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NEW  
OR RENAMED SPERMATOPHYTES  
MOSTLY PERUVIAN

BY

**J. Francis MACBRIDE**

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Diffidently, in the feeling that my action is even presumptuous, but yet enthusiastically in the knowledge that the merit is great and worthy recognition botanical, I here follow the ancient and pleasing custom of many botanists who have dedicated their efforts to a friend of their science : so, respectfully, I inscribe this little work to Monsieur John L. Albaret, président du Conseil administratif, Genève.

His interest in the Conservatoire Botanique and his sympathetic interpretation of its needs should bring to Geneva the support she requires to assure to the Conservatoire the perpetuance of service and progress its brilliant heritage demands! Traditionally international in the scope of its scientific endeavors, notably by the work of the late distinguished director, the Conservatoire Botanique occupies today a place unique in the hearts and minds of botanists the world over. Naturally it is therefore peculiarly gratifying to me, while a guest, to have this opportunity of recording my own appreciation of the work I have seen, in the course of my long sojourn, accomplished or begun by Geneva for the present and future welfare of the Conservatoire, — work that, particularly in these times could not have been consummated except for the broad-minded understanding of the need, by the city itself, acting especially through Monsieur Albaret under the far-sighted and extremely able leadership of the present Director.

The honor which is mine at the hands of the Director (and with the kind permission of the Director of Field Museum of Natural History) to publish this melange of new species and observations in *Candollea* is most gratefully acknowledged. A duplicate of each type, when available, or in lieu of this a photograph generally accompanied by some representation from the original, is deposited in the Conservatoire Botanique.

A comparatively small part of the paper, though, is the result of study at Geneva as the new species are all based on Field Museum collections which were available to me during my recent long stay at Dahlem. The determination work having been largely undertaken at Dahlem, I therefore thank most deeply, as has so often in recent years been both my pleasure and duty, the Directors of the Botanical Museum, Dahlem, Professor Diels and Professor Pilger and their staff for the privileges of study extended to me so willingly and for their ever helpful encouragement in my work.

The paper in its present form could not have evolved however except for the freedom which also has been so generously given me at Geneva by the Director and his associates in the use of both the herbarium and the library which has enabled me, out of the regular hours taken in my special duties, to bring it to completion. Sensible particularly of my indebtedness to Dr. Becherer and to Dr. Baehni for many courtesies, I extend here to them my best thanks.

Finally I wish to give myself the pleasure of expressing my earnest appreciation to the Director himself for his interest and cooperation during the past year in the work delegated to me by Field Museum of Natural History, undertaken with the aid of the Rockefeller Foundation, which has enabled its successful pursuance for the benefit of the science generally. Pleasant as his extraordinary interest and practical help has been to me personally I remark it with special enthusiasm as an example of unselfish Genevan service to an endeavor of international scientific worth.

Geneva, January 10, 1934.

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**Anthurium Albaretii** Macbr. nom. nov. = *A. pulchrum* Engler, *Jahrb.* 25 : 449 (1898) not N. E. Brown, *Gord. Chron.* n. s. 4 : 358 (1880).

Brown's plant was treated as a variety of *A. Harrisii* by Engler but even so, by either the old or revised International Rules the latter's name is in conflict with it because it may be questioned if it is a synonym *universally* regarded as non-valid. By the new rule it is in conflict in any case. Since there is already an *Anthurium Engleri* I take pleasure in naming this species for Monsieur John L. Albaret as an enduring acknowledgment well-merited of botanical service. If one may judge from the material of the type in the Conservatoire Botanique *A. Albaretii* must be a magnificent climber; the cordate-based leaves are notably beautiful in their elegant tapering to an acuminate tip.

**Anthurium Muelleri** Macbr. nom. nov. = *A. mexicanum* Engler in DC. *Monog.* 2 : 205 (1879) not Liebm. *Vidensk. Med. Kjoeb.* 21 (1849-50).

According to Engler the Liebmann plant is referable to *A. Schlechtendahlia* Kth. In any case Engler's name may be said to be in conflict with Liebmann's and I therefore rename the former species, selecting that of the collector, Fred. Mueller.

**Tigridia bracteolata** (Klatt) Macbr. comb. nov. = *Beatonia bracteolata* Klatt, *Linnaea* 34 : 733 (1865-66).

If one may judge from the specimen in the Conservatoire Botanique this Bolivian *Tigridia*, apparently well-marked by the nature of the inflorescence, is a rather ragged plant with small flowers, lacking altogether the attractiveness of the Peruvian forms.

**Paepalanthus Dielsii** (Ruhl.) Macbr. comb. nov. = *Leiothrix Dielsii* Ruhl. *Pflanzenr.* 13 : 231 (1903).

**Paepalanthus Schlechteri** (Ruhl.) Macbr. comb. nov. = *Syngonanthus Schlechteri* Ruhl. l. c. 247.

In *Field Mus. Bot.* 11 : 8 (1931) I expressed the opinion that the character of the anthers in this group of plants is the essential development by which the genera may be logically and naturally defined. On this

basis the above species of Africa, which have come to my attention at the Conservatoire Botanique in the course of reviewing my former decision, are to be included in the genus *Paepalanthus*.

**Sorocea uaupensis** (Baill.) Macbr. comb. nov. = *Pseudosorocea uaupensis* Baill. *Adans.* 11 : 297 (1875).

This species of northern Brazil (type, *Spruce* 2715), is well-marked by its lanceolate beautifully long-pointed leaves. The genus *Pseudosorocea* Baill. has long been merged and apparently with good reason in *Sorocea*.

**Psittacanthus Krausei** Macbr. spec. nov. — *P. peronopetalo* similis ; foliis ad 10,5 cm. longis, circa 3,5 cm. latis, acutissime acuminate ; petiolis 6 vel 7 mm. longis ; pedicellis glabris, 10-12 mm. longis ; floribus glabris nitidulis 6-6,5 cm. longis ; antheris 3 mm. longis, longe (2 mm.) mucronulatis. — Peru : Mishuyacu, near Iquitos, (Klug 1323 type, Field Museum).

In its smaller leaves, glabrous inflorescence, elongate pedicels, and, especially, in its long-mucronulate anthers, *P. Krausei* appears to be well-distinct from *P. peronopetalus* Eichler which it otherwise resembles and to which Mr. Smith, *Bull. Torr. Club* 58 : 90, 1931 would refer it. However I have seen no specimens at all intermediate in character and therefore presume that this plant represents a nicely defined entity. The unusual segments of the red and yellow flowers (Klug's notation) are similar to those of Eichler's species.

I name this form in pleasant recollection of Professor Krause's kindness. His well-known and wide taxonomic interests have sometimes extended to this group.

**Pthirusa pyrifolia** (HBK.) Eichl., var. *terminalis* Macbr. var. nov. — Racemis paniculatis terminalibus, 10-fere 15 cm. longis. — Peru : San Roque, Dept. San Martin (*Williams* 7482 type, Field Museum).

With the terminal paniculate inflorescence of *P. ruja* but lacking the large flowers and rufous pubescence, this plant, in these two characters is similar to *P. pyrifolia*. Possibly it is a distinct species.

**Liriosma singularis** (Vell.) Macbr. comb. nov. = *Dulacia singularis* Vell. *Fl. Flum.* I : 32. pl. 78, text 33 (1825) = *L. Velloziana* A. DC. *Prod.* 8 : 673 (1844).

De Candolle, as was often the custom, merely renamed the plant described by Vellozo. However, as Bentham long ago pointed out, there is no reason for discarding the names of the latter when they have been actually published, as is here the case.

**Portulaca amboensis** Macbr. spec. nov. — Annuua erecta stricta 1-3 dm. alta ; caulibus glabris in sicco 2-3 mm. crassis superne haud incrassatis ; internodiis 1 cm. remotis, plus minusve longe (5-7 mm.) fulvo-pilosis ; foliis deciduis teretibus linearibus plerumque 8 mm. longis ; bracteis (foliis superioribus) similibus ut videtur 3-4 ; capsulis acutis capitato-confertis terminalibus et etiam solitario- (vel 2-3) axillaribus cum pilis sordide albis dense involutis medium versus circumscisse dehiscentibus ; seminibus circa 0,5 mm. latis distincte atro-opalescentibus subtile tuberculatis. — Peru : stony river flat, Ambo, Huanuco (*Macbride* 3202 type, Field Museum).

In habit this very strict annual simulates *P. venezuelensis* Urban, a species with more numerous involucreal leaves, rounded capsules and black seeds. Among Peruvian forms it is nearest *P. tingoensis* Macbr. with oblong-lanceolate leaves, often branched stems strongly enlarged above and few if any axillary flowers. All three species are very near *P. hamilobus* L. and its segregates.

**Calandrinia acaulis** HBK., var. **magna** Macbr. var. nov. — Foliis interdum 12 cm. longis ; floribus fere 3 cm. longis, roseo-purpureis. — Peru : wet shallow soil on rocks, 3000 m., Viso, Lima (*Macbride et Featherstone* 606 type, Field Museum).

Apparently only an ecological development but striking, — and perhaps potentially if not already with permanent values.

**Iryanthera congestiflora** Macbr. spec. nov. — Arbor ; ramulis obscure angulatis rubido-brunneis glabris ut videtur elongatis ; petioliculis canaliculatis 7-9 mm. longis, vix 2 mm. crassis glabris vel minute parceque strigillosis ; foliis elliptico-lanceolatis basi apiceque gradatim attenuatis forsan breviter acuminatis, glabris, in sicco chartaceis supra

intense brunneis paullo nitidulis subtus opacis fuscescentibus, costa subtus crassa supra prominula, venis lateralibus circa 18 utrinque prominulis valde patentibus ante marginem arcuate conjunctis, tertariis haud vel paullo conspicuis; inflorescentibus fem. brevibus valde congestis vix 1 cm. longis axillaribus; floribus fere sessilibus dense fulvo-pubescentibus, segmentis recurvatis acute ovatis 0,75 mm. longis, tubo campanulato 1,5 mm. longo; stylo ut videtur 1 (3 conjunctis) crasso, disco non longiore. — Peru: between Yurimaguas and Balsa-puerto, Aug. 26, 1929 (*Killip et Smith* 28289, type, Field Museum).

I am at a loss to refer this tree to any genus other than *Iryanthera* but there I find no species combining the characters of sessile congested flowers and short slender petioles. In foliage it simulates strongly *I. Ulei* with pedicellate flowers and stout petioles.

**Mollinedia Killipii** Macbr. spec. nov. — Arbor 5-7 m. alta; ramulis teretibus gracilibus glabris ad nodos incrassatis et plus minusve compressis; internodiis circa 5 cm. longis; petiolis 8-10 mm. longis; foliis ellipticis circa 12 cm. longis, 5-7 cm. latis, basi rotundato acutis vel late cuneatis, apice anguste caudato-acuminatis, acumen 1,5 cm. longo, integerrimis membranaceis opaco-viridibus supra venis vix notatis subtus prominulo-reticulatis glabris vel sparsissime et minutissime pubescentibus; inflorescentiis paucifloris glabris; pedicellis gracilibus valde divaricatis 2,5 cm. longis; receptaculis obconicis 4 mm. longis, 3,5 mm. crassis; tepala subaequalia integerrima apice introflexa, truncata, 2 mm. longa; staminibus circa 15 subsessilibus vel exterioribus paullo pedicellatis et fere 1,5 mm. latis cordatis, antherarum loculi confluentes, connectivum superne non vel vix elongatum. — Peru: Soledad on Rio Itaya (*Killip & Smith* 29751 type, Field Museum).

Few species of *Mollinedia* have such beautifully caudate leaves and none among them has come to my notice with leaves so broad and pedicels so long and slender.

**Mollinedia caudata** Macbr. spec. nov. — Arbor ad 5 m. alta glaberrima; ramis ramulisque teretibus gracilibus remote ramosis; internodiis 4-6 cm. longis; petiolis 5-10 mm. longis; foliis pallide viridibus chartaceo-membranaceis densissime pellucido-puncticulatis utrinque praesertim supra obscure venosis integerrimis oblongo-vel

ovato-ellipticis basi rotundato-acutis, apice subrupte longeque caudato-acuminatis, acumen 1,5-2 cm. longo, plerumque 10-12 cm. longis, 3,5-4,5 cm. latis; floribus ignotis; carpellis circa 6, glabris, 1,5 cm. longis. — Peru: Pebas on the Amazon River, Loreto (*Williams* 1602 type Field Museum). Junin: Puerto Bermudez 375 m., *Killip & Smith* 26562.

There is of course no certainty as to the relationship of this tree known only in fruit but in foliage it resembles very few species, perhaps most *M. acutissima* Perk. with, however, toothed leaves. Among Peruvian forms it seems to be nearest *M. lanceolata* R. & P. with denticulate gradually acuminate leaves.

***Mollinedia simulans*** Macbr. spec. nov. — Ut videtur persimilis *M. oligantha* sed floribus ignotis; ramulis glabris; internodiis 3-6 cm. longis; petiolis 6-7 mm. longis; foliis integerrimis oblongo-lanceolatis basi cuneatis vel late cuneatis apice breviter vel interdum longe acuminatis, circa 12 cm. longis, 3,5-4,5 cm. latis, chartaceo-membranaceis supra glabris paullo nitidulis venis obscure notatis, subtus aliquid pallidioribus leviter minute parceque pubescentibus, prominulo-reticulatis; carpellis circa 10, adpresse strigosis, 2,5 cm. longis. — Peru: San Roque, San Martin (*Williams* 6977, type Field Museum).

Not very well marked but not exactly *M. oligantha* Perk, or any species in the nearly complete collection at Dahlem.

***Mollinedia casca*** Macbr. spec. nov. — Ut videtur arborea robusta; ramis crassis mox glabratis; ramulis dense adpresse pilosis; petiolis 7-10 mm. longis glabratis; foliis late ellipticis basi apiceque rotundatis vel obscure acutiusculis circa 14 cm. longis, 7 cm. latis, integerrimis supra glabris subtus pallidioribus prominulo-reticulato-venulosis parce minuteque pubescentibus, chartaceis; floribus ignotis; carpellis circa 12, glabris vel glabratis, 1,5 cm. longis. — Peru: Lower Rio Huallaga (*Williams* 4585 type, Field Museum).

In more than one sense this may well be an old species but it resembles none I have seen except *M. latifolia* (P. & E.) Tul. from which it appears to be distinct by its entire leaves and glabrous fruits.

**Siparuna Williamsii** Macbr. spec. nov.—Arbor ad 17 m. alta; ramulis haud angulatis paullo ad nodos compressis circa 1 cm. crassis sparse et minutissime fulvo-stellatis demum glabratis; petiolis glabratis supra acute sulcatis oppositis 2-2,5 cm. longis; foliis ellipticis, 2-3 dm. longis, 10-12 cm. latis, basi rotundatis acutis apice abrupte perbrevis acuminatis chartaceis glabris vel subtus interdum ad nervos sparsissime et minutissime stellato-puberulis; nervis lateralibus 10-12 supra cum venis haud impressis paullo prominulis subtus satis prominentibus, venis tenuibus laxe reticulatis; racemis masc. simplicibus vel 1-2-ramosis plerumque 5 vel 6 cm. longis intense denseque cum pilis brevibus minutis stellato-pubescentibus; pedicellis gracilibus ad fere 1 cm. longis; receptaculis ovoideis circa 2 mm. crassis; tepala et velum nulla; staminibus 12-15, filamentis latissime planiusculis vix vel haud exsertis. — Peru: Alto Rio Itaya (*Williams* 3371 type, Field Museum); San Antonio on Rio Itaya *Killip & Smith* 2946.; Soledad on Rio Itaya, *Killip & Smith* 29818.

This seems to be a very unusual species resembling *S. pauciflora* (Beurl.) A. DC. in the exceptionally broad filaments. Its general resemblance, however, among the more than fifty Peruvian species, is with *S. Uleana* Perk. with denticulate leaves and glabrate inflorescence.

**Siparuna calignosa** Macbr. spec. nov.—Arbor, circa 6 m. alta; ramulis novellis subangulatis sparse et breviter scabro-stellatis demum glabratis; petiolis 4-7 mm. longis dense cum pilis stellatis brevibus fulvo-viridibus pubescentibus; foliis ellipticis demum circa 7 cm. longis et 3,5 cm. latis, basi acutis, apice perbrevis acuminatis, obscure minuteque denticulatis demum ut videtur integris membranceo-chartaceis opacis vel subopacis sordide viridibus supra nervis obscuris interdum paullo strigillosis exceptis glabris subtus sparse praecipue ad nervos minute stellato-pubescentibus, nervis lateralibus circa 7 medio-criter prominentibus, venis vix notatis; racemis axillaribus ad 1,5 cm. longis gracilibus sparse minuteque stellato-pubescentibus; pedicellis 1-2 mm. longis; receptaculis depresso-conicis 3 mm. crassis, 2 mm. altis; ore parvo; tepala parvissima glabra; staminibus 4 liberis. — Peru: Iquitos (*Killip & Smith* 27069 type, Field Museum).

