortunately it has not been possible to locate *Macaluso* 65. The specimen is thought to be housed in the Instituto Botanico di Palermo, but attempts to trace it have been unsuccessful. Consequently the identity of *A. macalusoi* remains in some doubt.

Chiovenda, in Ann. Bot., Roma 13: 392 (1915), mentions having received the type specimen on loan. He found that there were two specimens mounted on the sheet of *Macaluso* 65, a flowering twig and a fruiting twig, and noted that the two twigs belonged to two different species, the flowering twig being very closely allied to *A. senegal* (L.) Willd.. Because of this mixed gathering, Chiovenda excluded the flowering twig from *A. macalusoi* and amended the description of the species accordingly, the fruiting twig thus becoming the lectotype of the species. Owing to the paucity of the fruiting twig, Chiovenda was unable to establish to which species A. *macalusoi* was most closely allied, but he concluded that it was not allied to *A. senegal*.

Subsequently, Chiovenda, Fl. Somala 2: 186, fig. 113 (1932), referred Senni 135 and 152 to A. macalusoi, fig. 113 being based on the latter specimen. These two specimens were received on loan from the Herbarium Universitatis Florentinae. Both are very poor fruiting specimens but they are apparently members of the A. goetzei Harms complex. As the remains of the calyces (just visible at the point of attachment of the pods) are sparingly puberulous, the specimens are thought possibly to be referable to A. rovumae Oliv., but the material is too poor for one to come to any definite conclusion. If the two specimens matched the type specimen of A. macalusoi, then there is a distinct possibility that A. macalusoi is not a good species.

ACACIA MANUBENSIS J. H. ROSS

Acacia manubensis J. H. Ross, sp. nov., A. goetzei Harms affinis, sed leguminibus minoribus differt; affinis etiam A. nigrescenti Oliv., sed foliolis numerosioribus et minoribus differt; ab utraque insuper cortice flavido papyraceo desquamato differt.

Arbor parva, usque 5 m alta; cortice flavido papyraceo desquamato. Ramuli juveniles rubrobrunnei vel atrogrisei, brevissime incano-puberuli, lenticellis crebris notati. Stipulae haud spinescentes. Aculei infrastipulares, ut videtur geminati, usque 3 mm longi, cum ramulis concolores. Folia: petiolus 0,5-1,4 cm longus, puberulus, supra interdum glandula ornatus; rhachis 0-2,8 cm longus, puberulus; pinnae 1-4-jugatae; rhachillae 0,8-3,8 cm longae, puberulae; foliola 3-7-juga, 7-12 mm longa, 3,5-9 mm lata, oblique obovato-elliptica vel \pm obovato-orbicularia, apice rotundata usque obtusa, matura supra appresse puberula, subtus appresse puberula, costa et nervis lateralibus subtus satis obviis. Inflorescentiae spicatae; spicis axillaribus solitariis vel fasciculatis, 1,8-3,5 cm longi; pedunculis \pm 1 cm longis, puberulis. Flores sessiles. Calyx 2-2,5 mm longus, glaber. Corolla 3-4 mm longa, glabra. Stamina numerosa; filamenta 4-4,5 mm longa; antherae apice glandula caduca coronatae. Ovarium breviter stipitatum, ± 1,2 mm longum, glabrum. Legumina 5,8-8 cm longa, 1,7-2 cm lata, oblonga, recta vel subrecta, purpurascenti-brunnea, minutissime puberula, subtiliter nervosa, apice rotundata vel subtiliter mucronata. Semina haud matura.

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Type: Somali Republic, Manúb, 49° 50′ E, 11° 05′ N, J.~G.~B.~Newbould 1080 (K, holo.).

Small tree to 5 m high; bark yellowish, papery, peeling; young branchlets reddish-brown or dark grey, very shortly and finely puberulous, with numerous somewhat transversely-elongated lenticels, flaking minutely. Stipules not spinescent. Prickles infrastipular, apparently in pairs, up to 3 mm long, the same colour as the branchlets. Leaves: petiole 0,5-1,4 cm long, puberulous, eglandular above or with a small, slightly-raised gland; rhachis 0-2,8 cm long, puberulous; pinnae 1–4 pairs; rhachillae 0,8–3,8 cm long, puberulous; leaflets 3–7 pairs, 7–12 × 3,5– 9 mm, oblique, obovate-elliptic or ± obovate-orbicular, apex rounded to obtuse, appressed puberulous on upper and lower surfaces, midrib and lateral nerves \pm conspicuous beneath. Inflorescence spicate; spikes 1,8–3,5 cm long, axillary, solitary or fascicled; peduncles \pm 1 cm long, puberulous. *Flowers* sessile. Calyx 2-2,5 mm long, glabrous. Corolla 3-4 mm long, glabrous, tinged with red. Stamens numerous; filaments 4-4,5 mm long; anthers with a deciduous apical gland. Ovary shortly stipitate, \pm 1,2 mm long, glabrous. Pods $5,8-8 \times 1,7-2$ cm, oblong, straight or almost so, purplish-brown, minutely puberulous, finely venose, apex rounded or minutely mucronate. Seeds immature.

