

2.5 mm. longis ca. 0.9 mm. latis; involucri squamis ovato-oblongis apice rotundatis ciliolatis ca. 4.8 mm. longis 1.2 mm. latis dorso glabris leviter costulatis; corollis ca. 6 mm. longis glabris; tubo proprio 2.5 mm. longo; faucibus cylindratis vix ampliatis 3 mm. longis; dentibus limbi acutis deltoideis patentibus 0.5 mm. longis; achaeniis maturis 2 mm. longis crassiusculis argute angulatis griseo-olivaceis glaberrimis lucidis; pappi setis rubellis ca. 45 apice paullo incrassatis obtusis penicillatis.—PERU: liana-like, on stream-brush; flowers white, turning greenish, about 610 m. alt., Aug. 10–24, 1923, J. F. Macbride, no. 5414 (TYPE, Field Mus.; ISOTYPE, Gr.).

This species in foliage has some resemblance to *M. Stuebelii* Hieron. but that has a different inflorescence (the lateral as well as the terminal heads being subsessile), longer and pubescent achenes, less blunt pappus-setae and other differences.

## II. NEW PLANTS OF PORTUGUESE WEST AFRICA COLLECTED BY MRS. RICHARD C. CURTIS.

BY I. M. JOHNSTON.

THE species here described are a part of an excellently prepared and very interesting collection of African plants made by Mrs. Richard C. Curtis, of Boston, during the summer of 1923, when accompanying her husband as well as his father, Mr. Charles P. Curtis, and brother, Mr. Charles P. Curtis, Jr., on a hunting trip to the interior of Kenya Colony and Angola. The plants are not only carefully chosen and well preserved, but are accompanied by full ecological, habitual and color notes. Hence they form a most welcome addition to the meager representation of the tropical African flora available in America.

The most interesting of the plants collected by Mrs. Curtis were those secured in central Angola, for here the expedition pene-trated a region which appears to have been previously unexplored botanically. A considerable part of the Angola collection was made in the range of the Giant Sable Antelope, between the Cuanza and Loando Rivers, about 100 miles south of their confluence. The party started from Dondé or Bella Vista, in Bailundo, near the end of the railroad east of Angola Bay, from there going by auto northwestward 120 miles to Capango. The march towards the Sabel Country started September 11th; the Cuanza River was crossed on the 14th, and a hunting camp formed on the 15th. The return march began September 22nd, and Capango was reached on the 26th,

the Cuanza having been crossed on the 24th. The Angola collection includes 311 numbers and was given by Mrs. Curtis to the Gray Herbarium. The Kenya collection is not as yet fully identified. So far as studied, it seems likely to contain many plants not previously represented in American herbaria, but relatively few, if any, that have not been scientifically described. Of the Kenya collection the ligneous plants have been deposited in the herbarium of the Arnold Arboretum and the herbaceous material, amounting to some 442 numbers, in the Gray Herbarium. Mrs. Curtis also made for the Gray Herbarium small collections during brief stops at Zanzibar, Mozambique, Lorenzo Marques, Walfisch Bay and Lüderitz Bay, containing characteristic plants of these localities.

**Acrospira Curtisiae**, sp. nov., glabra herbacea 20–24 cm. alta e cormo obliquo depresso 15–25 mm. crasso rugoso squamoso apicem versus radiculoso producta; foliis 3–5 linearibus nervosis 4–5 mm. latis; pedunculo foliis destituto gracili sulcato infra flores 13–15 cm. longo; racemo 8–10-floro simplici stricto 10–15 mm. crasso bracteis ovatis acuminatis scariosis instructo; floribus albis vel ochroleucis stricte et 2–6 mm. longe pedicellatis; perianthii lobis lanceolatis acutis ca. 10–11 mm. longis, exterioribus ca. 3 mm. latis in carina 3-nervatis; staminibus 6 subaequalibus, filamentis albis ca. 5 mm. longis linearibus, antheris luteis linearibus introrsis 4–4.5 mm. longis basifixis spiraliter convolutis basi profunde cordatis; capsula ovoidea lobata glabra 4–5 mm. crassa trivalva loculicide dehiscenti transverse delicateque undulato-rugosis; seminibus multis atris dense minute acuminate muriculatis irregulariter lobulatis ca. 2 mm. latis.—ANGOLA: east of the Cuanza River, Sept. 23, 1923, Anita G. Curtis 333 (TYPE, Gray Herb.).—*Acrospira Curtisiae* differs from *A. asphodeloides* Welw., the other Angolan species, in its much smaller size, very much narrower leaves, and longer filaments; from *A. Laurentii* DeWild., of the Belgian Congo, it differs in lack of pubescence, narrow leaves, and much less developed bracts; while from *A. lilioides* Chev., of French Equatorial Africa, it may be readily distinguished by its narrower leaves and narrower lanceolate perianth-lobes. The plant has a depressed oblique corm with dark wrinkled and scarred surface bearing over the upper portion numerous fleshy, often fusiform, rootlets.