If one may judge from the herbarium material this species is peculiarly nondescript in its rather sordid and dull green growing parts. It  
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suggests *S. hylophylla* Perk. with much longer petioles or *S. guianensis* Aubl. with larger leaves and more numerous stamens.

**Siparuna galbina** Macbr. spec. nov. — Arbor, ad 5 m. alta ; ramis juvenillis petiolis foliisque subtus molliter stellato-pubescentibus ; petiolis oppositis vel interdum 3-verticellatis ad 3 cm. longis ; foliis pallide flavido-viridibus chartaceis supra sparse stellato-scabriusculis nervis prominulis, subtus venis laxe reticulatis cum nervis lateralibus (utrinque circa 8) prominentibus, margine undulatis vel minutissime remoteque denticulatis, late ovato-ellipticis basi rotundatis vel late cuneato-rotundatis, apice subacutis, demum circa 13 cm. longis et 7 cm. latis ; inflorescentiis axillaribus dense stellato-pubescentibus circa 1 cm. longis ; pedicellis 3-5 mm. longis ; receptaculis ovoideis fere 4 mm. crassis ; tepalis 5-6 glabratis crassisimis (1 mm. crassis, 2 mm. latis) ; styli numerosi, velum bene superantes, liberi, filiformi, revoluti. — Peru : Ccarrapa, Dept. Ayacucho, 1000 m. (*Killip & Smith* 22453, type, Field Museum).

With much the aspect of *S. mollis* (HBK.) A. DC. but with longer petioles. In Peru, at least, it suggests, I think, no other. The collectors noted the «flowers» as orange-green ; the foliage and pubescence of the dried specimen is yellowish-green.

**Siparuna obstipa** Macbr. spec. nov. — Arbor parva ; ramulis compressis ad nodos 4 mm. latis minutissime parceque stellatis demum glabris ; petiolis oppositis 5-7 mm. longis ; foliis membranaceo-chartaceis supra glabris vix vel non nitidulis subtus ad nervos minute parceque stellatis vel glabratis ellipticis vel oblongo-ellipticis basi rotundato-acutis, subcaudato-acuminatis, acutis, 9-16 cm. longis, 3-5 cm. latis ; nervis lateralibus circa 9 utrinque paullo conspicuis, venis obscuris ; racemis masc. axillaribus, 1-1,5 cm. longis solitariis vel geminatis dense minuteque griseo-flavido-stellatis ; pedicellis ad 2 (2,5) mm. longis ; receptaculis ovoideis 2 mm. crassis ; tepala et velum omnino nulla ; staminibus 15 valde inaequalibus, 10 exterioribus bene exsertis et obstipatis filamentis planiusculis, interioribus (sterilibus ?) 5 multobrevioribus. — Peru : Iquitos, (*Williams* 3790 type, Field Museum) ; Mishuyacu, *Klug* 320.

The exact nature of the five interior stamens (?) is not clear to me.

The shrub simulates, however, *S. cervicornis* Perk. with broader leaves, somewhat pubescent above, shorter pedicels and little exerted stamens. The well-exserted stamens of *S. obstipa* are seemingly bent to one side.

**Siparuna plana** Macbr. spec. nov. — Arbor (?) monoeca ; ramulis petiolisque dense ferrugineo-stellatis forsan demum glabratis ; ramulis distincte compressis praecipue ad nodos ad 1 cm. crassis ; petiolis oppositis 12-22 cm. longis ; foliis grandis (1,5 dm. latis, fera 3 dm. longis) late ovato-ellipticis basi rotundatis vel late cuneato-rotundatis, apice bene acuminatis, integris vel plus minusve undulatis chartaceis ut videtur flavido-viridibus supra paullo nitidulis nervis medio-criter impressis sparse stellatis exceptis glabris, venis obscure et per-laxe reticulatis, subtus nervis venisque prominentibus parce pallideque stellato-pubescentibus ; paniculis axillaribus circa 5 cm. longis dense ubique pallido-stellato-pubescentibus ; receptaculis masc. plerumque terminali-fasciculatis plane cupuliformis circa 4 mm. latis, pedicellis 5-7 mm. longis ; tepala et velum nulla ; staminibus circa 20 ; receptaculis fem. sessilibus, tepala ut videtur minima. — Peru : Yurimaguas (*Williams* 4584 type, Field Museum).

The receptacles of this plant are so undeveloped that I am not sure of their character ; on each inflorescence-branch below the terminal clustered masculine are several ovoid completely closed and sessile very young feminine receptacles. Few species have masculine receptacles so shallow. The general aspect of the species is that of *S. podocarpa* Perk. and *S. gigantophylla* Perk. but its relationship is apparently with *S. guianensis* Aubl.

**Ocotea Ottoschmidtii** Macbr. nom. nov. = *Ocotea Weberbaueri* Otto Schmidt *Rep. Spec. Nov.* 31 : 181 (1933) not Mez, *Bull. Herb. Boiss.* 2, 5 : 236 (1905).

As this Peruvian shrub, based on *Weberbauer* 7053, obviously requires a new name I am changing it, with the kind permission of the capable author, and with pleasure choose his own name as being most appropriate.

**Sisymbrium macrorrhizum** (Muschl.) Macbr. comb. nov. = *Thelypodium macrorrhizum* Muschl. *Bot. Jahrb.* 40 : 268 (1908) = *Phlebiophragmus macrorrhizus* (Muschl.) O. E. Schulz, *Pflzr.* 86 : 165 (1924).

The genus *Phlebiophragmus* O. E. Schulz, l. c., rests on the short style and the 2-4-nerved septum. It does not seem to me expedient to separate this plant on these characters because they are variously developed within the genus *Sisymbrium* itself, the style varying in length and the pod-septum being 1-, 2- or 3-nerved or nerveless. With this species there are nine for the group now known from Peru.

**Weberbauera bracteata** (O. E. Schulz) Macbr. comb. nov.  
= *Pelagatia bracteata* O. E. Schulz, *Pflzr.* 105 : 192 (1924).

**Weberbauera trichocarpa** (Muschl.) Macbr. comb. nov. = *Eudemia trichocarpa* Muschl. *Bot. Jahrb.* 40 : 276 (1908) = *Brayopsis trichocarpa* (Muschl.) Gilg & Muschl. *Bot. Jahrb.* 42 : 484 (1909) = *Alpaminia trichocarpa* (Muschl.) O. E. Schulz, *Pflzr.* l. c. 191.

My respect for the discriminating and well-considered work of O. E. Schulz is so great that it is with no little regret that I find myself (even though rarely) not in entire agreement with his interpretation of generic lines as regards the *Cruciferae* of Peru. In this instance, however, I am not able to see that the natural affinities of these two little Andean plants will be less clearly expressed if they are grouped with the two similar species of *Weberbauera* Gilg & Muschl. *Bot. Jahrb.* 42 : 481, 1909. Such a disposition, it seems to me, strengthens rather than weakens Schulz' otherwise clear treatment of the entire subtribe. *Pelagatia* O. E. Schulz and *Alpaminia* O. E. Schulz, *Pflzr.* 105, 192, 191, 1924 are separable from *Weberbauera* essentially on one character only, namely, their in part dilated in contrast to capillary funiculi. Their distinction between each other is merely a matter of pubescence and habit, such diversity as exists in *Draba*, for example. The character of *Weberbauera* then has only to be extended to read : funiculi slender or, in part, dilated ; and, so constituted it is still well-distinct from its nearest relatives, *Englerocharis* of Peru and *Pachycladum* of New Zealand, — from the former in foliage, finally caducous sepals and short style and from the latter in the form of the inflorescence. Since the dilation of the funiculi is itself a development that exists in more than one degree, I fail to see that it is alone necessarily indicative of a generic concept.

**Lepidium Weddellii** Macbr. nom. nov. = *Lepidium affine* Wedd. *Ann. Sci. Nat.* 5. 1 : 284. 1864 not Ledeb. ex DC. *Prod.* 1 : 207 (1824) = *L. Meyenii* Walp., subp. *affine* (Wedd.) Thell. *Lepidium, Mitteil. Bot. Mus. Zürich* 204 (1906).

This Bolivian "polster" perennial is very similar to *L. Meyenii* Walp. of extreme southern Peru but the calyx of the latter is a third to twice longer. Furthermore the pod of *L. Weddellii* is usually orbiculate with the style never surpassing the apical margins ; that of *L. Meyenii* is variable, more or less roundish, and the apical margins are shorter than (or barely equal) the style. These differences, in connection with that of the calyx, slight as they are, are taken in this genus as indicating specific values and accordingly it seems logical to propose the above segregation.

**Lepidium Walpersii** Macbr. nom. nov. = *L. lanceolatum* Walp. *Nov. Act. Acad. Leop. Carol.* 19. Suppl. 1 : 249 (1843) not Presl *Fl. Sic.* 1 : 82 (1826) = *L. chichicara* Desv. var. *lanceolatum* (Walp.) Thell. *Lepidium, Mitteil. Bot. Mus. Zürich*, 221 (1906).

Allied, perhaps to *L. chichicara* but smaller and notably different in its merely sessile cauline leaves that are not at all auriculate and are often subentire, and in its somewhat smaller pods, the style quite equaling the pod-margins. These are characters that are commonly accepted in this genus as „specific”. Unlike the weedy widely distributed in Peru *L. chichicara*, this form so far as known is confined to the Department of Puno and adjacent Bolivia.

**Lepidium aletes** Macbr. nom. nov. = *L. calycinum* Godron, *Mém. Acad. Montpel.* 1 : 416 (1853) not Steph. ex Willd. *Sp. Pl.* 3 : 433 (1800).

This Peruvian species, the type of which was adventive in France ! — may well bear a name (the original being preoccupied as indicated above) suggestive of its errant propensity.

**Capparis quina** Macbr. spec. nov. — Fruticosa inflorescentiis minutissime pulverulentis exceptis glaberrima ; ramulis subcompressis ; petiolis 10-14 mm. longis ; foliis ellipticis basi rotundatis apice leviter emarginatis ad 12 cm. longis, 7 cm. latis plerumque aliquid minoribus

coriaceis utrinque fortiter reticulato-venosis et nitidis : racemis ut videtur foliis multo-brevioribus paucifloris ; pedicellis 6-7 mm. longis ; calycibus rotundato-lobatis vix 2,5 mm. altis ; petalis rotundato-obovatis circa 7 mm. longis ; staminibus circa 20 longe exertis contortis ; stipes 3 cm. longis ; fructibus fere globosis circa 3 cm. crassis puncticulotuberculatis. — Tarapoto (*Williams* 6282 type, Field Museum) ; also 5753.

A strange *Capparis*, if indeed it is a *Capparis*, because of the odd Morisonialike fruits. In flowers and foliage, however, it is quite characteristic and in its simple calyx a possible relationship with *C. petiolaris* is suggested. A native name is "quina-quina,,.

***Capparis acutifolia*** Macbr. spec. nov. — Arbor ad 4 m. alta fere glabra ; ramulis gracilibus teretibus ; petiolis pedicellisque gracilibus minutissime et obscurissime pulverulentis 2-3 cm. longis ; foliis membranaceis nitidulis, venis reticulatis vix prominulis, ovato-lanceolatis basi acutis apice bene acuminatis ad 15 cm. longis et 6 cm. latis ; racemis gracilibus 1 dm. longis solum superne floriferis paucifloris ; pedicellis 1 cm. longis ; calycibus valde lobatis, lobis oblongo-ellipticis obtusis fere 2 mm. longis, petalis albis ovato-ellipticis circa 5 mm. longis ; staminibus circa 15, 2 cm. longis, ovario oblongo-cylindrico glabro ; stipes 2,5 cm. longis. — Peru : Mishuyacu, near Iquitos (*Klug* 961 type, Field Museum).

Certainly none of the other sixteen species of *Capparis* known from Peru has the foliage of this, and none with simple calyx, so far as I have discovered.

***Capparis prisca*** Macbr. spec. nov. — Fruticosa ut videtur parva ; ramis crassis ; ramulis petiolis foliis subtus pedicellisque crispe puberulentis ; petiolis gracilibus ad 2,5 cm. longis ; foliis fere oblongis vel oblongo-obovatis basi minute cordatis apice emarginatis 7-8 cm. longis, 2,5-3 cm. latis opacis chartaceis, nervis venisque vix notatis ; inflorescentiis ignotis ; pedicellis 3 cm. longis ; sepalis pulverulentis ovalibus circa 3,5 cm. longis reflexis ; squamulis crassis 2 mm. longis ; petalis irregulariter oblongo-ellipticis 12 mm. longis ; staminibus circa 4 cm. longis. — Peru : without data (*Weberbauer* 7167 type, Field Museum).

The material seen by me is very broken. I have not succeeded in determining a possible relationship; it may be found in *C. mollis*.

**Capparis sola** Macbr. spec. nov. — Arbor parva pedicellis minutissime puberulentis exceptis glabra; petiolis 1,5-2,5 cm. longis; foliis chartaceo-membranaceis utrinque reticulato-venosis, nitidulis, supra viridibus subtus brunneis ovato-ellipticis plerumque circa 12 cm. longis, 4,5 cm. latis, apice sensim acuteque acuminatis basi late cuneato-acutis; racemis simplicibus 1 dm. longis, laxe paucifloris; pedicellis divaricatis gracilibus 10-12 mm. longis; bracteis minutis; sepalis oblongo-ellipticis apice rotundatis suberectis vix 2 mm. longis; petalis rotundato-obovatis 7 mm. longis; staminibus circa 1,5-2 cm. longis; ovario glabro oblongo longe (2,5 cm.) stipitato. — Peru: Mishuyacu, near Iquitos (*Klug* 961 type, Field Museum).

With the small flowers and calyx of *C. brasiliensis* but with the long petioles of large-flowered species of the same relationship, this exceptionally acuminate-leaved *Capparis* seems to require a name of its own.

**Gynandropsis orba** Macbr. spec. nov. — Annua ad circa 6 dm. alta glabra; caulibus mediocriter robustus strictis; foliis simplicibus numerosis longe (ad 1 dm.) petiolatis late ovato-ellipticis basi rotundato-acutis apice subabrupte angusteque acuminatis ad circa 2 dm. longis et 1 dm. latis membranaceis pallide viridibus subtus pallidioribus; racemis terminalibus ut videtur demum circa 1 dm. longis; bracteis caducissimis; pedicellis 4-6 mm. longis; floribus pallide rubris 1 cm. longis; laciniis calycinis anguste lanceolatis circa 3 mm. longis; petalis 8-10 mm. longis, ovatis obtusiusculis breviter unguiculatis; stipes circa 2 cm. longis; ovario (siliquis immaturis) oblongo-cylindraco; stylo 0,5 mm. longo, stigmatate capitellato. — Peru: Rio Mayo, Junin (*Weberbauer* 6760 type, Field Museum). Pichis Trail, Junin, *Killip & Smith* 26125.

The stamens in this material are undeveloped or badly broken but the theca appears to be about 1,5 cm. long, the filaments the same length and one attached 1 mm. below the other. The species therefore approaches the genus *Podandroyne* Ducke characterized by having two stamens borne distinctly lower than the others. In its simple

leaves the similarity is heightened. *Pedicellaria Sodiroi* Gilg is of this relationship but has longer pedicels and broader sepals.

The existence of these plants may bring forth the idea of course of uniting the genera, *Gynandropsis*, *Cleome* and *Podandrogyne*. I think it probable that *Podandrogyne* should be merged with *Gynandropsis* as a connecting species but very possibly more species of the same alliance are still to be discovered and they may establish the validity of Ducke's genus. If *Podandrogyne* is invalid *Gynandropsis* is scarcely more than a convenient segregate of *Cleome*.