On account of the paired prickles, spicate inflorescences and flowers with glabrous calyces, A. manubensis falls within the A. goetzei Harms— A. nigrescens Oliv. complex. It differs from A. goetzei in having different leaflets and smaller pods, from A. nigrescens in having more numerous and smaller leaflets and smaller pods, and from both of these species in having yellowish, papery, peeling bark.

A. manubensis is known only from the type collection. More material is desired.

I am grateful to Mr H. K. Airy Shaw for checking the Latin description.

ACACIA PSEUDONIGRESCENS BRENAN & J. H. ROSS

Acacia pseudonigrescens Brenan & J. H. Ross, sp. nov.; A. nigrescenti Oliv. affinis, sed cortice laevi griseo pulverulento, calyce dense pubescente, corolla adpresse pubescente, petiolis glandula magna applanata vel \pm depressa brevi spatio supra pulvinum sita instructis, foliolis utrinque puberulis, nervis compluribus conspicuis e basi ortis praeditis differt.

Arbor parva, gracilis, usque ad 5 m alta, ramulis suberectis, cortice laevi griseo pulverulento. Ramuli juveniles brunnei vel rubrobrunnei, juniores dense et brevissime incano-puberuli, demum glabrescentes, glandulis numerosis minimis conspicuis inter pilos immixtis, epidermide desquamante, inermes. Stipulae haud spinescentes. Folia: petiolus 1-2 cm longus, dense et brevissime puberulus, supra glandula applanata vel \pm depressa magna rotundata vel elongata usque 3,5 × 2,25 mm super basim petioli sita ornatus; pinnae 1-jugatae; rhachillae 2-3,2 cm longae, dense et breviter puberulae; foliola 2-juga, 18-35 mm longa, 11-31 mm lata, oblique obovato-orbicularia vel late obovato-elliptica, basi asymmetrica, apice rotundata et interdum plus minusve emarginata, coriacea, glauca, supra et subtus subtiliter appresse puberula, venulis compluribus conspicuis e basi ortis instructa. Inflorescentiae spicatae, spicis 2,5-3,2 cm longis, solitariis vel in ramulis lateralibus abbreviatis aggregatis; pedunculi 0,6-1 cm longi; pedunculi et axes dense breviter pubescentes. Flores ochroleuci, sessiles. Calyx cupularis, 2 mm longus, extra dense pubescens, breviter 5-lobatus, lobis triangularibus.

Corolla 3 mm longa, extra adpresse pubescens, lobis 5, ovato-triangularibus, 0,5–1 mm longis, 0,75–1 mm latis, apice subacutis. Stamina numerosa; filamenta libera, usque 4 mm longa; antherae \pm 0,1 mm latae, apice glandula caduca coronatae. Ovarium stipitatum, \pm 1 mm longum, pubescens; stylus glaber, \pm 2,5 mm longus. Legumen ignotum.

Type: Ethiopia, 8 km west of Mustahil on western track to Kelafo, 5° 15′ N, 44° 40′ E, low limestone or gypsum hillocks with cover of predominantly succulent shrubs, 305 m, 21 June 1971, *M. G. Gilbert* 2129 (K, holo.).

Small, slender tree up to 5 m high, branches rather erect, bark smooth, grey, powdery. Young branchlets brown or reddish-brown, in places appearing as though whitewashed over a purplish background, densely and shortly puberulous when young, but becoming glabrescent with age, with numerous minute, conspicuous glands scattered amongst the hairs, flaking minutely, unarmed. Stipules not spinescent. Leaves: petiole 1-2 cm long, densely and shortly puberulous, with a large, rounded or elongate-flattened or depressed gland, up to 3.5×2.25 mm, situated at the base of the petiole; pinnae 1 pair; rhachillae 2-3,2 cm long, densely and shortly puberulous, with a gland at the junction of the top leaflet pair; leaflets 2 pairs per pinna, 18-35 mm long, 11-31 mm wide, obliquely obovate-orbicular or broadly obovate-elliptic, asymmetric basally, apex rounded and sometimes slightly emarginate, coriaceous, glaucous, finely appressed-puberulous above and below, with several conspicuous veins arising from the base. Inflorescences spicate, spikes 2,5-3,2 cm long, solitary or aggregated in short, lateral shoots; peduncle 0,6-1 cm long; peduncles and axes densely and shortly pubescent. Flowers pale yellowishwhite, sessile. Calyx cupular, 2 mm long, densely pubescent externally, shortly 5-lobed, lobes triangular. Corolla 3 mm long, appressed-pubescent externally, lobes 5, ovate-triangular, 0,5–1 mm long, 0,75–1 mm wide, subacute apically. Stamens numerous; filaments free, up to 4 mm long; anthers \pm 0,1 mm wide, with an apical, caducous gland. Ovary stipitate, ± 1 mm long, pubescent; style glabrous, \pm 2,5 mm long. Pod unknown.