**Brachystegia Russelliae**, sp. nov., suffruticosa; caulis pluribus rhizomate crassissimo lignoso erumpentibus 3–4 dm. altis subsimplicibus glaberrimis basi squamis imbricatis instructis; foliis paucis imparipinnatis 12–18 cm. longis 4–5 cm. latis glaberrimis 9–12-jugis 1.5–2 cm. longe petiolatis; foliolis coriaceis oppositis subsessilibus

glaberrimis oblongo-lanceolatis 6–11 mm. separatis 3–4.5 mm. longis 8–10 mm. latis superioribus paullo gradatim reductis apice obtuse rotundatis basi oblique truncatis vel subcordatis subtus paullo pallidioribus costa paullo excentrica; stipulis deciduis inconspicuis reniformi-deltoides 3–4 mm. latis venosis; inflorescentia pauc laxaque ramosa 3–6 cm. longa ca. 3 cm. crassa fulvo-tomentulosa folio multo breviori; bracteis ovatis vel oblongo-ovatis 2–3 mm. longis deciduis, pedicellis 2–4 mm. longis tomentulosis; bracteolis obovatis ca. 6 mm. longis 4–4.5 mm. latis coriaceis extus tomentulosis apice rotundatis; sepalis 5 inaequalibus imbricatis oblongis vel ovatis 2–3 mm. longis 1–1.5 mm. latis pallidis conspicue dense fusco-ciliatis; petalis 3–5 inaequalibus filiformi-subulatis 0.5–1.5 mm. longis pallidis; staminibus 10–15 ca. 10–12 mm. longis glabris; ovario dense viloso ca. 2 mm. longe stipitato; legumine ignoto.—ANGOLA: locality uncertain, but probably from the Sable Country, Anita G. Curtis 428 (TYPE, Gray Herb.).—This remarkable species is an undershrub with annual shoots from a woody rootstock and in that regard resembles the common habit of *Cryptosepalum*. In floral structures, however, the new species is clearly typical of *Brachystegia*, and I see no good reason for not considering it a member of that genus. It is noted that Burtt Davy & Hutchinson, Kew Bull. 1923, 130, in their recent revision of *Brachystegia* recorded no species with such a habit. Arborescent plants and undershrubs are accommodated, however, in the closely related *Cryptosepalum*. In the revision referred to, *B. Russelliae* keys out with *B. longifolia* Benth. of Nyasaland, a species which differs in its loosely branched arborescent habit, larger leaves, narrower bracteoles and sepals, and more stipitate, less villous ovary. FIG. 4.

At the request of Messrs. C. P. and R. C. Curtis this plant has been named in memory of the late Margaret P. (Mrs. Robert S.) Russell of Boston at whose suggestion the botanical collecting of the expedition was undertaken.