***Cleome virens*** Macbr. spec. nov. — Fruticosa (superne herbacea) 1-1.5 m. alta glaberrima; caulibus impexis striatis cum petiolis gracilibus (ad 8 cm. longis) plus minusve aculeatis vel interdum laevis; foliolis 3 vel interdum 5 ovato-ellipticis basin versus gradatim attenuatis apice breviter acuminatis, lateralibus 5-10 cm. longis, 3-4 cm. latis, subsessilibus, terminalibus paullo majoribus longe petiolutis permembranaceis; racemis demum elongatis ad 2 dm. longis; bracteis caducissimis; pedicellis fere filiformis circa 1 cm. longis, fructiferis fere 2 cm. longis, valde divaricatis; sepalis anguste lanceolatis acutis circa 2,5 mm. longis; petalis 4 mm. longis, lamina elliptico-spathulata, ungue circa 1 mm. longo; staminibus 7 mm. longis; siliquis glabris plus minusve torulosis lineari-cylindratis 10-17 cm. longis; stipes vix 1 cm. longis. — Peru: La Victoria (*Williams* 2596 type, Field Museum); also 2842. Iquitos, *Williams* 8183 (forma laevis, eaculeata); also *Klug* 1163; 487. Yurimaguas, *Killip & Smith* 27653.

With hesitancy I propose a name for these collections as it seems scarcely probable that a *Cleome* apparently as common as this one has not been classified. It seems unquestionably to be a *Cleome* and yet no species has come to my attention with small greenish ebracteate flowers (grass-green and yellow, according to *Klug*) and 3-5-foliolate leaves that is also a glabrous „shrub” as each collector describes this plant, although the specimens themselves are herbaceous. Incidentally, Peru is rich in *Cleomes*; with this and the next at least 24 species are now known there.

***Cleome hirsuticaulis*** Macbr. spec. nov. — Inermis fruticosa erecta stricta 2,5-3 dm. alta; caulibus pedicellisque dense cum pilis

patentibus firmis glanduloso-pubescentibus; foliolis oblongo-ellipticis vel-lanceolatis, fere caudato-acuminatis basi cuneatis, ad 14 cm. longis, 4 cm. latis, permembranaceis supra sparse hirsutulis subtus glabris fere costa media exceptis; pedicellis 4-6 cm. longis; stipes 5-6 cm. longis; siliquis 14-17 cm. longis, ad 8 mm. crassis, anguste conico-cylindraceutis, ad apicem attenuatis, pilosiusculis; stylo 3 mm. longi. — Peru: Schunke Hacienda above La Merced (*Killip & Smith* 24812 type, Field Museum).

Complete leaves are lacking but this plant is evidently allied to *C. Kerberi* Briq. from which its shaggy-villous stem distinguishes it.

In a recent number of the botanical series Field Museum I referred *C. Kerberi* and my *C. monochroma* to *C. gigantea* L. The former, at least, is well-distinct by its long style.

***Brunellia brunnea*** Macbr. spec. nov. — Ut videtur arborea; ramulis inflorescentiisque intense denseque brunneo-tomentulosis, haud hirsutulis; ramulis crassis leviter angulatis; foliis circa 3 dm. longis, 8-jugis; foliolis subequalibus fere sessilibus basi rotundato-cordatis, apice acuminatis, ad 1,5 dm. longis, 4,5 cm. latis, undulato-crenato-denticulatis, supra paullo nitidulis fere glabris, subtus pallidioribus ad venos minutissime pilosis, costa media brunneo-tomentulosa, utrinque mediocriter reticulatis; inflorescentiis laxè paniculatis 1-1,5 dm. longis, ramulis subcompressis patente curvatis; floribus fasciculatis subsessilibus 3 mm. longis; segmentis 5 crassis utrinque fulvo-puberulentis ovato-acutis fere 2,5 mm. longis; staminibus 9, demum bene exsertis; filamentis subulatis 2,5 mm. longis, ad basin longe hirsutulis; carpellis hirsutulis 4-5. — Peru: without locality (*Weberbauer* 6969 type, Field Museum).

If this species is compared with *B. comocladifolia* it is at once distinguished by the lack of hispidulous pubescence and if with *B. crenata* by the more numerous leaflets and larger flowers. Other species I suppose, from descriptions, are at least as distinct, including the obscure *B. propinqua* which, apparently similar in pubescence, has only 3-4 pairs of acute leaflets, one-sided at base.

***Brunellia dichapetaloides*** Macbr. spec. nov. — Arbor; ramis ignotis; ramulis plus minusve pilosiusculis demum glabratis et niti-

dulis ; inflorescentiis et foliis subtus (praecipue rhachis ubique) plus minusve dense et breviter brunneo-vel subcano-pilosis ; petiolis 6 cm. longis ; foliis 5-6 jugis 2-2,5 dm. longis ; foliolis oblongo-ellipticis basi obliquis, apice valde acutis vel acuminatis subaequalibus, 1-1,5 dm. longis, 3,5-4 cm. latis, inconspicue crenato-dentatis, supra glabris et pernitidis, breviter petiolatis ; inflorescentiis paniculato-cymosis multifloris circa 1 dm. longis, 1-1,5 dm. latis ; pedunculis 2 cm. longis ; ramis principalibus 3 circa 3 vel 4 cm. longis ; floribus ad apicem ramulosum conferto-congestis breviter pedicellatis (pedicellis 1,5 mm. longis) sordide puberulatis ; segmentis 4 late oblongis acutiusculis 2 mm. longis ; staminibus bene exsertis ; filamentis glabris basi exceptis ; antheris rufo-puncticulatis ; carpellis 4, pilosis. — Peru : Chanchamayo Valley, Junin (*Schunke* 83 type, Field Museum) : also 84.

There are a number of species in this genus known to me only by description but I suppose this resembles none of them particularly except *B. crenata* from which it differs in its well-pointed leaflets and different pubescence.

***Brunellia dulcis*** Macbr. spec. nov. — Arbor circa 15 m. alta ; ramulis valde sulcato-angulatis, crassis, plus minusve adpresse lanatis ; foliis simplicibus irregulariter denticulatis oblongo-ellipticis, circa 2 dm. longis, 5,5 cm. latis basi apiceque cuneato-attenuatis, acutis, rigido-characteris supra ad nervos plus minusve lanatis, glabris, vix nitidulis, venis obscuris, subtus adpresse fulvo-lanatis, tenuiter reticulato-venosis ; nervis lateralibus subtus prominibus circa 15-19 ; petiolis 1,5-2 cm. longis ; paniculis 1-1,5 dm. longis, 3-4 cm. latis pauciramosis, ramullis dense fulvo-lanatis, interdum foliosis (foliis valde reductis) ; floribus ad apicem ramulosum capitellato-congestis griseo-albis fere 3 mm. longis segmentis 5 ovatis acutis ; staminibus 8 ; filamentis 3-4 mm. longis ad basin pilosis ; carpellis 4 ut videtur infertilis. — Peru : Pan de Azucar, Huanuco (*Sawada* 74 type, Field Museum).

Similar to *B. tomentosa* but lacking the coarse pubescence that to some extent is present in the inflorescence of that species. The leaves of *B. dulcis* are much more finely reticulate-veined.

***Prunus vana*** Macbr. spec. nov. — Arbor 5-7 m. altus glaberrimus ; lenticellis fere minutis paucis ; petiolis 4-7 mm. longis, fere 2,5 mm.

crassis ; foliis late ellipticis vel ovato-ellipticis, plerumque 12-14 cm. longis, 5-6 cm. latis, basi acutis apice late obtuseque acuminatis, integerrimis, rigide chartaceis, supra valde nitidis, subtus opacis, perobscuris venosis ; racemis circa 4,5 cm. longis ; rhachis fere 1 mm. crassis ; pedicellis ad 2 mm. longis, fere 0,5 mm. crassis ; petalis staminibusque vix 2 mm. longis ; antheris minutis. — Peru : La Merced (*Killip & Smith 23772* type, Field Museum).

Reluctantly I propose this as a new species for it seems to be so very near several, a fact that suggests the possibility that the characters upon which species of *Prunus* have been based by Koehne (*Bot. Jahrb.* 52 : 292-333, 1915), are not, at least always, valid. This tree could be *P. integrifolia* (Presl.) Walp but for its acute-based leaves, slenderer pedicels, and smaller anthers ; *P. guanaiensis* Rusby but for its shorter petioles and pedicels and broader leaves ; *P. debilis* Koehne but for its obscurely veined leaves and shorter stamens. Similar *minutae* seem to separate it from other South American forms, — a term applicable probably to many of the *Prunus* trees recently described as “species” including those here.

***Prunus sana*** Macbr. spec. nov. — Robustus glaberrimus ; lenticellis numerous conspicuis ; petiolis 5-7 mm. longis, 2,5 mm. crassis ; glandulis basilibus 2 mm. longis ; foliis numerosissimis opacis chartaceis integris basi apiceque acutis vel apice acuminatis, elliptico-lanceolatis demum circa 13 cm. longis, 5 cm. latis ; venis praecipue subtus leviter reticulatis ; racemis axillaribus solitariis vel ut videtur confertis vel approximatis circa 4 cm. longis densifloris ; rhachis vix 1 mm. crassis ; pedicellis ad 2 mm. longis vix 0,3 mm. crassis ; petalis staminibusque vix 2 mm. longis ; antheris minutis. — Peru : (*Weberbauer 6958* type, Field Museum).

*Prunus debilis* Koehne, from character is distinguishable from this tree by its few lenticels, supra basal leaf-glands, laxly flowered racemes and longer (3 mm.) stamens. No other Peruvian species, at least, appears comparable.

***Prunus stipulata*** Macbr. spec. nov. — Glaberrimus ; ramulis dense conspicueque lenticello-tuberculatis (lenticellae tuberculiformes) ; stipulis tarde deciduis conspicue subrotundatis, circa 5 mm. latis ;

petiolis 2,5-3 mm. longis, 1,5 mm. crassis ; glandulis (2) subtus in lamina a basi insertis ; foliis integris ovato-ellipticis basi rotundatis apice attenuato-acuminatis, 5-7 cm. longis, 2,5-3 cm. latis, rigide chartaceis nitidulis ubique conspicuis reticulato-venosis ; veniis supra tenuiter impressis ; racemis axillaribus 4-6 cm. longis ; rhachis vix 1,5 mm. crassis ; pedicellis 4-5 mm. longis, 0,5-0,6 mm. crassis, dense tuberculatis ; petalis staminibusque 2,5 mm. longis ; antheris 0,6 mm. longis. — Peru : (*Weberbauer* 6930 type, Field Museum).

Compared with *P. Ruiziana* Koehne, *Bot. Jahrb.* 52 : 316, 1915 this shrub or tree is distinguishable by its conspicuous tuberculiform lenticels, acuminate veiny leaves and smaller flowers. Other species that have come to my notice differ more widely.

***Prunus oblonga*** Macbr. spec. nov. — Fruticosus glaberrimus dense foliosus ; petiolis vix 1 mm. longis ; foliis rigido-coriaceis tenuiter reticulato-venosis fere opacis margine basi fere ad apicem acute denticulatis, oblongo-ellipticis basi breviter acutis vel subrotundatis apice rotundatis, minute retusis, plerumque 4 cm. longis, 2 cm. latis ; racemis circa 3 cm. longis densifloris ; rhachis fere 2 mm. crassis ; pedicellis 3-4 mm. longis, fere 1 mm. latis ; petalis 3 mm. longis ; staminibus 2,5 mm. longis ; antheris 0,9 mm. longis. — Peru : Pozuzo, (*Weberbauer* 6732 type Field Museum).

Among Peruvian species comparable to *P. rigida* Koehne with acuminate leaves or with *P. ovalis* with smaller, entire leaves. I have seen no other species as similar to *P. oblonga* as these two.

***Prunus Williamsii*** Macbr. spec. nov. — Glaberrimus ; ramulis gracilibus ; lenticellis numerosis mediocriter conspicuis ; petiolis plerumque 10-14 mm. longis, 2 mm. crassis ; foliis integerrimis supra lucidulis, chartaceis inconspicue leviter venosis late ovato-ellipticis ad 14 cm. longis, 6 cm. latis basi rotundato-acutis, apice ut videtur breviter et obtuse acuminatis ; glandulis 2 mm. longis ; racemis 6-9 cm. longis laxifloris ; rhachis 1 mm. crassis ; pedicellis vix 0,5 mm. crassis, 6-7 mm. longis ; petalis 2 mm. longis ; staminibus 2,5 mm. longis ; antheris 0,3-0,4 mm. longis. — Peru : San Roque, Dept. San Martin (*Williams* 7396 type, Field Museum).

The collector noted this cherry as a „liana” and if this is its habit

it is a more distinctive species than even its apparently excellent characters would seem to indicate : namely its slender rachis and long pedicels which separate it at once from *P. integrifolia*, its nearest relative in Peru, and its large leaf-glands and long stamens which forbid its reference to the Bolivian *P. guanaiensis* Rusby.

**Prunus rotunda** Macbr. spec. nov. — Arboreus glaberrimus 3-8 m. altus ; ramulis gracilibus, cortice glauco-albido subnitidulo ; lenticellis obscuris paucis ; petiolis 7 mm. longis circa 1,5 mm. latis ; glandulis supra-basilibus 1 mm. longis ; foliis integerrimis chartaceis supra nitidis subtus opacis, ovalibus vel subrotundatis, basi rotundatis, subabrupte acuminatis, 10-13 cm. longis, 6-8 cm. latis nervis ubique vix conspicuis plus minusve distincte reticulatis ; racemis circa 4 cm. longis ; rhachis circa 1 mm. crassis ; pedicellis circa 0,4 mm. crassis, 3- fere 4 mm. longis ; petalis 3,5 mm. longis ; staminibus 3 mm. longis ; antheris minutis. — Peru : Mishuyacu (*Klug* 797 type, Field Museum) ; also 823.

Totally different in its beautiful subrotund leaves from any species listed by Koehne in his revision, *Bot. Jahrb.* 52 : 292-333, 1915.

**Prunus detrita** Macbr. spec. nov. — Arboreus glaberrimus circa 8 mm. altus ; ramulis ut videtur gracilibus cortice glauco-albido ; lenticellis obscuris paucis ; petiolis 12 mm. longis anguste sulcatis 1,5-2 mm. crassis ; glandulis perobscuris fere basilibus ellipticis circa 2 mm. longis ; foliis elliptico-ovalibus vel paullo ovato-ellipticis basi rotundato-acutis abrupte obtuseque acuminatis 12-15 cm. longis, 6,5-8 cm. latis, integerrimis coriaceo-chartaceis supra nitidulis, nervis haud prominulis impressis subtus opacis nervis cum venis obscure laxequae reticulatis ; racemis plerumque 5 cm. longis ; rhachis 0,75 mm. crassis ; pedicellis pergracilibus 2,5-vix 3 mm. longis ; petalis 1,5 mm. longis ; staminibus 2-2,5 mm. longis ; antheris minutis. — Peru : Mishuyacu (*Klug* 1094 type, Field Museum).

Too near, apparently *P. ampliifolia* Pilger which species, however, as to type, has very stout petioles and stouter pedicels. This brings the total number of forms of *Prunus* in Peru to 16 most of them resting on single collections distinguished from one another on characters as slight or perhaps as trite as those indicated here. Nevertheless until sufficient

material exists to permit determination of the true species' range of variation it seems eminently practical to give these aberrant collections names.

**Couepia Williamsii** Macbr. spec. nov.—Arbor pumila; ramulis gracilibus subtortuosis; petiolis 5 mm. longis; follis anguste oblongis vel elliptico-oblongis, basi breviter acutis vel subrotundatis, apice mediocriter abrupte acuteque acuminatis, ut videtur plerumque 11 cm. longis et circa 3,5 cm. latis vel interdum 16 cm. longis et fere 6 cm. latis, supra glabris nitidis, subtus dense adpresseque fulvo-tomentulosus, chartaceo-membranaceis; nervis subtus prominulis; racemis gracilibus axillaribus terminalibusque ut videtur 6-12-floris, glabris; pedicellis 5 mm. longis; floribus circa 2 cm. longis; calycis leviter curvatis, tubo cylindrico basi paullo gibbo circa 1,5 cm. longo, lobis late ovatis 6 mm. longis; staminibus circa 1 cm. longis; stylo 9-11 mm. longo dense ubique fere villosus. — Peru: La Victoria (*Williams 2975* type, Field Museum).

*Couepia leptostachya* Benth. is very similar but its somewhat smaller flowers are borne on shorter pedicels and the style is always much less densely hairy and only toward the base.

**Alchemilla andina** (Perry) Macbr. comb. nov. = *A. procumbens* Rose, var. *andina* Perry, *Contrib. Gray Herb.* 84 : 23 (1929).

As indicated by Miss Perry in her recent painstaking revision of *Alchemilla* sect. *Lachemilla*, l. c., this plant is "fairly constant," in character, — it seems to me more so than some other forms, and, of special significance, its known variations are not concerned with its diagnostic features, i. e. with its short obovate leaves serrate only at tip and its disk-constricted calyx. It would seem convenient, therefore, at present to call it a "species" and from the material seen by me it appears to be better marked, because of the uniformly shorter broader leaf-segments than many forms so designated. To the Peruvian records given by Miss Perry may be added *Weberbauer 3236* from above Huaraz, Ancash.