A. pseudonigrescens bears a strong superficial resemblance to A. nigrescens Oliv., but is readily distinguishable from the latter in having a smooth, grey, powdery bark, a densely pubescent calyx, an appressed-pubescent corolla, a pubescent ovary, a petiole with a large, flattened or \pm depressed, discoid or elongate gland situated a short distance above the pulvinus, and finely appressed-puberulous leaflets with several conspicuous basal nerves arising from the point of attachment. In A. nigrescens the leaflets have a distinct midrib and prominent lateral nerves, although occasionally there are also a few relatively inconspicuous basal nerves. In A. pseudonigrescens, however, there is often no conspicuous midrib, but rather a number of prominent basal nerves arising from the point of attachment of the leaflet. The leaflets in A. pseudonigrescens are finely appressed-puberulous on both surfaces, while in A. nigrescens the leaflets are either glabrous throughout or sometimes they are clothed with semi-erect hairs above and/or below. Leaflet size and shape in the two species are similar, but the texture differs, the leaflets in A. pseudonigrescens being more coriaceous.

Although *Gilbert* 2129 is unarmed, it is anticipated that further collections of this species may be armed with paired prickles. It will be recalled that *A. nigrescens* is occasionally unarmed.

In addition to the above morphological differences between *A. pseudonigrescens* and *A. nigrescens*, a large geographical discontinuity separates the two species, *A. nigrescens* not being recorded further north than Tanzania.

More material of A. pseudonigrescens, particularly fruiting material, is desired.

J.P.M.B. & J.H.R.

ACACIA SEYAL DEL.

In the past A. seyal has often been confused with A. hockii De Wild., but, although the two are closely related, they are considered to be distinct species. A. hockii differs from A. seyal chiefly by having a non-powdery bark. The twigs are usually (but not always) more elongate and slender, with a reddish or brownish bark which does not peel to expose the inner layer as, so characteristically, does the bark of A. seyal, while the young branchlets are usually clothed with a more or less dense puberulence which is absent in A. seyal.

De Wildeman described three varieties of A. seyal from Zaire, namely, var. lescrauwaetii, var. seretii and var. kassonionga, but an examination of the type specimens of each of these varieties revealed that all are in fact referable to A. hockii and not to A. seyal. A. hockii, which is widespread in tropical Africa and occupies a wide range of habitats, is a very variable species. All of the above variants fall within the overall range of variation of A. hockii and none is considered worthy of retention under A. hockii. The three varieties are now relegated to synonymy.

A. hockii De Wild. in Feddes Repert. 11: 502 (1913). Type: Zaire, Katanga, Luafu valley, Hock s.n. (BR, holo.!).

A. seyal Del. var. lescrauwaetii De Wild. in Ann. Mus. R. Congo Belge, Bot., Ser. V, 2: 128 (1907) synon. nov. Type: Zaire, entre Lulua et Kanda-Kanda, Lescrauwaet 338 (BR, holo.!).

A. seyal Del. var. seretii De Wild. 1.c.: 128 (1907) synon. nov. Type: Zaire, region du chef Guago, Seret 290 (BR, holo.!).

A. seyal Del. var. kassonionga De Wild., Pl. Bequaert. 3: 65 (1925) synon. nov. Syntypes: Zaire, Kikosa, Delevoy 91 (BR!); nord de la Lukuga, Delevoy 224 (BR!).

ACACIA STENOCARPA HOCHST. EX A. RICH.

A. stenocarpa Hochst. ex A. Rich., Tent. Fl. Abyss. 1: 238 (1847), has frequently been misinterpreted in the past and often confused with A. hockii De Wild. It was therefore of great interest to find two sheets of Schimper 1948 from Ethiopia, the type number of A. stenocarpa, in the Paris herbarium. Unfortunately the material on each of the sheets is rather poor, one sheet consisting of a small flowering twig and a fruiting twig, and the other of a small fruiting twig, two pods and sterile fragments. However, they do enable the species to be identified.