***Cryptosepalum Curtisioides*, sp. nov.**, humilis; caulis multis erectis simplicibus gracilibus e rhizomate crassissimo lignoso erumpentibus dense puberulentis fuscis 1–2 dm. altis basi a squamis latis scariosis instructis; foliis imparipinnatis breviter petiolatis 14–20-jugis 4–5(–9) cm. longis 15–25 mm. latis oblongis vel rare ovatis; rhachi puberulenta; foliolis subsessilibus oblongis vel lineari-oblongis 10–18 mm. longis 2–3(–4) mm. latis glaberrimis margine integerrimis et sparse ciliatis apice rotundatis vel obtusis basi obliquis; stipulis lanceo-linearibus scariosis 9–14 mm. longis libris; racemis terminalibus 10–25-floris 4–6 cm. longis 20–25 mm. crassis puberulentis, bracteis

obovato-ob lanceolatis scariosis, pedicellis strictis 8–15 mm. longis; bracteolis petaloideis albis obovatis 5–8 mm. longis apice rotundatis extus puberulentis; petalo 1 oblongo vel obovato 5–8 mm. longo albo; staminibus 3 glabris; ovario compresso stipitato in lateribus glabro in marginibus plus minusve dense ciliato; legumine stipitato valde obliquo plano oblongo vel ovato 2–3 cm. longo glabro in margini superiori angustissime bialato.—ANGOLA: dry hard soil near Cuanza River, Sept. 13, 1923, Anita G. Curtis 186 (TYPE, Gray Herb.); Giant Sable Country, east of Cuanza River, 900 m. alt., Anita G. Curtis 207, 212, 271a, 281, 290.—Closely related to *C. mimosoides* Welw., but readily distinguished by its more numerous flowers, better developed inflorescence, and much longer pedicels. This species is named in honor of Messrs. Charles P. Curtis and Richard C. Curtis, whose careful planning and skillful direction of their difficult journey into the interior of Angola rendered possible the discovery of the plants here described. It is learned that *Cryptosepalum Curtisiorum* is one of the plants chiefly grazed by the Giant Sable Antelope.

FIG. 3.

**Crotalaria bicolor**, sp. nov., perennis; caulis numerosis subsimplicibus strictis 15–25 cm. altis minute sulcato-striatis breviter villosis canescens e radice crassa orientibus; stipulis nullis; foliis trifoliolatis 2–5 mm. longe petiolatis, inferioribus gradatim reductis; foliolis lineari-ob lanceolatis acutis, brevissime petiolulatis supra glabris subtus strigose pubescentibus, terminali 8–16 mm. longo 0.7–2.0 mm. lato; racemis terminalibus densiusculis 4–8 cm. longis 10–13 mm. crassis basem versus cum foliis normalibus bracteatis aliter minute setaceo-bracteatis; pedicellis ca. 3 mm. longis ascendentibus; calycibus 3–5 mm. longis, dentibus lanceolatis tubum excedentibus; corolla calycem fere duplo superante; carina flava 5–6 mm. longa margine inferiori rectangulari-inflexa inde in rostrum rectum attenuata; vexillo sparse pubescenti rubro-brunnescenti-lineato 5–6 mm. longo; ala flava brunnescenti-lineata; leguminibus obliqui-depresse globosis sessilibus erecto-pedicellatis 3–4 mm. longis monospermis sparse adpressi-pubescentibus.—ANGOLA: just east of Cuanza River, alt. 900 m., Sept. 18, 1923, Anita G. Curtis 211 (TYPE, Gray Herb.), Giant Sable Country, alt. 900 m., Sept. 21, 1923, Anita G. Curtis 252.—Apparently related to *C. erythrophleba* Welw., but having smaller flowers with both standard and wings streaked with purple or reddish brown, more numerously flowered inflorescence leafy-bracted only at very base, inconspicuously pubescent larger leaves, and lower decidedly perennial habit. The plant has a strong, thick, deep taproot which distinguishes it from most of the other members of the

§ *Sphaerocarpae*. The keel and standard of the corolla are subequal. The keel is yellow, and the standard and wings are yellow with many longitudinal brownish-purplish lines. FIG. 2.