**Alchemilla hirsuta** HBK. *Nov. Gen.* 6 : 224 (1824).

This plant, not identified by Miss Perry, has been found at Ocos,

Ancash, Peru by Dr. Weberbauer (2691, det. Markgraf.) I think the good material matches the meager but sufficient specimen by Humboldt in Herb. Willdenow 3148.

Surprisingly enough the hypanthium within is pubescent! But glabrous without, and the plant in other respects is similar to *A. aphanoides* except for the rather abundant and spreading villous-hirsute pubescence. Following Miss Perry's acceptance of the presence or absence of pubescence within the hypanthium, however, as a criterion of salient importance in defining "species,, here, this plant seems to be a "good,, one.

**Parinarium parile** Macbr. spec. nov. — Ut videtur arboreum; ramulis subflexuosis glabris mediocriter tuberculatis; petiolis crassis quadratis 8-10 mm. longis; foliis oblongo-ellipticis vel elliptico-lanceo. latis basi subrotundatis vix vel haud acutis apice bene acuminatis ad 16 cm. longis, 5 cm. latis vel saepius circa 9 cm. longis et 3 cm. latis coriaceis vei coriaceo-chartaceis, supra nitidulis glabris, subtus primum inter venem cinereo-lanato-tomentulosis demum glabratis; nervis lateralibus praecipue subtus prominentibus utrinque 25; paniculae ramis cum pilis fulvis subpatento-pubescentibus, ramulis floribusque adpresse cano-pilosis; pedicellis brevissimis vel interdum 1 mm.; longis; bracteis caducis 2,5 mm. longis; calycis tubo turbinato 2 mm-longo intus solum ad apertum densissime piloso lobis anguste ovatis acuminatis paullo longiore; petalis caducissimis oblongo-ellipticis vix 1,5 mm. longis; staminibus ad 6 unilateralibus; filamentis glabris vel fere sepalis vix vel paullo longioribus liberis; stylo ad basin piloso. — Peru: Manfinfa on the upper Rio Nanay, Loreto (*Williams* 1140 type, Field Museum); also 1113.

Paralleling several species in several respects this particular form seems nevertheless to depart from all others in characters that mark it as distinct. The native name recorded is „Uchpa-umari”.

**Polylepis subsericans** Macbr. spec. nov. = *P. incana* HBK. var. *flavipila* Bitter, *Bot. Jahrb.* 45: 640 (1911) = *P. incana* HBK var. *subtussericascens* Bitter in herb.

The last indicated collection in Field Museum, *Weberbauer* 5487 from Hacienda Tortorabamba, Ayacucho may be taken as the type

of this tree which seems to be a species distinct enough from *P. incana* by virtue of the pilose pubescence on the under surfaces of the leaflets. In this it resembles *P. albicans*. Variable as *P. incana* is, its pubescence is always a compact tomentosity, soft and abundant to fine and meager. Some specimens referred by Bitter in his most exacting revision, l. c., to *P. incana* as varieties are rather, it seems to me, forms of *P. villosa*, a species characterized by loose villous pubescence. In this group the *character* of the pubescence is acceptable as specifically diagnostic.

It may be noted that *P. subsericans* apparently varies (as other species) in the degree of crenation of the leaflets. The leaflets of the type are entire or two to four-toothed near the tip; in *Weberbauer* 5433 from the same general region the crenations are often, but not always, more numerous. The latter collection is the type of Bitter's published variety but I have not taken up his name (the action not being required) because it is not significant.

**Licania trigonioides** Macbr. spec. nov. — Fruticosa, 2 m. alta; ramulis dense fulvo-hirsutulis gracilibus elongatis; stipulis lineari-subulatis 7 mm. longis dense adpresseque fulvo-strigosis; foliis subsessilibus (petiolis 1-1,5 mm. longis) ellipticis vel oblongo-ovato-ellipticis basi leviter cordatis, apice plus minusve acuminatis plerumque circa 1 dm. longis et 4,5 cm. latis, papyraceo-chartaceis supra nitidulis glabris costa media paullo hirsutulis exceptis, subtus dense cano-tomentulosis, nervis principalibus et praecipue costa media sparse fulvo-villosis; veniis utrinque paullo prominulis tenuiter reticulatis; paniculis remote ramosis fulvo-hirsutulis ut videtur ad circa 2 dm. longis; ramis patentibus ad 7 cm. longis remotifloris; floribus 2-3-fasciculatis sessilibus sordide tomentulosis et pilosis; calycis tubus urceolatus intus hirsutus vix 1,5 mm. longis, laciniis circa 1 mm. longis, ovatis, acutis; petalis 0; staminibus 5-7; filamentis dense villosis; stylo villoso, 2 mm. longo; ovario velutino-strigoso. — Peru: Mishuyacu near Iquitos (*Klug* 449 type, Field Museum).

Really very different from any species I have found recorded from Peru and apparently distinct enough from any although its bicolored foliage reminds one of the smaller-leaved *L. incana* of Guiana and Brazil. Its aspect, not too critically considered, is that of a Peruvian *Trigonía*.

**Licania intrapetiolaris** Spruce, var. **brevis** Macbr. var. nov. — Foliis subtus ad nervos plusminusve pilosis demum glabris; floribus vix 2 mm. longis. — Peru : Mishuyacu, near Iquitos (*Klug* 612 type, Field Museum).

At first I referred this specimen to Spruce's species on character but from a meager representation of the type in Herb. Dahlem I notice that the Brazilian state has flowers nearly 3 mm. long. This difference may be significant but there are already so many species of *Licanias* based on minutae that I hesitate to give this material that rank. At that, it may be as distinct as any of the following.

**Licania lucida** Macbr. spec. nov. — Arbor, 10 m. alta; ramulis molliter et breviter villosis; petiolis 2-3 mm. longis; stipulis lineari-lanceolatis, 5-7 mm. longis; foliis ovato-ellipticis, basi leviter cordatis, apice subabrupte acuminatis, plerumque 10-12 cm. longis, 5-7 cm. latis vel interdum multo minoribus, supra glabris et pernitidis, subtus molliter fulvo-villosis; venis subtus prominulis reticulatis; paniculis 7-8 cm. longis, fulvo-villosis, ramulis 2,5-3,5 cm. longis; floribus confertis sessilibus; calycis urceolatis 3 mm. longis extus adpresse strigillosis obscure costatis intus plus minusve lanato-villosis; staminibus ut videtur circa 10; filamentis brevibus; stylo adpresse cano-piloso 2 mm. longo; ovario piloso vix 1 mm. longo. — Peru : Mishuyacu, near Iquitos (*Klug* 462 type, Field Museum).

Except that the style is fully twice as long as the ovary, — instead of little longer, — I should refer this to *L. mollis* as a more pubescent variety or form.

**Licania lata** Macbr. spec. nov. — Arbor, ad 18 m. alta; ramulis glabris vel juvenillis brevissime villosis; petiolis 7-10 mm. longis; foliis chartaceo-coriaceis supra nitidis subtus cano-arenoso-tomentulosis utrinque leviter et tenuiter reticulato-venosis, oblongo-ellipticis vel interdum late ellipticis, basi rotundatis vel rare paullo acutis, apice breviter acuminatis, ad 16 cm. longis et circa 4,5 cm. latis vel interdum 6 vel 7 cm. fere latis; glandulis plus minusve prominulis; paniculis fulvo-pubescentibus, 1-1,5 dm. longis; ramulis 2,5-8 cm. longis densifloris; floribus albis vel albido-flavis confertis sessilibus; calycis campanulatis subcano-tomentulosis 3 mm. longis intus dense

lanuginosis, lobis late ovato-acutis ; petalis 0 ; staminibus circa 12 ; filamentis glabris lobis calycis duplolongioribus ; ovario et stylo longe piloso. — Peru : Mishuyacu, near Iquitos (*Klug* 560 type, Field Museum) also 587.

Maybe there are two species represented by this material but except for the broader leaves and longer panicle -branches *Klug* 587 essentially agrees with *Klug* 560 as dissected (after cooking) flowers seem to be inseparable. I judge the tree to be comparable with *L. humilis* with different pubescence and strong leaf-venation. In Peru it suggests most *L. octandra* (Hoffmansegg) Pilger, a species with uniformly smaller leaves, rarely 3 cm. wide, the venation densely reticulate.

**Parosela Smithii** Macbr. spec. nov. — Herbacea ad basin valde suffutescens paullo ramosa ; caulibus 3-6 dm. altis haud pubescentibus mediocriter glandulosis ; stipulis setaceis vix 2 mm. longis ; foliis 3-4 cm. longis, foliolis plerumque 13 vel 15, petiolatis supra glabris subtus sparse vel obscure puberulis et dense punctato-glandulosis fere oblongis, basi paullo-cuneatis apice rotundato-truncatis minustissime mucronulatis plerumque 7-10 mm. longis, circa 1,5 mm. latis ; spicis satis pedunculatis demum 4-5 cm. longis ; rhachibus dense breviter pilosis ; bracteis caducis glabris vel fere glabris sed glanduloso-punctatis abrupte caudatis ad 4 mm. longis ; calycis dentibus inaequalibus basi ipsa excepta subulatis ad 2 mm. longis cum tubo 4 mm. longo dense villosis ; floribus circa 8 mm. longis ut videtur purpureis ; alis auriculatis longe (2 mm.) stipitatis ; vexillo ignoto. — Peru : Anco, Rio Mantaro Valley 2500 m., April, 1929 *Killip & Smith* 22180 type, Field Museum).

This species is unique, in so far as the group is known to me, in its combination of relatively narrow leaves and characters of inflorescence.

I continue to use the name *Parosela* in preference to *Dalea* for reasons repeatedly stated most recently in *Field Mus. Bot.* 11 : 24. 1931. The former undoubtedly, from a standpoint of practicability and technicality, is the name to be *conserved* ; but the important thing is that one name or the other be added to the list of nomina conservanda, and end the long argument and confusion.

**Astragalus imputatus** Macbr. spec. nov. — Suffrutex humilis subprostratus ; caulibus ad 2 dm. longis mediocriter et breviter ramo-

sis ; stipulis vaginantibus haud valde imbricatis parce adpresse rigosis solum base persistentibus ; foliis numerosissimis plerumque 4 cm. longis circa 9-jugis ; foliolis viridibus parce subadpresse strigosis fere oblongis subacutis 3 (4) mm. longis, vix 1 mm. latis, deciduis ; rhachisibus persistentibus rigido-spinescentibus ; floribus axillari-geminatis breviter pedicellatis flavido-albis ad 17 mm. longis ; calycis dentibus anguste ovato-acuminatis ad 2 mm. longis, tubo oblongo-cylindraceo 6 mm. longo dense cum pilis plerumque negris pubescentibus ; petalis 12-13 mm. longis ; vexillo 17-18 mm. longo, ad 8 mm. lato, mucronate retuso et longe (5 mm.) unguiculato. — Peru : Rio Blanco, 3000 m., (*Killip & Smith* 21739 type Museum).

One other Peruvian *Astragalus* has a persistent spine-like leaf-rachis, *A. alienus* Gray. It differs notably in its retuse canescen leaflets, smaller (12 mm.) flowers and in its differently proportioned calyx, the teeth a half as long as the calyx-tube.

**Ventana peruviana** Macbr. spec. nov. — Arbor, affinis *V. minor* ad 12 m. alta praeter inflorescentia glabra ; ramis dense ramosis, ramulis crassis plus minusve tuberculatis ; petiolis 2,5 mm. longis ; foliis late ellipticis vel elliptico-obovatis basi breviter cuneatis apice rotundato-retusis ad 8 cm. longis, 4,5 cm. latis vel plerumque circa 5 cm. longis et 3,5 cm. latis, rigide coriaceis supra nitidis subtus opacis, nervis vix notatis ; inflorescentiis 3 cm. longis, 5 cm. latis ; ramulis pedicillisque brevissimis angulatis sparse et minute puberulis vel glabratis ; calyce breviter 5-lobo, lobis eciliolatis ; alabastris fere linearibus 10 mm. longis ; staminodiis nullis (?) — Peru : Mishuyacu, near Iquitos (*Klug* 1130 type, Field Museum).

I have not seen *V. minor* Benth of British Guiana but from description this Peruvian tree appears to differ, notably in its much shorter flowers and glabrous calyx, and apparently it is comparable only to Bentham's species.

**Erythroxyton Shatona** Macbr. spec. nov. — Glabrum ; ramulis crassis dense verruculose lenticellatis ; stipulis persistentibus haud striatis obscure vel non setosis 4 mm. longis ; petiolis 3-4 mm. longis ; foliis ovato- ellipticis breviter acutis 7-10 cm. longis, 3-5 cm. latis, coriaceis, utrinque nitidulis supra glauco-viridibus venis obscuris,

nervo centrali tenui impresso, subtus in sicco brunneis, lineis longitudinalibus valde manifestis, pulchre areolatis; floribus paucis; pedicellis circa 3 mm. longis; calycis segmentis anguste ovatis 2 mm. longis; corollis ignotis; stylis plus minusve connatis (semper?) drupis oblongo-ellipsoideis subangulatis acutiusculis 12 mm. longis, 3,5 mm. latis. — Peru: Rio Mayo, Tarapoto (*Williams* 6212 type, Field Museum).

Perhaps related to *E. carthaginensis* Jacq. but distinguishable by its shortly pointed leaves. Among species reported from Peru it resembles most *E. gracilipes* Peyr. with thin and acuminate leaves. A native name, according to the collector, is "Shatona colorado,,"

**Erythroxyton luculentum** Macbr. *soec. nov.* — Fruticosum ubique nitidulum; ramulis gracilibus elongatis paucis ramosis plus minusve conspicue lenticellatis; petiolis gracilibus 5-6 mm. longis; foliis oblongo-ellipticis plerumque circa 12 cm. longis et 4 latis basi acutis apice obtuse acuminatis, supra praecipue nitidis costa media et venis flavidis exceptis olivaceis subtus flavido-viridibus et pallidioribus ubique laxe reticulato-venulosis, lineis longitudinalibus non manifestis, chartaceo-membranaceis; stipulis persistentibus enervatis crasse carinatis circa 2,5 mm. longis ut videtur breve setulosis; floribus ignotis sed ut videtur paucis; pedicellis 5 mm. longis; drupis 10-12 mm. longis ad apicem plus minusve curvatis, — Peru: La Victoria on the Amazon (*Williams* 2788 type, Field Museum).

I have not been able to match this shrub in the large collection at Dahlem built up by O. E. Schulz. It is perhaps allied to *O. Ruizii* Peyr. of Ecuador which, however, has opaque leaves. Its long and slender petioles distinguish it from similar Peruvian species, as *E. mamacoca*.

**Fagara Mantaro** Macbr. *spec. nov.* — *Z. Culantrillo* peraffine; ramis ut videtur inermibus, ramulis novellis minutissime pulverulentis; foliis densis 8-15 cm. longis, petiolo puberulo teretiusculo supra complanato haud alato, foliolis 3-5-jugis ellipticis sessilibus apice rotundatis basi oblique rotundatis, ad 6 mm. longis et 3 cm. latis infimis imprimis minoribus, coriaceis nitidulis subtus opacis, nervo medio subtus valde prominente, nervis lateralibus fere parallelis vix prominulis margine subintegro vel remote et obscure crenatis; racemis paullo ramosis

circa 3 cm. longis cum pedicellis brevibus minute puberulis; calycis laciniis ovatis; petalis elliptico-oblongis, parce ciliatis 2,5 mm. longis; staminibus paullo exsertis; fructibus 1-3 coccis crasse stipitatis, coccis ovato-rotundis lateraliter aliquid compressis parce foveolatis. — Peru: Rio Mantaro, Junin, 2500 m. (*Weberbauer* 6585 type, Field Museum).

In spite of the subentire leaflets, light pubescence and somewhat different fruits I think this shrub is comparable only with *F. Culantrillo*. It also may bear a native name.