The young branchlets are sparingly puberulous and armed with slender, paired, stipular spines up to 6 cm long. The epidermis of the branchlets is brown, flaking off to reveal a powdery, yellowish inner layer, and the leaves have 2–6 pinnae pairs and 9–14 leaflets per pinna. The leaflets have inconspicuous lateral nerves and are glabrous except for the ciliolate margins. The peduncles are glabrous or have few scattered hairs, and the involucels are almost at or below the middle of the peduncle. The calyx is inconspicuously pubescent above and the corolla is glabrous. The pods are linear, falcate, up to 11 cm long and 0,6 cm wide, finely longitudinally striate, glabrous apart for some sessile glands, and longitudinally dehiscent.

Schimper 1948 is undoubtedly conspecific with A. seyal Del., and A. stenocarpa is now reduced to synonymy under A. seyal var. seyal.

A. seyal Del., Fl. Egypte Expl. Planches: 286, t. 52 fig. 2 (1813). Type: Egypt, Delile (?MPU, holo.).

A. stenocarpa Hochst. ex A. Rich., Tent. Fl. Abyss. 1: 238 (1847) synon. nov. Type: Ethiopia, Schimper 1948 (P, iso.!).

ACACIA TORTILIS (FORSK.) HAYNE VAR. LENTI-CELLOSA CHIOV.

A. tortilis var. lenticellosa Chiov., Fl. Somala 2: 197, fig. 121 (1932), was based on Senni 480 from the Somali Republic. Although var. lenticellosa was not validly published, the identity of Senni 480 is nevertheless of interest.

Senni 480, which is housed in the Herbarium Universitatis Florentinae, consists of two sterile twigs, each armed with a mixture of short, recurved and long, straight, stipular spines, and two pods in a capsule mounted on the upper left-hand side of the sheet. The young branchlets are glabrous and lenticellate, the leaves have up to 5 pinnae pairs, the leaf-rhachides are sparingly pubescent and the leaflets are glabrous. The pods are falcate, 5,5 mm wide, and glabrous apart from a few hairs at the base of the stipe. Senni 480 is referable to A. tortilis subsp. raddiana (Savi) Brenan var. raddiana.

ACACIA TORTILIS (FORSK.) HAYNE VAR. PUBESCENS AYLMER EX BURTT DAVY

Burtt Davy, in Kew Bull. 1930: 404 (1930), stated that the type specimen of A. tortilis var. pubescens Aylmer ex Burtt Davy, namely, Aylmer X8 from kilo 8 on Medani railway, Khartoum, Sudan, was housed in the Kew herbarium, but all efforts to trace this specimen have failed. Of the other three specimens cited and determined by Burtt Davy as var. pubescens, only Muriel S/9 and Letourneux 257 have been located. Muriel S/9 from the Blue Nile near Wadi Medani is now selected as the neotype of var. pubescens. Choice of a neotype for var. pubescens is to some extent academic, because var. pubescens Aylmer ex Burtt Davy is a later homonym and synonym of A. tortilis var. pubescens A. Chev. in Bull. Soc. Bot. Fr. 74: 960 (1927), the latter now being A. tortilis subsp. raddiana (Savi) Brenan var. pubescens A. Chev.

ACACIA VERRUGERA SCHWEINF. VAR. SUBINERMIS A. CHEV.

Chevalier, in Bull. Soc. Bot. Fr. 74: 959 (1927), based his description of *A. verrugera* var. *subinermis* on *Chevalier* 7598 from the Central African Republic. The holotype in the Paris herbarium is a flowering specimen. The young branchlet is yellowish, glabrous or nearly so, and, as the varietal epithet implies, unarmed. The leaves have up to 18 pinnae pairs and up to 35 leaflets per pinna. The leaflets are narrowly oblong, up to 5×1 mm, rounded apically, glabrous throughout or with few small, marginal cilia. The involucels are apical.

Chevalier 7598 is clearly referable to A. sieberana DC. The absence of stipular spines is not considered to be worthy of taxonomic recognition, and, as the young branchlet is \pm glabrous, Chevalier 7598 is referred to A. sieberana var. sieberana. A. verrugera var. subinermis is now reduced to synonymy.

A. sieberana *DC.*, Prodr. 2: 463 (1825). Type: Senegal, *Sieber* 43 (G, holo.; K!).

A. verrugera Schweinf. var. subinermis A. Chev. in Bull. Soc. Bot. Fr. 74: 959 (1927) synon. nov. Type: Central African Republic, Ndellé, Chevalier 7598 (P, holo.!).