**Indigofera latipinna**, sp. nov., fruticosa erecta; caulis pluribus ca. 4 dm. altis lignosis teretibus maturitate dilute brunnescens glabris basem versus 6 mm. crassis juventate adpresso villosis canescens; petiolis ca. 1 cm. longis canescens-villosis; foliis imparipinnatis in rhachi breviter villosis canescens; primariis trifoliolatis ceteris quinque-foliolatis; foliolis integerrimis cuneato-ovatibus 10–25 mm. longis 7–16 mm. latis ca. 1 mm. longe petiolulatis bicoloribus supra glaberrimis subtus dense canescenter tomentosis basi cuneatis apice truncatis vel late obcordatis vel retusis conspicue mucronatis, lateralibus oppositis, terminalibus paullo minoribus; stipulis linearilanceolatis 5–6 mm. longis deciduis; racemis 5–7 cm. longis axillaribus multifloris ascendibus quam folia paullo brevioribus vel ea paullo excedentibus; rhachi et pedicellis et calyce canescens adpresso villosis; floribus 0.5–1.0 mm. longe pedicellatis; calycis 15 mm. longi obliqui tubo brevi, dentibus obtusis deltoideis vel late oyatis; corolla calycem fere quadruplo superante ca. 12 mm. longa flavescenti vel ochroleuca; vexillo 9 mm. longo elliptico plicato apice rotundato brevissime unguiculato extus adpresso sparseque fusco-pubescenti quam carina multo breviori; alis linear-oblongis ca. 8 mm. longis; carina 11–12 mm. longa acuta (in rostrum non producta); legumine ignoto.—ANGOLA: near Cuanza River, a day's march from Copango, Sept. 24, 1923, Anita G. Curtis 360 (TYPE, Gray Herb.).—A member of Baker's group *Tinctoriae*, Jour. Bot. xxxii. 263 (1903), in which it is readily distinguished from most of the species by its woody stems and particularly by its few very large conspicuously bicolored leaflets. It is most nearly related to *I. rhynchocarpa* Welw. and *I. nambalensis* Harms, but differs from both in the number, size, outline and pubescence of the leaflets.

**Aeschynomene Curtisiae**, sp. nov., perennis herbacea ca. 4 dm. alta; caulis erectis striatis paullo angulatis crasse sparseque hispido-setulosis stricte ramosis; stipulis lanceolatis acuminatis coriaceis paralleliter nervatis basi truncatis; foliis paucis strictis 10–12 mm. longe petiolatis 4–9 cm. longis ca. 1.7 cm. latis; rhachi compressa angulata glabrata; foliolis 8–20 oppositis vel rariter alternis coriaceis valde nervatis glabris 0.5–1.0 mm. longe petiolulatis oblongis vel elliptico-oblongis 15–20 mm. longis 4–6 mm. latis integerrimis apice rotundatis conspicue mucronatis basi obliquis subcordatis; panicula terminali laxa ca. 15 cm. crassa; pedicellis ascendentibus glabris 5–10 mm. longis; calycis glaberrimi 5 mm. longi labio superiori profunde

(ca. 1 mm.) emarginato 3–3.5 mm. lato ovato, labio inferiori integer-  
rimo ca. 3 mm. lato obtuso; vexillo oblongo ca. 1 mm. longe unguicu-  
latis, lamina 5 mm. longa 2 mm. lata flavescenti conspicue purpureo-  
nervata apice rotundata carinam subaequanti; alis flavis oblongo-  
lanceolatis acutis ca. 6–7 mm. longis 2 mm. latis 1 mm. longe unguicu-  
latis quam petala cetera longioribus; carina 2.5 mm. lata flavescenti  
purpureo-nervata; ovario glabro stipitato 2-ovulato; legumine glabro  
valde compresso venoso saepe 2-loculato 10–14 mm. longe stipitato;  
loculis 7–9 mm. latis 10–14 mm. longis ca. 0.7 mm. crassis marginatis  
sed non alatis.—ANGOLA: Giant Sable Country, 900 m. alt., Sept. 23,  
1923, Anita G. Curtis 321 (TYPE, Gray Herb.).—Apparently most  
nearly related to *A. Baumii* Harms but glandless, much less pubescent,  
and with a lower herbaceous habit, entire lower calyx-lip, smaller  
flowers, and wingless pods. It is probably also related to *A. siifolia*  
Welw., but that has more pubescence and has many more leaflets.  
The new species is a handsome one because of its firm clean yellowish-  
green seemingly glabrous herbage, and loose panicles of small yellowish  
or ochroleucous flowers and later large conspicuously stipitate broad  
glabrous fruit. FIG. 1.