**Fagara valens** Macbr. spec. nov. — Arboreum magnum; ramulis petiolisque ignotis; foliis circa 3 dm. longis et circa 13-foliolatis; foliolis subcoriaceis subtus vix supra valde nitidis, subaequalibus oblique oblongo-ellipticis abrupte caudato-acuminatis (acumen 7-10 mm. longo) basi valde obliqua vel etiam acuta, plerumque 13 cm. longis, 5,5 cm. latis, margine integris, petiolulo 7-10 longo, nervo medio subtus valde prominente minutissime pulverulento, nervis lateralibus ubique prominulis subtus imprimis cum venis reticulatis, punctulis numerosissimis minutis; ramis floriferis puberulentis 3 dm. longis cum ramulis patentibus paniculatis; pedicellis brevissimis; calycis laciniis brevibus ovato-acutis; petalis subovatis glabris vix 1,5 mm. longis; staminibus filiformibus duplum petalorum fere aequantibus. — Peru: Pebas, on the Amazon (*Williams* 1962 type, Field Museum).

Although the collector noted this species as a "large tree", the type consists only of one leaf neatly cut off above the petiole and one inflorescence at some point above its attachment. However it seems to be undescribed and to be allied to *F. cuyabense* Engler and *F. Sprucei* Engler. Perhaps it is the staminate plant of the latter but the leaflets are more numerous than known for that species.

**Picramnia lineata** Macbr. spec. nov. — *P. Spruceana* affinis; ramulis petiolisque cinereo-puberulentis; foliis chartaceo-membranaceis fere glabris 7-9-foliolatis; foliolis acutissime acuminatis vel etiam interdum obtusiusculis; nervis lateralibus supra lineolato-notatis subtus cum venis reticulatis distincte prominentibus; pedicellis fructiferis 5 mm. longis. — Peru: Yurimaguas (*Williams* 4629 type, Field Museum); also 4635. Yarina Cocha, Loreto, *Tessmann* 5478.

*Williams* recorded the native name "Sani panga"; *Tessmann*,

“Ami”. The leaflets of the type average about 10 by 3,5 cm., those of *Williams* 4635 about 6,5 by 2,5 cm. The latter specimen is only in bud but I think it is undoubtedly the same species.

The chief difference between this plant and the species with which it is compared is the raised nervation, that is, the lateral nerves, even though sometimes more or less grooved, appear as sharply raised lines. The allied *P. macrostachya* has larger leaflets and sessile fruits.

**Picramnia Martiniana** Macbr. spec. nov. — Fruticosa; ramulis petiolisque plus minusve flavido-cinereo-pilosis; foliis chartaceis vel chartaceo-membranaceis nervo medio supra lateralibusque subtus sparse piloso excepto glaberrima 9-13 foliolatis oblongo-ellipticis plus minusve valde inæquilateralibus apicem versus acute acuminatis, plerumque 10-12 cm. longis et circa 4 cm. latis; petiolulis crassis 3,5 mm. longis; nervis arcuato-adscendentibus supra impressis subtus cum venis laxè reticulatis; ramulis floriferis mediocriter crassis folio aequalongis, ramulis curvato-patentibus demum adscendentibus racemosis; pedicellis 1,5-3 mm. longis cum calycis lineari-lanceolatis 1,5 mm longis sparse flavido-pilosis; stigmatè oblongo; bacca demum 2 cm. longa, pedicello 7 mm. longo. — Peru: San Roque, San Martin, (*Williams* 6943 type, Field Museum); also 7069; 7045; 6935; 6968.

Like the foregoing, very near *P. Spruceana* from which it may be distinct by its stouter flowering branches, the branchlets much more widely spreading at the base, and by its mostly longer pedicels and larger leaflets.

**Picramnia juniniana** Macbr. spec. nov. — Arbor, ad 8 m. alta; ramulis (floriferis exceptis) glabris; foliis chartaceis supra nitidis, glabris, 5-7-foliolatis; foliolis terminali elliptico excepto late ovato-ellipticis circa 7.5 cm. longis, 4 cm. latis infimis brevioribus, apice caudato-vel subcaudato-acuminatis, basi paullo vel haud oblique rotundato-acutis; nervis supra haud impressis vix notatis subtus cum venis valde reticulatis prominentibus; ramulis floriferis puberulento-pilosis sparse ramosis circa 1,5 dm. longis; floribus glomerulatis ignotis. — Peru: Puerto Yessup, Junin (*Killip & Smith* 26377 type Field Museum).

Possibly related to *P. caracasana* from which its glabrous branches and smaller leaflets distinguish it.

**Picramnia tenuis** Macbr. spec. nov. — Fruticosa ad 3 m. alta ; ramulis petiolisque fulvo-cinereo-puberulentis ; foliis tenuiter membranaceis 7-9-foliolatis supra nervo medio pulverulento excepto glaberrimis subtus ad nervos sparse cum pilis brevibus et subpatentibus pubescentibus ; foliolis valde inaequalateralibus basi oblique rotundatis vel subtruncatis, apice breviter acuminatis obtusiusculis plerumque 5-6 cm. longis, 3-3,5 cm. latis, infimis subrotundatis, 1,5-2 cm. latis ; petiolulis 1,5 mm. longis ; nervis venisque utrinque reticulatis vix prominulis supra haud impressis ; ramulis floriferis ut videtur circa 3 vel 4 cm. longia ; pedicellis fere 2 mm. longis ; calycis laciniis petalisque fere subulatis vix 1 mm. longis ; ovario oblongo-ellipsoideo ; stylo brevo sed stigmatibus patentibus oblongo-acutis elongatis. — Peru : Capahuanos, on Rio Pichis, Junin (*Killip & Smith* 26739 type, Field Museum).

A species with more distinctive characters than usual, but another that nevertheless is apparently not referable to any described form.

**Picramnia Schunkei** Macbr. spec. nov. — Arbor ; ramulis petiolis foliis subtus ad nervos inflorescentiisque dense molliterque pilosis ; foliis chartaceo-coreaceis supra nervo medio impresso breviter piloso excepto fere glabris 11-15-foliolatis ; foliolis similibus inaequalibusque (vel inferioribus multo brevioribus) mediocriter inaequalateralibus apicem versus oblique obtuseque attenuato-acuminatis basi obliqua subacuta, oblongo-ellipticis, plerumque 9 cm. longis et circa 3,5 cm. latis, petiolulo 2 mm. longo ; nervo medio lateralibusque supra impressis subtus cum venis laxe reticulatis prominentibus ; ramulis floriferis fem. pseudo-racemosis ; floribus solitariis vel plus minusve dense glomerulatis vix pedicellatis ; calycis dense pilosis-hirsutulis parvis, vix 1 mm. longis. — Peru : Chanchamayo Valley, Junin, 1600 m. (*Carlos Schunke* 316 type, Field Museum). Ayacucho : Rio Apurimac Valley, *Killip & Smith* 22955 (fruit) ?

This particular tree differs from *P. Martiana* in its more numerous smaller and obtusish leaflets. Whether these differences indicate a distinct species, is, with our present knowledge, open to question. Possible the Killip & Smith "much tangled shrub., is the same but its leaflets are thinner and as many as 17. The fruits are very large (more than 2 cm. thick), subrotund, on pedicels 1,5 cm. long.

**Picramnia magnifolia** Macbr. spec. nov. — Arbor parva; ramulis forsan glabris; foliis ut videtur 5-7- foliolatis chartaceo-coriaceis utrinque nervo medio interdum parce puberulo excepto bene nitidis glaberrimis; foliolis paullo vel vix inaequalateralibus basi late subrotundato-vel cuneato-acutis apice breviter acuminatis, obtusiusculis, oblongo-vel ovato-ellipticis vel infimis minoribus subrotundatis plerumque circa 2 dm. longis et 9 cm. latis sed interdum 3 dm. fere longis et 11 cm. latis; petiolulis crassis plus minusve rugulosis 4-5 mm. longis; nervis utrinque conspicuis cum venis praecipue subtus reticulatis prominentibus; ramulis fructiferis sparse puberulis demum glabratis circa 2 dm. longis pendulis; bacca oblongo-ovali dense ferrugineo-puberulis; stigmatate elongato plus minusve recurvo. — Peru Pebas, on the Amazon (*Williams* 1737 type, Field Museum); also 1879. Mishuyacu, near Iquitos, *Klug* 1096.

If this tree is a *Picramnia* it appears to be comparable only with *P. macrostachya* Kl. and then only as to foliage. The Klug material (staminate) is very young but apparently the same.

**Esenbeckia venulosa** Macbr. spec. nov. — Glabra; ramulis teretibus; foliis plerumque trifoliolatis numerosis subaequalibus, petiolo supra leviter complanato subangulato 3-5 cm. longo, foliolis chartaceo-coriaceis opacis subtus praecipue conspicue reticulato-venulosis, inaequalibus oblongo-ellipticis vel interdum elliptico-obovatis obtusis, lateralibus ad 7 cm. longis, 3 cm. latis, vix petiolulatis basin versus oblique cuneatis, intermedio majore basi cuneato distincte petiolato ad 1 dm. longo 5 cm. lato; paniculis subracemosis obscure sparseque puberulis 1.5-3 cm. longis; pedicellis brevissimis; calycis laciniis rotundatis minute ciliolatis, fere 1 mm. longis; petalis anguste ovato-oblongis 5 mm. longis obscure pulverulentis; staminibus circa 1,5 mm. longis; antherae magnae; disco carnosio 4 plicato ovarium stylo capitullato cornatum includente. — Peru: Rio Mantaro, Dept. Junin, 2500 m., (*Weberbauer* 6584 type, Field Museum).

I have not succeeded in referring this shrub or small tree to any known species and have therefore concluded that it may be undescribed, whatever its relationship.

**Protium medianum** Macbr. spec. nov. — Fere ubique glabrum ; ramulis novellis obscure angulatis ; foliis glabris coriaceis haud nitidulis 2-jugis ; petiolo communi 2,5-3 cm. longo ; foliolis oblongo- vel paullo obovato-ellipticis basi cuneato-acutis apice breviter (5-7 mm.) caudato-acuminatis, lateralibus terminali paullo minoribus 5-2 mm. petiolatis subaequalibus 8-10 cm. longis et circa 3,5 cm. latis, nervis lateralibus supra obscure notatis subtus cum venis tenuiter reticulatis subprominentibus ; inflorescentiis folia aequantibus (semper ?) laxe composito-paniculatis minutissime sparseque pulverulentis circa 2 dm longis ; pedicellis 1,5-2 mm. longis basi minutissime bracteolatis ; calycis laciniis late ovatis ; petalis anguste ovato-lanceolatis sparse puberulis ; disco glabro ; ovario solum ad basin piloso superne glabro in stylum brevum contracto. — Peru : Mishuyacu (*Klug* 270 type Field Museum). Iquitos, *Williams* 3792.

There seems to be no place for this species in Engler's grouping, DC. *Monog.* 4 : 61. 1887, since the ovary is neither glabrous nor pilose but partly pilose. Among species known from Peru it suggests most *P. Riedeliana* Engler with much larger very lustrous leaflets and a densely pilose ovary. In exact character it is probably comparable with species 28-30 of the revision mentioned. The Williams' material is apparently the same but the inflorescence is very much shorter.

**Protium puncticulatum** Macbr. spec. nov. — Glabrum ; foliis 3 (-4) -jugis ; petiolo cummuni 4-6 (-10) cm. longo ; foliolis membranaeo-chartaceis paullo nitidulis oblongo-ellipticis basin versus haud angustatis plus minusve oblique acutis, apice subcaudato-acuminatis (acumen obtuso 5-7 mm. longo), plerumque 10 cm. longis, 3-5 cm. latis vel majoribus circa 12 cm. longis et 5 cm. latis, petiolulo circa 8 mm. (rare ad 15) longo ; nervis lateralibus et venis densissime reticulatis subtus vix prominentibus sed minutissime albo-puncticulatis ; inflorescentiis brevis ut videtur cymoso-umbellatis paucifloris circa 1 cm. longis ; pedicellis glabris 3-4 mm. longis ; floribus 3,5 mm. longis ; calycis segmentis minutissimis ; ovario glabro (?) videtur in discum immerso ; drupis circa 18 mm. latis et longis (sub-globosis) haud attenuatis glabris, 4-5-pyrenis. — Peru : Santa Rosa, Yurimaguas, (*Williams* 4861 type, Field Museum) ; Parana Pura, Yurimaguas, *Williams* 4625 (fruit).

The larger measurements apply to the fruiting specimen which I

refer with little hesitation to the same species as the leaf veins have the same peculiar punctulations giving them a chain-like effect. The flowers are all more or less damaged by mould. Their character is, therefore, somewhat uncertain but the fruit is similar to that of *P. macrophyllum* (HBK.) Engler except that it is not pointed. The native name "Copal caspi," is applied also to other species.

**Protium Klugii** Macbr. spec. nov. — Arborum 8 m. altum; ramulis novellis petiolis inflorescentibusque dense fulvo-puberulentis; foliis subcoriaceis utrinque opacis 4-jugis longe (4-6 cm.) petiolatis; foliolis lateralibus superioribus oblongo-ellipticis basi oblique rotundatis, apice obtuse caudato-acuminatis circa 10 cm. longis, 3 cm. latis, terminali 3,5-4 cm. latis subtus ad nervos et venis prominente reticulatis minute pulverulentis; petiolulis circa 5 mm. longis; ramulis floriferis folio haud vel paullo brevioribus; floribus 2 mm. longis breviter pseudoracemosis; pedicellis 1,5-2 mm. longis; calycis laciniis ovatis 1 mm. longis cum petalis anguste ovatis acutis extus puberulis; ovario fulvo-piloso bene exserto stylo brevi instructo; disco glabro crassiusculo. — Peru: Mishuyacu, near Iquitos (*Klug* 806 type, Field Museum).

With the pubescent ovary well-exserted from the glabrous disk this species with four pairs of leaflets is comparable only with *P. crassifolium* Engler. The latter has very lustrous and glabrous leaves with larger leaflets.

**Protium Llewelyni** Macbr. spec. nov. — Ramulis novellis petiolisque obscure minuteque pulverulentis; petiolo communi circa 3 cm. longo; petiolulis 4-7 mm. longis; foliis glabris subcoriaceis opacis vel vix nitidulis, 4-5-jugis; foliolis oblongo-ellipticis basi oblique rotundatis vel plus minusve acutis, apice caudato-acuminatis (acumen ad 6 mm. longo) vel interdum subobtusis circa 9 cm. longis, 3-fere 4 cm. latis, nervis venisque subtus laxe reticulatis vix prominentibus; inflorescentiis circa 1 dm. longis, minute fulvo-puberulis; pedicellis 1,5 mm. longis cum petalis calycisque minute sparseque puberulis; calyce breviter rotundato lobato; ovario dense piloso in stylum aequilongum attenuato; disco glabro. — Peru: Iquitos (*Llewelyn Williams* 3704 type, Field Museum).

*Protium crassifolium* [Rich.] Engler is probably now known from Peru by *Williams'* 4564 from San Ramon, Yurimaguas, and, if technically near *P. Llewelyni*, it is at once distinct vegetatively by its heavier and very lustrous broader leaves as well as by its much longer inflorescence.

This tree may bear the euphonious and less usual given name of the collector and thereby commemorate particularly his zealous endeavors in botanical exploration.

**Protium titubans** Macbr. spec. nov. — Lianum (?); ramulis novellis sparse pilosis demum glabris, cortice subcano; petiolo communi 2-2,5 cm. longo angulatis cum petiolulis pilis brevibus et longioribus intermixtis obtectis; petiolulis lateralibus 8-10 mm. longi, terminali 2,5-3 cm. longis; foliis 1-2-jugis chartaceis pallide viridibus vix nitidulis nervo medio subtus obscure sparsissimeque puberulento excepto glabris; foliolis subaequalibus ovato-ellipticis, apice abrupte caudato-acuminatis (acumen 7-10 mm. longo) lateralibus basi plus minusve oblique rotundatis 8-11 cm. longis, circa 5,5 cm. latis, terminali basi paullo oblique rotundato-acutis ad 12 cm. longis et 6 cm. latis; nervis supra inconspicuis subtus cum venis laxis prominentibus; inflorescentiis vix 1,5 cm. longis densifloris parce pubescentibus; pedicellis 1-1,5 mm. longis; calyce glabro, brevissime rotundato-dentato; floribus glabris 2,5 mm. longis; lobis acutis; ovario glabro depresso obscure sulcato, stylo fere aequilongo; disco perbrevis. — Peru: Iquitos, (*Williams* 1521 type, Field Museum).

In floral characters not unlike *P. Martianum* and allies but with much broader and much less pubescent leaflets. Observed by the collector as a "bejuco amongst shrubs"; perhaps more likely it is a shrub with elongate branches that may rest or become tangled in other shrubs.