**Dolichos linearifolius**, sp. nov. perennis erectus 30–45 cm. altus;  
caulibus paucis herbaceis in sicco angulatis et striatis simplicibus vel  
ascendenter ramosis pallide viridibus sparse adpreso-  
villoso e radice crassa lignosa conico-fusiformi orientibus; stipulis triangulari-  
oblongis sessilibus glabris striatis subpersistentibus 4–5 mm. longis  
2–4 mm. latis; foliis pinnatim trifoliolatis 8–16 mm. longe petiolatis,  
foliolis linearibus longitudinaliter trinerviis ca. 1 mm. longe petio-  
latis basi cuneatis apice acutis juventate dense argenteo-villoso  
maturitate glabratis terminalibus usque ad 5 cm. longis et 6 mm.  
latis; inflorescentia ante folia evoluta vel cum foliis novellis vel  
nondum plane evolutis coactanea; floribus 5–7 mm. longe pedicellatis  
in axillis bractearum vel foliorum fasciculatis; calyce campanulato  
sparse villoso 4–5 mm. longo irregulari, dentibus brevibus 2 superiori-  
bus in unum excisum connatis, lateralibus lanceolato-ovatis acutis,  
infimo ceteris paullo longiori lanceolato acuto tubo breviori; pro-  
phyllis 2 infra calycem insertis filiformibus 2–3 mm. longis; corolla  
glabrata 7–9 mm. longa (in sicco lilacea) calyce pluries longiori;  
vexillo suborbiculari emarginato ca. 1 mm. longe unguiculato 9–10  
mm. lato; alis carinam paullo excedentibus oblique ca. 8 mm. longis;  
carina curvata obtusa ca. 3 mm. longe unguiculata, laminis 6 mm.  
longis; ovario linearis-lanceolato supra basin dilatato apicem versus  
attenuato apice 3–4 cm. longo ca. 8 mm. lato compressissimo.—  
ANGOLA: Between Cuanza and Loando Rivers, alt. ca. 900 m., Sept.

19-22, 1923, *Anita G. Curtis* 230 (TYPE, Gray Herb.), 216, 288.—This species belongs to Harms's § *Trinervati* and appears to be most nearly related to *D. trinervis* De Wild. of Katanga. It differs, however, in being less pubescent and in having short calyx-lobes that do not surpass the length of the calyx-tube. FIG. 8.

**Polygala congestiflora**, sp. nov., annua herbacea; caule erecto striato in sicco atrato puberulo 4 dm. alto, ramis numerosis 10-15 cm. longis ascendentibus subsimplicibus angulatis floriferis; foliis numerosis oblanceolatis firmis integerrimis uninerviis glabratis concoloribus 1.5-2 cm. longis 3-4 mm. latis in sicco atropurpurascensibus apice breviter acuminatis basi attenuatis, racemis congestis subglobosis terminalibus 15 mm. crassis; bracteis ovato-deltoides carinatis minutis deciduis; pedicellis angulatis 1-4 mm. longis; sepalo superiori ovato acuto 3-nervato 3 mm. longo glabro margine breviter denseque ciliato; sepalis anterioribus oblongis acutis ciliatis 3-nervatis glabris supra medium connatis 2.5 mm. longis; alis oblique ovatis ca. 8 mm. longis ca. 5 mm. latis flavis glabris basi abrupte lato-unguiculatis apice acutis margine basin versus inconspicue ciliatis; carina flavescenti 6 mm. longa ampla abrupte 1 mm. longe unguiculata; cristis plurifidis ca. 2 mm. longis; petalis superioribus obovato-oblongis ca. 3.5 mm. longis apice retusis basin versus abrupte breviter unguiculatis; antheris 6 oblongis glabris quam filamenta 4-6-plo brevioribus; filamentis glabris duobus interioribus sterilibus; stylo curvato glabro ca. 5 mm. longo apicem versus vaginato abrupte recurvo cucullato; stigmate refracto papilloso; ovario glabro oblongo-elliptico vix alato.—ANGOLA: vicinity of Capango, Sept. 27, 1923, *Anita G. Curtis* 419 (TYPE, Gray Herb.).—A well marked species belonging in the "Subsect. *Deltoidea* § *Tetrasepala*" of Chodat. Its closest relation appears to be *P. Dekindtii* Gürke, from which it differs in its broader leaves, larger decidedly acute wings and oblong upper petals. Its style is almost exactly like that of *P. liniflora* Boj. and *P. acicularis* Oliv. as they are illustrated by Chodat, Monog. Polygal. t. 29, fig. 2 & 8 (1893). FIG. 5.