**Protium glaucum** Macbr. spec. nov. — Glaberrimum; ramulis ignotis; petiolo communi fere 1 dm. longo; foliis 3-jugis glabris membranaceis glauco-viridibus paullo nitidulis; foliolis elliptico-oblongis lateralibus basi valde oblique rotundatis apice breviter (3-4 mm.) caudato-acuminatis 10-14 cm. longis, circa 5 cm. latis, terminali basi cuneato-acutis, nervis lateralibus patentibus cum venis dense reticu-

latis subtus vix prominentibus; petiolulis 6-10 mm. longis; inflorescentiis 2-3,5 cm. longis, densifloris; pedicellis 1,5-2 mm. longis; calyce brevissime dentato; ovario glabro in stylum brevum contracto. — Peru: Santa Rosa, Yurimaguas (*Williams 4772* type, Field Museum).

Only in bud but in all probability related to species 15-20 of Engler's revision. Of these only *P. Aracouchini* (Aubl.) March. with long-acuminate leaves is notably comparable.

***Trichilia magnifica*** Baehni & Macbr. nom. nov. = *Trichilia lanceolata* Pittier, *Contrib. Fl. Venez.* 8. 1921, not C. DC. *Monog.* 1 : 698 (1876).

In ordering the rich collections in this family at the Conservatoire Botanique Dr. Baehni, who is beginning the study of the group, has called my attention to the above duplication of names, the de Candollean species being Peruvian. On his insistence I share in the corrective publication. As there is already a *T. Pittieri* we have chosen an adjective which seems applicable to the Venezuelan tree.

***Banisteria quitensis*** Ndz. *Ind. Lect. Lyc. Brunsb.* 10 (1900). *Banisteriopsis quitensis* (Ndz.) Morton, *Journ. Wash. Acad. Sci.* 21 : 486 (1931).

Llewelyn Williams obtained on the lower Rio Nanay, Peru (330) this recently much-written-about narcotic plant. He recorded the local name as "Ayahuasco" which is essentially like those noted by Tessmann, namely "Ayavasca" and "Hayawasca". Curiously enough neither of these collectors obtained flowers or fruits but their material is certainly similar to that determined by Niedenzu. It seems worthwhile to note sometimes a leaf bears two large glands at the apex of the petiole though these are usually lacking.

Morton, l. c., has recently described and apparently with good reason another form in this group, — *Banisteriopsis inebrians* Morton, — and thoughtfully remarks that "the necessity for using the name *Banisteriopsis*..... has been discussed..... in *Proc. Biol. Soc. Wash.* 43 : 157, 1930. He overlooks, however, the sagacious discussions by Fawcett & Rendle, *Flora of Jamaica* 4 : 232, 1920 and by Niedenzu, *Pflzr.* 4, 141 : 386, 1928 who reach, in common with all past students of importance, the rational conclusion that the long-accepted application of the

names *Heteropteris* and *Banisteria* should be maintained. (I called attention to these elucidations in *Field Mus. Bot.* 8 : 120).

These authorities had to have the courage of convictions based upon common sense to accept the traditional interpretation of the names for admittedly, on a technical basis they were not then admissible. But now they are because of the authority vested in committee by the last botanical congress. (Cf. Article 58). Wherein, then, is there any "necessity" in 1931 to make this confusing change in name-application, because of a technicality that can be voided by legal agreement?

Mr. Morton, reconsidering the matter, will probably himself transfer his new species, at the same time appealing to the committee to conserve the Linnean name in the sense in which custom has established it.

**Jatropha Dichtar** Macbr. nom. nov. = *J. ferox* Pax, *Ann. Bot. Roma* 6 : 185 (1896) not M. Arg., *Fl. Brasil.* 11, 2 : 497 (1874).

This African species, represented in the Conservatoire Botanique, may well bear the native name, inasmuch as that assigned it by Pax has already been used for another plant in the same genus.

**Vallea stipularis** L. f. var. **parvifolia** Macbr. var. nov. — *Stipulis* conspicuis persistentibus reniformi-cordatis interdum fere 1 cm. latis ; *foliis* subtundatis basi truncatis haud vel paullo cordatis 3-4 cm. latis, 2,5-3 cm. longis. — Peru : Huacapistana, Junin (*Killip & Smith* 24208 Type, Field Museum). Huanuco, *Weberbauer* 1766.

*Vallea stipularis* is such a variable shrub in foliage at least that this form can scarcely be considered as more than an extreme variation.

**Triumfetta Schunkei** Macbr. spec. nov. — Ut videtur paullo vel haud ramosa sublignosa ; *caulibus* superne puberulis demum glabris ; *stipulis* caducis anguste lanceolato-acuminatis 1 cm. longis ; *petiolis* ad 6 cm. longis cum inflorescentiis subsimplicibus ad 1,5 dm. longis dense cum pilis stellatis pubescentibus demum glabratis ; *foliis* late ovatis subcordatis acuminatis ad circa 15 cm. longis, 8 cm. latis grosse irregulariter serratis, chartaceo-membranaceis ubique sparse cum pilis stellatis pubescentibus ; *pedicellis* 5-7 mm. longis ; *alabastris* fere cylindratis lineari-oblongis 1 cm. longis, sparse stellatis ; *sepalis* lineari-apiculatis 12 mm. longis *petalis* subaequalibus oblongo-obo-

vatis obtusis basin versus sensim angustatis vel pseudoungiculatis ; staminibus circa 12 petalis aequantibus ; stylo apice integro, stigma dilatatum obscure denticulato-orbiculare ; fructu ignoto. — Peru : Chanchamayo Valley, Junin, 1500 m. (*Schunke* 1517 type, Field Museum).

If I interpret correctly the characters of this plant it seems to be unique among species to which it might be referred (because of similarities of foliage and flowers) in its undivided style. Many of the coarse teeth of the leaves are densely pubescent, apparently being diseased.

**Luehea tarapotina** Macbr. spec. nov. — Arbor modica ; ramulis teretibus novellis cum pilis brevibus furfuraceo-stellatis ferrugineo-pubescentibus demum glabris ; petiolis 6-7(-12) mm. longis dense pilis ferrugineo-stellatis obtectis ; foliis late et suboblique ellipticis basi leviter cordatis apice subabrupte lateque acuminatis ad 14 cm. longis 8 cm. latis, irregulariter simpliciter dentatis, chartaceis supra nitidulis viridibus sparsissime stellato-pubescentibus, subtus fulvo-cano tomentulosus nervis cum venis reticulatis subprominentibus ; floribus ignotis ; pedicellis fructiferis circa 2 cm. longis furfuraceo-puberulus ; capsulis pentagonis haud valde angulatis ad circa 3 cm. longis, 2 cm. latis cum pilis persistentibus dense fulvo-pilosis ; seminibus nitidulis 7 mm. longis. — Peru : Tarapoto (*Williams* 5704 type, Field Museum).

In the absence of flowers I thought to refer this medium-sized tree to *L. speciosa* as the foliage-resemblance is striking, except that the petioles of our material are somewhat shorter, but I notice also that the dehiscing fruits are permanently instead of caducously pubescent and, especially, that the mature seeds of *L. tarapotina* are distinctly smaller. Its relationship, when flowers are known, may be found to be with *L. Tessmannii* Burret.

**Ouratea iquitosensis** Macbr. spec. nov. — Fruticosa glabra ; ramulis crassis plus minusve flexuosis ; petiolis 3,5-5 mm. longis incrassatis supra valde sulcatis ; foliis oblongo-lanceolatis vel interdum elliptico-oblongis, basi rotundatis breviter acutis apicem versus gradatim acute acuminatis plerumque circa 12 cm. longis, 3-4 latis vel ad 15 cm. longis [et 5,5 cm. latis, margine ad basin fere leviter serrula-

tis, rigidiusculis opacis; nervis lateralibus valde arcuatis demum adscendentibus cum venis numerosis horizontalibus subtus medio-criter prominentibus; paniculae subsimplicis vel racemiformis dense pauciflorae 3 vel 4 cm. longis; pedicellis subangulatis leavibus tenuibus 7-9 mm. longis quam alabastra conico-ovatis paullo longioribus; sepalis oblongo-lanceolatis acutis; petalis oblongo-obovatis vix vel obscure unguiculatis fere 10 mm. longis vix 3 mm. latis; gynophoro ovarium subaequante, stylo filiforme ovarium multo superante. — Peru: in water, Iquitos (*Williams* 1498 type, Field Museum); also 1497; 1492; 1491; 1499; 1496; 1503.

With some of the characters of *O. olivaeformis* (St. Hil.) Engler but differing essentially in its dull leaves with distinctive venation. As some other species it always grows, apparently, on inundated banks.

The Peruvian species of this genus are, with few exceptions, different from those described by Engler in his revision of the American forms in the *Flora Brasiliensis*. His work is remarkably good, considering the obscure nature of the apparent specific entities in the group, except for the key which unfortunately cannot be used, partly due to typographical and partly to fact-errors. Without more knowledge of the plants already described it seems best to treat the Peruvian variations as further specific entities. v. Tieghem has already pointed out a number of logical segregates for Brazil (not always under the name *Ouratea*) and I, for the above reasons, venture to add several for Peru. I have seen few of the Colombian species but from descriptions they appear to be distinct. Professor Malme (in Herb. Dahlem) has determined the Tessimann material. Curiously enough none of it is the same as that collected from the same general region by Williams or by Killip & Smith, and none of it, in my opinion, is referable to Brazilian species unless Engler's specific lines are to be discarded, a possibility, but not, at present, with material available, a practicality.

**Ouratea Killipii** Macbr. spec. nov. — *O. pendula* affinis; petiolis vix 3 mm. longis valde incrassatis; foliis oblongo-ellipticis basi rotundatis apice acutissime acuminatis ad 2,5 dm. longis, 7 cm. latis, margine subintegris vel obscure undulato-serrulatis; nervis lateralibus supra paullo notatis subtus cum venis numerosis late arcuato-adscendentibus medio-criter prominentibus; panicula racemiformi ut videtur ad 2,5 dm.

longa e medio florifera; pedicellis plerumque ternis 7 mm. longis; alabastra ignota; sepalis anguste ovato-lanceolatis margine scariosis acuminatis vix 7 mm. longis; petalis obovatis calyce distincte longioribus (ad 3 mm.) fere 5 mm. latis, acutis; antheris obscure rugulosis 7 mm. longis; stylo rubido petala flava subaequante. — Peru: Iquitos (*Killip & Smith* 27169 type, Field Museum).

Apparently allied to *O. pendula* (Poeppig) Engler of Peru with narrower lanceolate leaves and more densely fasciculate flowers, their petals little if at all exceeding the sepals.

***Ouratea Williamsii*** Macbr. spec. nov. — Fruticosa; ramulis gracilibus; petiolis 2-3 mm. longis supra canaliculatis; foliis oblongo-lanceolatis basi apiceque cuneato-angustatis acutis margine subintegrifolia vel praeter infimam partem leviter serrulatis fere lucido-membraneis nitidulis plerumque circa 7 cm. longis, 2-5 cm. latis vel interdum 11 cm. longis; nervis cum venis tenuissimis densis ubique obscuris; paniculae terminalis racemiformis 3,5-7 cm. longis; pedicellis solitariis basi bracteolis subalatis fugaceis instructis, tenuibus circa 5 mm. longis alabastra ovatis aequantibus, fructiferis ad 12 mm. longis; sepalis anguste ovatis acutiusculis; petalis vix acutis forsitan calyce paullo longioribus; gynophoro fructifero obellipsoideo; drupis ignotis. — Peru: Tarapoto (*Williams* 6707 type, Field Museum); also 6090.

This shrub resembles *O. lucens* (HBK) Engler but differs particularly in the much longer slenderer pedicels.

***Ouratea tarapotensis*** Macbr. spec. nov. — Fruticosa parva fere glaberrima; petiolis satis crassatis supra valde sulcatis plerumque 3 interdum 4 mm. longis; foliis chartaceis-coriaceis paullo nitidulis ut videtur pallido-viridibus ellipticis vel oblongo-ellipticis basi angustatis acutis vel plus minutis rotundatis vel interdum rotundato-emarginatis, apice rotundatis, obtusis vel breviter acutis, plerumque 10-12 cm. longis, 4-5 cm. latis, margine leviter sed dense serrulatis vel interdum mucronato-serratis, basin versus integris, costa utrinque valde prominente, nervis lateralibus paullo prominulis arcuato-adscendentibus, venis numerosis subhorizontalibus; paniculae racemiformis densis circa 3 cm. longis; pedicellis tenuibus laevibus vel obscurissime tuberculatis 5-8 mm. longis saepius quam alabastra glabra ovoidea distincte

longioribus; sepalis anguste ovato-lanceolatis, 5 mm. longis; petalis oblongis vel anguste oblongo-obovatis obtusis basin versus paullo angustatis calyce vix longioribus; antheris rugulosis; gynophoro ovarium subaequante in fructu obovoideo 5-7 mm. longo, drupis subclavato ovoideis olivaceis nitidulis plus minusve venulosis ad fere 1 cm. longis, 7 mm. crassis. — Peru: Tarapoto (*Williams* 6720 (fls.); 5748 (fr.), type sheets, Field Museum); also 6644; 6640; 6908. Yurimaguas, *Williams* 4301?

This seems to be another plant peculiar to the region of Tarapoto or at any rate I have not succeeded in referring it to any described form that has come to my attention.

***Anthodiscus glaucescens*** Macbr. spec. nov. — Fruticosus; ramulis novellis pulverulentis; petiolo communi 2-2,5 cm. longo parce pilosiusculis, foliolis 3-digitatis similibus sed lateralibus aliquid minoribus, centrali ad 1 dm. longis et 4 cm. latis, omnibus oblongo-obovatis apice rotundato-apiculatis, fere sessilibus vel basi in petiolum brevem cuneato-attenuatis, crenato-serrulatis, subcoriaceis, supra glaucopacis glabris subtus pallidioribus ad nervos sparse pilosiusculis; nervis venisque ubique subprominulis; pedunculis 3 cm. longis; racemis densifloris 5 cm. longis; pedicellis (5 mm. longis) calycibusque puberulo-pilosiusculis; calyce subcoriaceo cupuliforme perobscure vel leviter crenato; floribus (immaturis) 7 cm. longis; petalis glabris crassis; filamentis ante anthesin plus minusve incurvato-complicatis valde inaequalibus longioribus circa 5 mm. longis laevigatis; ovario ovoideo; stylis 10 erectis apice subulato-attenuatis circa 2 mm. longis. Peru: San Roque, San Martin, 1350 m. (*Williams* 7491 type, Field Museum).

Although the specimen is only in bud it is evident that half the filaments, in conformity with the generic character are much longer. No described species for the genus however, in so far as I have been able to determine, is particularly related i. e. to say, similar.

***Norantea curva*** Macbr. spec. nov. — *N. peduncularis* peraffinis ramulis flexuosis; foliis oblongo- vel elliptico-lanceolatis basi acutis, apice acutis vel obtuse acuminatis, circa 13 cm. longis, 3-4,5 cm. latis flexilo-chartaceo-coriaceis; glandulis plerumque seriatis circa 5 mm.

distantibus interdum approximatis; pedicellis flexuosis gracilibus 5,5 cm. longis; bracteis 1,5-2 cm. longis; calycis vix 5 mm. altis; floribus subovoideis 5 mm. exertis. — Peru: San Roque, Dept. San Martin (*Williams* 699<sup>c</sup> type, Field Museum); also 7480.

Except as noted apparently very much like *N. peduncularis* with obovate-oblong thicker leaves, little if at all pointed, stouter peduncles and larger calyx. It resembles also *N. Ulei* which has tapering leaves with much more approximate glands.

**Marcgravia strenua** Macbr. spec. nov. — *M. macrophylla* peraffinis; petiolis crassis 5 mm. longis; foliis oblongo-ellipticis basi late cuneatis apice caudato-acuminatis ad 1,5 dm longis et 6 cm. latis, ubique leviter laxaque reticulato-venosis, ad basin grosse biglandulosis subrigido-coraiceis; pedicellis circa 5 cm. longis, gracilibus conspicue denseque verruculoso-tuberculosis; bracteis ignotis; ovario circa 6 mm. alto. — Peru: Yurimaguas, Loreto, (*Williams* 3809 type, Field Museum) also 4536.

Distinguished readily from *M. macrophylla*, in spite of the incompleteness of the material, by the very rough long slender pedicels. A strong vigorous liana.

**Marcgravia longifolia** Macbr. spec. nov. — *M. macrophylla* similis sed foliis 2-2,5 dm. longis et bracteis valde clavatis sed vix 6 mm. crassis ad apicem, 2 cm. longis; pedunculis ad 1,5 dm. longis; pedicellis circa 30 sparse rufo-tuberculatis 2 cm. longis, infra florem 2 mm. crassis. — Peru: Mishuyacu, near Iquitos (*Klug* 924 type, Field Museum).