**Triumfetta glabrata**, sp. nov., herbacea perennis; caulis numerosis erectis 20-35 cm. altis glabratis gracilibus in basi a squamis latis obtusis ornatis e radice crassa orientibus infra medium foliosis; foliis simplicibus 3-6 cm. longis 1.5-4 mm. latis anguste lanceolato-linearibus denticulatis subsessilibus acutis vel obtusis basin versus attenuatis subtus pallidioribus maturitate glaberrimis vel cum pilis stellatis paucis obtectis juventate canescentibus leviter stellato-tomentosis; stipulis filiformibus deciduis 2-4 mm. longis; inflorescentia terminali paniculata ascendenter pauciramosa supra folia valde projecta ca.

15 cm. longa 5 cm. crassa; floribus in cymas plurifloras distantes aggregatis; pedicellis 3–7 mm. longis pubescentibus; sepalis ca. 7 mm. longis late oblanceolato-linearibus ca. 1.5 mm. latis extus stellato-tomentulosis intus glabris 5–7-nervis supra basin reflexis, cornu 0.3–0.5 mm. longo; petalis obovatis 5–6 mm. longis apice rotundatis basi late unguiculatis; staminibus 25–35; disco et ovario villosis; fructibus ignotis.—ANGOLA: east of Cuanza River, Sept. 20, 1923, *Anita G. Curtis 231* (TYPE, Gray Herb.).—Obviously related to *T. Welwitschii* Masters from which it is distinguishable by its lack of pubescence, inconspicuous stipules, and smaller leaves and flowers.

**Ochna angolensis**, sp. nov., fruticula 1–5 dm. alta glaberrima e radice crassa lignosa oriens; caulis pluribus 1–2 mm. crassis subsimplicibus erectis; foliis subcoriaceis oblongo-oblanceolatis vel oblanceolatis integerimis vel apicem versus parcissime obsoleteque seriatim 5–8 cm. longis 12–24 mm. latis 2–4 mm. longe petiolatis apice obtusis mucronatis basi cuneatis, nervis lateralibus majoribus 18–24 angulo acuto in costa insidentibus, venis numerosis in costa subrectangulariter impositis atque a nervis transversis reticulatis, nervis venisque supra prominulentibus; stipulis deciduis linearilanceolatis 3–5 mm. longis; floribus flavis in pseudoracemos 4–7-floros laxos 2–6 cm. longos 2.5–5 cm. crassos 2–5 mm. longe pedunculatos axillares dispositis; racemis conjunctim inflorescentiam complexam laxiusculam multifloram 2.5–4.5 cm. crassam formantibus; pedicellis 5–8 mm. longis; pedunculis unifloris 3–5 mm. longis; bracteis inconspicuis deciduis subulatis 1–3 mm. longis; sepalis obovatis apice rotundatis petalis aurantiaco-flavis oblonge obovatis 9–14 mm. longis; staminibus 25–35 quam petala brevioribus; filamentis filiformibus 3–4 mm. longis quam antherae 2–3-plo longioribus; antheris linearioribus longitudinaliter dehiscentibus; ovario 5-lobo glabro.—ANGOLA: Dondé, Bailundo, ca. 1500 m. alt., Sept. 8, 1923, *Anita G. Curtis 158* (TYPE, Gray Herb.), 136; dry, hard soil at Cuanza River, Sept. 13, 1923, *Anita G. Curtis 171*; west bank of Cuanza River, Sept. 25, 1923, *Anita G. Curtis 372*.—Related to *O. Debeerstii* De Wild., which also occurs in Angola, but differing in its broader, larger, obtuse, subentire leaves and larger, more floriferous racemes of distinctly larger flowers. Oil obtained from the leaves of the plant is said to be used in ointments.