There seems to be no reason for describing this plant at length for it appears to be identical with *M. macrophylla* except as indicated. Perhaps it and the foregoing segregate were better regarded as variants of the typical form which I think is well-represented by *Williams* 3318 from Paraiso, alto Rio Itaya with stouter not at all clavate bracts. The three forms however are recognizable on characters accepted as specific elsewhere in the genus.

**Marcgravia Williamsii** Macbr. spec. nov. — *M. Eichleriana* affinis; petiolis 3-4 mm. longis; foliis oblongis vel oblongo-ellipticis

basi rotundatis apice fere caudato-acuminatis (acumen ad 1,5 cm. longo) subcoriaceis subtus solum circa 8 glandulis punctiformibus ornatis margine integris sed valde undulatis plerumque circa 10 cm. longis, 3 cm. latis, ut videtur haud venosis; pedicellis 2-2,5 cm. longis infra florem paullo incrassatis; bracteis ad 7,5 cm. longis anguste tubuloso-cucullatis paullo incurvatis apice satis clavatis, orificio suborbiculari, margine expanso, florem sterilem subapicem gerentibus; corolla ovoideo-rotundata. — Peru: forest of Paraiso, Alto Rio Itaya (*Williams* 3209 type, Field Museum).

Comparable and related to *M. Eichleriana* because of the extended rhachis that characterizes that species and *M. coriacea* but remarkable in the extraordinary length of the bracts. Except for these, in general aspect suggestive of *M. crenata* (with longer pedicels) and *M. Weberbaueri*.

**Marcgravia crenata** Poepp. var. **roquensis** Macbr. var. nov. — Foliis paullo obovatis plerumque 5,5 cm. latis; bracteis incurvatis circa 4 cm. longis apice vix clavatis incurvo-cuspidatis. — Peru: San Roque, Dept. San Martin (*Williams* 7388 type, Field Museum).

The aberrant characteristics of this plant are, comparatively speaking minor, so it may at least on this material, be considered as only a variant of the narrower leaved *M. crenata* with straightish clacate bracts.

**Marcgravia flagellaris** Poepp. var. **leticiana** Macbr. var. nov. — Foliis 8-9,5 cm. longis, 17-22 mm. latis. — Peru: Leticia on the Amazon (*Williams* 3149 type, Field Museum).

Typically the leaves of *M. flagellaris* are 3-4 cm. wide and usually shorter than 8 cm. The variant here described therefore seems noteworthy.

**Quiina Klugii** Macbr. spec. nov. — Arbor 7 m. alta glaberrima; ramulis novellis paullo compressis; stipulis foliaceis vel lineari-lanceolatis interdum fere subulato-setaceis circa 1 cm longi; petiolis 4-6 mm. longis; foliis ellipticis vel ovato-ellipticis circa 14 cm. longis, 5,5-6 cm. latis, basi breviter acutis apice plus minusve abrupte obtuseque caudato-acuminatis, chartaceis, supra nitidulis; nervis lateralibus utrinque mediocriter prominentibus circa 20; inflorescentiis plerumque gemi-

nis axillaribus suberectis, bracteis ovato-acutis minutis, flores 5-7 mm. pedicellatis solitariis; sepalis 4 subrotundatis 3 mm. longis; petalis 5-6,3 mm. longis ciliolatis ad basin inter se et cum staminibus circa 10 plus minusve cohaerentis; antherae globosae; ovario ovoideo fere 2 mm. longo; stylis 2aequilongis coronata. — Peru: Mishuyacu near Iquitos *Klug* 228 type, Field Museum).

The foliage of this small tree is strikingly like that of *Q. surunensis* but its relationship is evidently with *Q. florida* from which (besides in aspect) it differs notably in floral character.

**Quiina nitens** Macbr. spec. nov. — Arbor 6 cm. alta; ramulis teretibus novellis minute pilosis; stipulis foliaceis lineari-lanceolatis ad 1,5 cm. longis; petiolis valde incrassatis 5-7 mm. longis; foliis ellipticis vel oblongo-ellipticis basi acutis apice breviter subcaudato-acuminatis plerumque circa 10 cm. longis, 4-5 cm. latis, chartaceo-coriaceis supra pernitidis subtus fere opacis; nervis lateralibus vix notatis utrinque circa 10; flores in axillis bractearum 1-3, pedicellis ad 4 mm. longis; inflorescentiis 1-3 cm. longis erectis subsimplicibus paucifloris; sepalis 4 liberis rotundis 2 mm. longis subaequalibus ciliolatis; petalis 4 fere rotundo-obovatis 3 mm. longis glabris; staminibus circa 20. — Peru: Mishuyacu, near Iquitos (*Klug* 710 type, Field Museum).

In comparing this tree with *Q. Poeppigiana* I distinguish it by the shorter very lustrous and heavier leaves and fewer flowers borne on longer pedicels.

**Cochleospermum Williamsii** Macbr. spec. nov. — Arboreum magnificum; ramulis ignotis; petiolis 1,5-? cm. longis, glabris striato-angulatis; foliolis 6 integris valde inaequalibus minoribus circa 6 cm. longis, 4 cm. latis, majoribus ad 20 cm. longis, 9 cm. latis, omnibus ellipticis fere basi ad petiolum distinctum breviter cuneatis apice breviter acuminatis, chartaceo-membranaceis supra nitidulis glabris subtus opacis nervis (et nervo medio) parce et breviter pilosiusculis exceptis glabris, nervis lateralibus circa 16 supra paullo subtus bene prominentibus, venis vix notatis; paniculis ubique dense ferrugineo-subsericeo-tomentosis, ramulis valde divaricatis paucifloris; floribus circa 5 cm. longis, 7 vel 8 cm. latis; pedicellis 1 cm. longis fructiferis fere 2,5 cm. longis; sepalis imbricatis extus et intus brunneo-tomentosis

ellipticis 2 exterioribus paullo minoribus circa 17 mm. longis ; petalis graciliter nervatis obovatis apice valde bilobatis circa 5 cm. longis, ad 3,5 cm. latis ; staminibus numerosis inaequalibus in uno latere floris majoribus quam in altero latere, majoribus 2 cm. fere (antheris 3 mm.) minoribus 1 cm. vix longis, antheris plus minusve curvatis apice poro duo apertis fere truncatis ; ovario fulvo-tomentulosis leviter 3-angulatis ; stylo ad basin dense et breviter villosa superne glabro 12 mm. longo ; capsula junior obconica intense brunneo-sericeo-tomentosa, apice truncato-depressa. — Peru : Pebas on the Amazon (*Williams* 1964 type, Field Museum.) ; also 1778. Caballo-Cocha, *Williams* 2090.

A member of the section *Diporanda* and probably nearest *C. Wentii* Pulle from which it differs in foliage and in the pubescent sepals, those of *C. Wentii* being glabrous within. This must be a beautiful tree, and if undescribed its name may well commemorate the sincere work of the collector.

**Banara Tulasnei** Macbr. nom. nov. = *Banara mollis* Tul. *Ann. Sci. Nat.* 3, 7 : 290 (1847), [not (P. & E.) Tul., l. c. = *Kuhlia mollis* P. & E. *Nov. Gen. & Sp.* 3 : 74 (1845)].

Although Tulasne noticed that his Colombian material was less densely pubescent than that from Peru upon which Poeppig and Endlicher founded their species of *Kuhlia*, he included his plant in the latter, contenting himself with writing a new description under the same name, transferred to *Banara*. Good cotype specimens of both plants exist in the Conservatoire Botanique and I notice that in addition to the difference in pubescence the leaves of *B. mollis* (P. & E.) Tul. are sessile or essentially so, in strong contrast to the definitely petioled ones of *B. mollis* Tul. In the absence of intermediate forms the latter plant, therefore, seems to require a new name, as indicated above.

**Laetia ovalifolia** Macbr. spec. nov. — Arbor ad 15 m. alta ; ramulis laevibus mediocriter crassis ; petiolis valde sulcatis 13 mm. longis ; foliis late ellipticis vel rotundo-ellipticis interdum 2 dm. longis, 1 dm. latis sed plerumque 10-12 cm. longis et 6,5-8 cm. latis, basi rotundatis, apice abrupte et breviter acuminatis, coriaceis nitidis praecipue supra, ubique conspicue reticulato-venosis ; nervis lateralibus 5 prominentibus ; fasciculis interdum extraaxillaribus saepius

8-10 floris ; cupulis glabris irregulariter lobatis distincte (1 mm.) pedicellatis 2,5-3 mm. longis ; pedicellis cum sepalis extus sericeo-cinereo-pilosis 8-9 mm. longis ; sepalis valde reflexis intus puberulentus oblongis circa 5 mm. longis ; stylo apice conspicue trifido circa 6 mm. longo ; ovario dense ferrugineo-piloso. — Peru : Mishuyacu near Iquitos (*Klug* 757 type, Field Museum) : also 656 ; 814.

The flowers of the first and last collections were noted by Mr. Klug as white and rose ; of the second as white, dark green and red. I separate this tree from *L. cupulata* and *L. coriacea* by its proportionately broader leaves, smaller distinctly pedicellate “cups” and reflexed sepals ; and further from *L. cupulata* by the lobed “cup”.

***Carpotroche parvifolia*** Macbr. spec. nov. — Ut videtur arbor fructibus exceptis glaberrima: ramulis albis flexuosis gracilibus sublaevibus : petiolis 5-10 mm. longis supra caniculatis ; foliis ellipticis vel oblongo-ellipticis ad basin breviter cuneato-acutis, apice abrupte acuminatis, 1-12 cm. longis, 4-4,5 cm. latis, etiam multominoribus, membranaceis utrinque pallide viridibus nitidulis mediocriter dense lineato-punctulato-pellucidis ; nervis lateralibus utrinque 4-5 supra cum venis paullo prominulis subtus cum venis reticulatis mediocriter prominentibus ; floribus ignotis ; pedicellis fructiferis crassis fere 1 cm. longis ; fructibus globosis ad 2,5 cm. crassis dense cum appendiculis triangulari-subulatis puberulis mollibus 5 mm. longis ornatis. — Peru : Puerto Arturo, Yurimaguas, Loreto. (*Williams* 5260 type, Field Museum).

As the soft appendaged fruits of this plant seem to be exactly those of *Carpotroche* I venture to describe it even in the absence of flowers. The leaves, however, are exceptionnally small for the genus, suggesting more the related group *Mayna*. “Cashahuayo” was noted as a native name.

***Carpotroche mollis*** Macbr. spec. nov. — Arbor circa 4 m. alta ; ramulis petiolis nervis (costa media lateralibusque subtus) pedicellisque dense molliterque cum pilis brevibus pubescentibus ; petiolis circa 2 cm. longis ; foliis chartaceis ellipticis basi obtusis apice late acuminatis, 3 dm. longis, 12 cm. latis remote minuteque apiculato-denticulatis supra costa media et nervis excepta glabris paullo niti-

dulis, subtus ubique molliter pilosis sed imprimis ad nervos laterali-  
bus et venis reticulatis prominulis; pedicellis circa 7 mm. longis; flo-  
ribus masc. paucis circa 1 cm. latis; segmentis albis extus sericeo-  
pilosis circa 6 mm. longis; staminibus flavis numerosis; floribus fem.  
ignotis. — Peru: Mishyuacu, near Iquitos (*Klug* 1120 type, Field  
Museum).

Notwithstanding the lack of fruit or pistillate flowers I refer this to  
*Carpotroche* which genus it resembles in aspect, particularly in its large  
leaves. In its soft pubescence, however, it is entirely aberrant.

**Xylosma armata** Macbr. spec. nov. — Fruticosa-liana parva;  
ramulis brevibus glabris interdum laevibus interdum longe armatis;  
spinis 1-3 cm. longis; petiolis vix 1 mm. longis; foliis numerosis ellip-  
ticis basi breviter cuneatis apice obtusis vel acutiusculis plerumque  
circa 4,5 cm. longis, 2 cm. latis, coriaceis haud punctatis supra paullo  
nitidulis leviter reticulato-venosis, minute denticulatis; fasciculis  
numerosis; pedicellis pulverulentis 2,5 mm. longis; sepalis 4-7 late  
ovatis 1 mm. longis; staminibus valde inaequalibus ad 3 mm. longis;  
circa 12 vel interdum circa 30 (!) glabris; staminodiis nullis; disco  
crasso. — Peru: San Roque, San Martin (*Williams* 7237 type, Field  
Museum).

The leaves of no other Peruvian species are so small and so minutely  
toothed.

**Xylosma pilosa** Macbr. spec. nov. — Fruticosa; ramulis graci-  
libus dense cum pilis mollibus brevibus pubescentibus; petiolis 3-5 mm.  
longis cum nervis foliorum subtus breviter denseque pilosis; foliis  
ovato-ellipticis basi late cuneatis apice subabrupte acuminatis ad 8 cm.  
longis, 3,5 cm. latis, chartaceo-membranaceis, epunctatis supra niti-  
dulis praeter costa media pilosiuscula glabris, margine argute obtu-  
seque serratis; pedicellis pilosiusculis 1,5 mm. longis; sepalis 4 acutis;  
staminibus circa 10 fere 3 mm. longis glabris; disco subprominulo. —  
Peru: Puerto Arturo, Yurimaguas (*Williams* 4977 type, Field Museum).

In the abundant pubescence and crassly toothed leaves this form  
is well-distinct from others I have found recorded for Peru. "Supay  
caspi" was noted by Mr. Williams as the native name.

**Xylosma minutiflora** Macbr. spec. nov. — Fruticosa ; ramulis glabris vel glabratis plus minusve flexuosis gracilibus ; petiolis 1,5 mm. longis ; foliis ovato-lanceolatis vel ovatis basi inaequaliter rotundatis apice sensim acuminatis obtusiusculis demum 10 cm. longis, 3,5 latis plerumque minoribus, chartaceo-membranaceis glabris obscurissime minutissimeque pellucido-puncticulatis supra nitidulis integris ; fasciculis sessilibus ; pedicellis glabris filiformibus ad 7 mm. longis in sicco aliquid contortis ; calycis segmentis 6 vix 0,75 mm. longis ; staminodiis nullis ; staminibus 6. — Peru : Puerto Arturo, Yurimaguas (*Williams* 4970 type, Field Museum).

Rather similar to *X. Salzmanni*, also in Peru, but the longer pedicels filiform. The leaf-punctations are obvious only against a strong and concentrated light.

**Lacistema rosidiscum** Macbr. spec. nov. — Arboreum parvum ; ramulis gracilibus interdum paullo tortuosis glabris ; petiolis 5-7 mm. longis, supra canaliculatis glabris ; foliis oblongo-elliptico-lanceolatis acute acuminatis basi plus minusve angustatis acutis versus apicem repando-denticulatis vel remote serratis plerumque circa 8 cm. longis 2,5-3,5 cm. latis, chartaceis supra glabris vix nitidulis subtus opacis parcissime praecipue ad nervos pilosis vel saepius glabris ; stipulis lanceolatis caducis plus minusve pilosis ; spiculis petiolo brevioribus ; bracteis punctulato-rugulosis rotundatis medio apiculatis denticulatis ; discus maximus roseus antice valde fissus irregulariter undulatus ; sepalis 1 anguste oblongis acutiusculis. — Peru : San Roque, San Martin (*Williams* 7216 type, Field Museum). Tarapoto, *Williams* 6721.

This species is very distinct by virtue of its solitary sepal and petaloid rosy colored disk. It seems to resemble most *L. purpureum*. The collection from Tarapoto is similar in floral character but the leaves are narrower (about 2,5 cm. wide).

**Lacistema nena** Macbr. spec. nov. — Forsan arboreum ; ramulis gracilibus elongatis plus minusve pilosis demum glabris ; petiolis 4-6 mm. longis pilosis ; foliis chartaceis-membranaceis opacis costa medio leviter pilosis exceptis glabris subtus praecipue ad nervos sparse pilosis integris aequalibus oblongo-ellipticis basi cuneatis apice anguste acuminatis circa 14 cm. longis et 4 cm. latis ; nervis lateralibus utrinque

5-6; spiculis circa 1 cm. longis; bracteis acutiusculis; sepalis 4 sub-oblongis obtusis obscure denticulatis; discus maximus haud lobatis; fructu sessili dense griseo-puberulento. — Peru: Pebas on the Amazon, (*Williams* 1876 type, Field Museum).

Except for the sessile pubescent fruit and 4 sepals this species resembles greatly *L. purpureum*. It may bear the native name.