**Syphostemon articulatus**, sp. nov., glaberrimus herbaceus verisimiliter annuus; caule erecto gracili laxe et ascenderter alterniramoso subtereti ca. 35 mm. alto infra medium sparse alternifolia; ramis ramulisque a bracteis lanceolatis caducis 2–3 mm. longis suffultis; foliis non visis ut videtur caducis saltim ab exemplis Dominae

*Curtisiae* deficientibus; inflorescentia racemosa terminali laxa 10–15 cm. longa 2–3 cm. crassa; pedicellis laxe ascendentibus 8–10 mm. longis a bracteis minutis deciduis suffultis medium versus articulatis, parte superiori fusce et sparse stellato-setulosa decidua, parte inferiori persistenti glabrata; calyce campanulato extus glandulifero fructifero 6–7 mm. longo ca. 3.5 mm. crasso; lobo superiori late ovato breviori; lobis inferioribus anguste triangularibus acutis; corolla alba vel dilute rosea calyce 4–5-plo longiori glabra extus glandulifera, tubo cylindrico supra basem abaxillariter valde gibboso ca. 4 mm. longo 1.5–2 mm. crasso, faucibus late campanulatis ca. 4–5 mm. longis 3–4 mm. crassis, labio inferiori ca. 10 mm. longo ovato ca. 8 mm. lato obtuso, lobis labii superioris 4, exterioribus suborbicularibus 2 mm. longis, interioribus oblongo-ovatis ca. 1.1 mm. longis inconspicuis ab exterioribus imbricatis obscuratis; filamentis linearibus ca. 8 mm. longis basem versus ca. 1.5 mm. longe connatis; nuculis globosis ca. 1.8 mm. crassis rubescensibus subopacis sublaevibus.—ANGOLA: east of the Cuanza River, Sept. 23, 1923, Anita G. Curtis 309 (TYPE, Gray Herb.).—Differing from *S. insolitus* (Wright) Hieron. in its larger and differently proportioned, decidedly sigmoid, pale corollas which have a well developed proper tube and proportionately smaller upper lip. In *S. articulatus* the outer pair of lobes on the upper lip are much the largest, being roughly orbicular in outline and surpassing the oblong-ovate inner lobes, as well as strongly overlapping and somewhat hiding them. The peduncles of the reduced racemose panicles bear only a single flower apiece, and hence the pedicel appears about twice its real length and is apparently articulate near its middle. Upon maturing the pedicel and calyx fall away leaving the rhachis of the inflorescence beset with the persistent peduncles. FIG. 7.

**Ocimum cuanzae**, sp. nov., perenne herbaceum 2.5–4 dm. altum; caulis pluribus pauce stricteque ramosis tetragonis sulcatis albide septateque hispido-villosis; foliis firmis lanceolatis vel oblongo-lanceolatis 4–11 cm. longis 1.5–3.5 cm. latis glaberrimis vel sparsissime villosis minute impresso-glandulosis apice rotundato-obtusis basi abrupte attenuatis subtus pallidis flavescenti-glaucis conspicue nervatis margine grossidentatis ciliatis; petiolis 10–13 mm. longis sparse villosis; racemis multifloris 3–8 cm. longis 10–15 mm. crassis 1–3.5 cm. longe pedunculatis terminalibus vel axillaribus, verticellastris 4–5-floris; pedicellis 1–4 mm. longis dense villosis; calyce villoso purpurascenti nutanti, tubo campanulato fructifero 5–6 mm. longo, dente superiori ovato-orbiculari acuminato decurrenti, dentibus lateralibus triangulari-ovatis longissime acuminatis, dentibus inferioribus subulatis elongatis; corolla 10–12 mm. longa extus pubes-

centi, tubo calycem floriferum aequanti 5–6 mm. longo, labiis tubo brevioribus extus pallide glanduliferis pubescentibus, inferiori oblongo-lanceolato ca. 5 mm. longo apice bilobato, lobulis ca. 1 mm. longis oblongo-ovatis, labio superiori subrectangulari 2.5 mm. longo et lato apice ca. 1 mm. profunde trilobatis, lobulis ovatis; staminibus 4 inclusis, filamentis exappendiculatis glabris 2 mm. longis linearibus. —ANGOLA: near the Cuanza River, Sept. 24, 1923, Anita G. Curtis 342 (TYPE, Gray Herb.), 343.—Belonging to the § *Gymnocimum* and apparently most nearly related to *O. laxiflorum* Baker, from which, to judge from descriptions, it differs in its larger, more elongate, firm, dentate leaves, and less open inflorescence. FIG. 6.

Among the ferns collected by Mrs. Curtis and determined at the Gray Herbarium by Mr. C. A. Weatherby one appears to require a new combination of names to designate it in accordance with the International Rules of Botanical Nomenclature. At Mr. Weatherby's request this nomenclatorial change with explanatory synonymy may be here placed on record as follows:

**THELYPTERIS PALUSTRIS** Schott, var. **squamigera** (Schlecht.) Weatherby, n. comb. *Aspidium Thelypteris* β. *squamigerum* Schlecht. Adumb. 23, pl. 11 (1825). *A. squamulosum* Kaulf. ex Schlecht. l. c. (in synonymy). *Lastrea squamulosa* Presl, Tent. 76 (1836). *Nephrodium squamulosum* Hook. f. Fl. New Zealand, ii. 39 (1855). *A. Thelypteris* β. *squamuligerum* Mett. Abh. Senckenb. Naturf. Ges. ii. 112 (1858). *N. Thelypteris* β. *squamulosum* Hook. Sp. Fil. iv. 88 (1862). *N. Thelypteris*, var. β. *squamuligerum* Sim, Ferns S. Africa, 180 (1892). *Dryopteris Thelypteris*, var. β. *squamuligerum* [sic] Sim, Ferns South Africa, ed. 2, 102 (1915).

#### EXPLANATION OF PLATES.

PLATE 1. Fig. 1. *Aeschynomene Curtisiae* Johnston, n. sp.  $\times \frac{1}{2}$ ; 1a. lower surface of leaf of same  $\times 1$ . Fig. 2. *Crotalaria bicolor* Johnston, n. sp.  $\times \frac{1}{2}$ ; 2a. mature legume of same  $\times 2$ . Fig. 3. *Cryptosepalum Curtisiorum* Johnston, n. sp.  $\times \frac{1}{2}$ ; 3a. petal  $\times 1$ , 3b. submature pod  $\times \frac{1}{2}$ , 3c. flower after removal of bracteoles, petal, and 2 stamens  $\times 2$ . Fig. 4. *Brachystegia Russelliae* Johnston, n. sp.  $\times \frac{1}{2}$ ; 4a. flower after removal of bracteoles  $\times 2$ ; 4b. bracteole  $\times 1\frac{1}{2}$ ; 4c. leaf  $\times 1$ .

PLATE 2. Fig. 5. *Polygala congestiflora* Johnston, n. sp.  $\times \frac{1}{2}$ ; 4a. wing  $\times 1$ . Fig. 6. *Ocimum cuanzeae* Johnston, n. sp.  $\times \frac{1}{2}$ ; 6a. a large leaf  $\times \frac{1}{2}$ ; 6b. fruiting calyx  $\times 1$ . Fig. 7. *Sympostemon articulatus* Johnston, n. sp.  $\times \frac{1}{2}$ ; 7a. side view of flower  $\times 1$ . Fig. 8. *Dolichos linearifolius* Johnston, n. sp., in very immature foliage  $\times \frac{1}{2}$ .



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1. *AESCHYNOENE CURTISIAE* Johnston, spec. nov.
2. *CROTALARIA BICOLOR* Johnston, spec. nov.
3. *CRYPTOSEPALUM CURTISIORM* Johnston, spec. nov.
4. *BRACHYSTEGIA RUSSELLIAE* Johnston, spec. nov.





A. Brackett del.

5. *POLYGALA CONGESTIFLORA* Johnston, spec. nov.
6. *OCIMUM CUANZAE* Johnston, spec. nov.
7. *SYMPHOSTEMON ARTICULATUS* Johnston, spec. nov.
8. *DOLICHOS LINEARIFOLIUS* Johnston, spec. nov.



Johnston, I. M. 1924. "New plants of Portuguese West Africa collected by Mrs. Richard C. Curtis." *Contributions from the Gray Herbarium of Harvard University* (73), 31–40. <https://doi.org/10.5962/p.336083>.

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