**Lacistema curtum** Macbr. spec. nov. — Arboreum 3-5 m. altum; ramulis novellis petiolis foliisque subtus imprimis ad nervos conspicue pilosiusculis; petiolis solum 2-2,5 mm. longis; foliis integris rigidiuscule chartaceis supra lucidulis glabris oblongo-ellipticis basi acutis apice subabrupte caudato-acuminatis inaequalibus interdum 7 cm. longis, 2,5 cm. latis vel interdum 14 cm. longis, 4,5 cm. latis; nervis lateralibus utrinque 5-6 subtus mediocriter conspicuis; stipulis caducis subulato-acuminatis margine glabris scariosis; spiculis petiolo brevioribus; bracteis late triangularibus acutiusculis minutissime parceque denticulatis ad basin solum longe hirsuto-pilosis; sepalis 4, oblongo-lanceolatis acutis integris (?); discus parvus. — Peru: above San Ramon, Junin, in dense forest, 14-1700 m., *Killip & Smith* 24617 type, Field Museum).

With nearly the abundant pubescence of *L. pubescens* this tree is apparently rather related to *L. lucidum* or to *L. Poeppigii*. From the former it differs in its short petioles and glabrous aments; from the latter in its short petioles, acutish bracts, narrow sepals and much more abundant pubescence. It is remarkable in the shortness of petioles and aments.

**Malesherbia tubulosa** (Cav.) Macbr. comb. nov. = *Gynopleura tubulosa* Cav. *l.c.* 4. 52 (1791) = *M. cylindrostachya* Urb. & Gilg, *Bot. Jahrb.* 37: 592 (1906).

In the course of photographing the types in this group at the Conservatoire Botanique I was astonished to notice that a specimen labeled "*Gynopleura tubulosa* misit Cav." is an exact match to cotype material of Urban and Gilg's species rather than a synonym of *M. thyrsoflora* R. & P., as has always been supposed. The error in interpretation of Cavenilles' species has been made because the artist of the illustration, l. c. plate 375, has drawn an urn-shaped flower, exactly that in fact of *M. thyrsoflora*. The description, however, calls for a flower

“tubular-ventricose” though simply tubular would be better. But the plate is correct in the delineation of the scattered reduced leaves in the inflorescence, so in contrast to the long bracts of *M. thyrsoiflora*. It may be remarked here my recently described *M. ardens* seems from the cotype sheet before me to be too near *M. tubulosa*, except for its red flowers. The description, however, is not, at the moment available.

**Myrcia collina** (DC.) Macbr. comb. nov. = *Eugenia collina* DC. *Prod.* 3 : 281 (1828) = *Aulomyrcia collina* (DC.) Berg. *Fl. Bras.* 14, 1 : 73 (1857).

Having occasion to seek authentic material of this and the following species in this family that might lie undetermined in the rich collection in the Conservatoire Botanique, my attention came to the desirability of making these nomenclatorial changes.

**Campomanesia sparsiflora** (DC.) Macbr. comb. nov. = *Eugenia sparsiflora* DC. *Prod.* 3 : 263 (1828) = *Abbevillea Martiana* Berg, *Fl. Bras.* 14. 1 : 435 (1857).

**Campomanesia dulcis** (Vell.) Macbr. comb. nov. = *Psidium dulce* Vell. *Fl. Flum.* 5. pl. 56. text 201, 213 (1825) = *Abbevillea Fenzliana* Berg. *Fl. Bras.* 14, 1 : 433 (1857).

According to Berg himself this is a form of his *A. Fenzliana*.

**Miconia sphagnophila** Macbr. *Field Mus. Bot.* 4 : 183 (1929) is probably distinct from *M. radula* Cogn. to which, however, it must be compared, by its broader 5-7-plinerved leaves. *M. trichona* Macbr. l. c., similar, is distinguishable, I think, from *M. radula* by its larger 7-nerved leaves, from *M. hamata* Cogn. by its blunt leaves and very different pubescence and from *M. sphagnophila* by its much longer petioles and different pubescence.

**Brachyotum callosum** Macbr. l. c. 172 is, I think, referable to *B. rosmarinifolium* (R. & P.) Triana, a species misinterpreted by me from description. Original material at Dahlem seems to have smaller flowers but this difference alone is immaterial. To be included, appa-

rently are two collections by Weberbauer, 3378 and 2218, perhaps by an oversight referred by Cogniaux to *B. Maximowiczii*, a species with larger leaves.

**Brachyotum tyrianthinum** Macbr. l. c. 174 is the same as *B. Lindenii* Cogn. *Monog.* 159 at least as that species has been interpreted in Herb. Dahlem by its author, including a specimen by Weberbauer, 2930, from Pichin, Arcash. *B. Figueroae* Macbr. l. c. 173 seems to be recognizable.

From the above remarks it is evident that the title of my paper, "New and renamed Peruvian Melastomes" was apropos! Doubtless some other species have also been renamed.

**Niphogeton scabra** (Wolff) Macbr. comb. nov. = *Oreoscadium scabrum* Wolff, *Bot. Jahrb.* 40 : 305 (1908). = *Apium scabrum* Wolff, *Pflzr.* 4. 228 : 49 (1927). = *O. dissectum* (Benth.) Wedd. var. *asperum* Wedd. *Chloris And.* 2 : 204 (1857 ?) = *N. dissecta* (Benth.) Macbr. var. *aspera* (Wedd.) Macbr. *Field Mus. Bot.* 8 : 125 (1930).

When I referred this plant to *N. dissecta* as a variety I had not seen the type. Bentham's species, as to original, has leaves that are much more finely divided than in any Peruvian form and it lacks the large scarious petiole-sheaths that characterize conspicuously *N. scabra* and serve as bracts beneath the umbels. Probably Weddell's variety belongs to the latter or possibly to *N. andicola*. *N. dissecta* has the comparatively open umbels of *N. Weberbaueri* (Wolff) Macbr. but its leaves are much broader with smaller segments. *N. scabra* is probably nearest *N. andicola* Schlecht. l. c. with similarly crowded inflorescence but without the scarious bract-like sheaths, or these poorly developed.

The status of the genus *Niphogeton* Schlecht. has already been discussed by me, l. c.

**Geissanthus Karlii** Macbr. spec. nov. — Praeter inflorescentia glabra ; petiolis robustis 1 cm. longis ; foliis elliptico-obovatis ad fere 13 cm. longis et 6, 5 cm. latis basi late cuneato-rotundatis, apice rotundatis obtusis vel breviter acutis, rigide chartaceis supra fere evenosis opacis subtus venis lateralibus prominulis paullo vel obscure reticulatis punctulis paucis ; inflorescentibus circa 1 dm. longis et

latis dense paniculato-ramosis, ramis adscendentibus vel interdum valde divaricatis minute furfuraceo-lepidotis; floribus racemosis numerosis glabris ante anthesin fere 5 mm. longis; calycis epictis in lobos 4-5 valde irregulares ruptis membranaceis; petalis oblongo-ellipticis apice cuculatto-inflexis perobscure cum lineis brevibus (2-3) pictis fere medium usque connatis; antherae minutissime apiculatae vel ut videtur interdum obtusae longae ovatae quam filamenta longa duplo-breviores; ovario oblongo-cylindrico, stigmatе conico. — Peru: without locality (*Weberbauer* 6288 type, Field Museum).

Allied to *G. Haenkeanus* with conspicuously pictate petals and to *G. glaber* with only 3 sepals. The leaves are more obovate than those of any species in this alliance.

If this plant has not already a name it may bear the above euphonious one in memory of my friend, Karl Schulz-Korth, deceased September 6, 1931. Professor Mattfeld, *Verh. Bot. Ver. Brandenb.* 73: 141-152, 1931, has written sympathetically an account of the life of this talented young man, wherein (page 148) this species is mentioned.

**Rapanea brevis** Macbr. spec. nov. — Fruticosa ut videtur pumila; ramis ramulisque plus minusve pulverulentis tarde glabratis; petiolis 4 mm. longis fere glabris crassis; foliis numerosissimis in sicco brunneis subtus multo pallidioribus praeter novellis ad marginem parce ciliolatis glabris ovato-ellipticis basi vix acutis apice rotundatis interdum brevissime retusis 22-25 mm. longis, 12-15 mm. latis ut videtur evenulosis, supra paullo nitidulis subtus punctulis ad marginem nigris et crebris ceterum dissitis pallidis praeditis; inflorescentiis brevissimis; floribus perpaucis subsessilibus (pedicellis fem. crassis fructiferis 0,5 mm. longis); sepalis subovatis, acutiusculis glabris; petalis ad circa  $\frac{1}{4}$  connatis, lobis florum masc. ovato-acutiusculis margine minutissime pulverulentis parce nigro-ornatis; ovarium floris masc. bene evolutum, stigmatе maximo subpyramidato obscure lobato. — Peru: without locality, (*Weberbauer* 7025 type, Field Museum).

Allied I suppose to *R. andina* Mez but the pubescence persisting, the sepals acute and the leaves much shorter.

**Rapanea chartacea** Macbr. spec. nov. — Fruticosa glabra fere vel ramulis novellis ad apicem obscure ferrugineo-pulverulentis;

ramulis subflexuosis subpatentibus crassis ; petiolis vix 5 mm. longis antice alatis fere 3 mm. latis ; foliis pallido-viridibus chartaceis subellipticis basi late cuneato-acutis apice breviter acuteque acuminatis 4,5-5 (-6) cm. latis, circa 12 (-14) cm. longis, utrinque prominulo-reticulatis et glandulo-punctulatis paullo nitidulis ; ramulis inflorescentiarum nodosiformibus 6-8-floribus ; pedicellis pulverulentis 2 mm. longis ; floribus ut videtur pallidis et circa 2,5 mm. longis ; sepalis 4 paullo connatis ovatis acutis haud herbaceis albo-chartaceis plus minusve brunneo-punctatis eciliatis ; antherae triangularae (?). — Peru : Iquitos (*Williams* 8049 type, Field Museum).

There is some doubt as to the generic identity of this shrub with no fully developed flowers. In inflorescence, however it is a characteristic *Rapanea* but if it is always 4-merous it appears to have no close relatives in that genus. It is apparently unique in its hyaline sepals.

**Rapanea pallens** Macbr. spec. nov. — Ubique glaberrima ad 2 m. alta ; ramulis gracilibus elongatis ; petiolis 7-10 mm. longis ; foliis lanceolato-ellipticis basi apiceque attenuatis acuminatis plerumque circa 12 cm. longis, 4 cm. latis ubique pallidissime viridibus membranaceis perobscure venulosis sed praecipue subtus verruculoso-punctatis ; inflorescentiis subsessilibus paucifloris ; pedicellis 3,5 mm. longis ; sepalis paullo coalitis ovatis acutiusculis dense glandulis haud ciliatis ; fructibus circa 5 mm. crassis glandulis prominentibus. — Peru : Puerto Arturo, Lower Rio Huallaga (*Williams* 5330 type, Field Museum) ; also *Killip & Smith* 27802 ; 27881.

This shrub or small tree differs from any species seen by me in its markedly pale foliage, uniform in the three collections.

**Ardisia nigrovirens** Macbr. spec. nov. — *A. albovirens* persimilis ; foliis ad 2,5 dm. longis, 8 cm. latis, membranaceis vel demum chartaceis densissime nigro-punctatis in sicco pallido-viridibus ; venis tenuiter et obscure reticulatis ; sepalis breviter connatis elliptico-rotundatis plus minusve punctulis nigris ornatis ; fructibus globosis circa 6 mm. crassis mediocriter nigro-punctis obtectis. — Peru : Puerto Arturo, Lower Rio Huallaga (*Williams* 5081 type Field Museum) ; also *Killip & Smith* 27743.

Very similar to *A. albovirens* Mez except the leaves are much thinner

and so black punctate that against the light they are greenish-black. On the sheet they are pale green, however, while the leaves of *A. albovirens* dry blackish.

**Conomorpha Preslii** Macbr. nom. nov. = *Myrsine verticellata* Presl., *Rel. Haenk.* 2 : 64 (1835), = *C. verticellata* (Presl) Mez, l. c. 252, [not *C. verticellata* Zahlbr. *Ann. Nat. Hoffm. Wien* 7 : 2, 1892, i. e. = *C. Jelskii* Mez, *Pflzr.* 9. 4, 236 : 251, 1902].

Mez, as noted above, changed Zahlbruckner's name which, in accord with accepted nomenclatorial practice remains valid since it is the first use of *verticellata* in the genus *Conomorpha*. It is rather the plant of Presl therefore, that, treated as a *Conomorpha*, requires a new name since its specific designation is and was already preoccupied in that genus.

I am making this rather precise explanation of this legal nomenclatorial change because, after straightening out a quite analogous case in respect to *Echeveria elegans* Berger (properly *E. Harmsii*, cf. *Field Mus. Bot.* 11 : 22, 1931) my action was promptly challenged in no uncertain manner by a student of *Echeverias* in California. This therefore is in the nature of an answer to his surprising comment, and I trust that the necessity of nomenclatorial changes of this sort will now be clear to him and to any others not conversant with well-established (and with good reason) nomenclatorial law.

**Styrax socialis** Macbr. spec. nov. — Subscandens 3 m. alta; ramis subtortuosis fere teretibus glabrescentibus, junioribus petiolisque dense brunneo-lepidotis; foliis integris vel obscure undulatis ovato-oblongis vel subelliptico-oblongis, basi rotundatis-acutis, apice bene vel subcaudato-acuminatis, circa 15 cm. longis et 5 vel 6 cm. latis chartaceis supra vix nitidulis praecipue ad nervos sparse lepidotis demum glabratis, subtus cum pilis minutissimis stellatis et lepidotis intermixtis (ad nervos venisque dense lepidotis) cinereo-pubescentibus; nervis lateralibus circa 6 supra cum venis reticulatis mediocriter notatis imprimis nervis prominulis; petiolis 10 mm. longis; racemis 3-4 cm. longis axillaribus adscendentibus flavescenti-brunneo-lepidotis; pedicellis 10-12 mm. longis; bracteis perobscuris; floribus 15 mm. longis, externe sericeo-lepidotis; calyce minute vel vix denticulato

cupuliformi 4 mm. alto ; corolla alba, 5 partita, lobis oblongo-lanceolatis 3 mm. latis solum ad apicem intus pilosis ; antheris ad basim leviter adpresse pilosis, 6 mm. longis ; stylo fere 12 mm. longo. — Peru : in bushwood almost climbing, Marcapata Valley, Cuzco, 1500 m. (*Weberbauer* 7819 type, Field Museum).

An interesting form because referable to *S. Tessmannii* Perk. (i.e. to *S. guianensis* sens lat.) except for its much more abundant lepidote pubescence and glabrous (within) flowers and to *S. heterotrichus* Perk. except for its much more acuminate leaves with less prominent venation and its smaller lepidote trichomes, more numerous on the nerves.

**Symplocos compacta** Macbr. spec. nov. — Fruticosa fere glabra ubique dense ramosa ; ramis crassis ; ramulis dense verrucosis fastigiatis incurvato-adscendentibus ; foliis numerosissimis integris elliptico-ovalibus vel oblongo-ellipticis, basin versus sensim in petiolum brevissimum angustatis, obtusis vel interdum minute retusis, 10-12 mm. longis, 5-6 mm. latis coriaceis, supra pallide viridibus nitidulis, venis impressis prominulis, subtus intense viridibus (in sicco brunneis) opacis evenosis ; floribus solitariis sed apicem versus ramulorum congestis ; pedicellis compresso-angulatis circa 5 mm. longis ; bracteis inequalibus majoribus 7 mm. longis, mucronatis glandulosociliatis ; petalis fere liberis obovatis circa 7 mm. longis minute denticulatis ; filamentis 1,5 mm. longis tubo longioribus ; stylo glabro. — Peru : Rio Pozuzo, Huanuco (*Weberbauer* 6731 type, Field Museum)

Few species of this large genus have the small leaves and habit of this shrub, -two of them Peruvian, *S. nana* and *S. Sandiae*, both with crenate or denticulate leaves. *S. compacta* resembles most the former which however, has entire petals that are scarcely half as long.

**Buddleia blattaria** Macbr. spec. nov. — Fruticosa tota sicca densissime fulvo-lanta ad 1 m. alta ; ramulis demum glabratis quadratis ; foliis numerosis sessilibus plus minusve distincte undulato-crenatis crasso-coriaceis oblongis vel demum oblongo-ellipticis c. 5 cm. longis 1-1,5 (-2) cm. latis acutiusculis vel obtusis ; glomerulis singulis terminalibus sessilibus vel breviter pedunculatis globosis 2 cm. crassis ; calycis turbinato-campanulatis 6,5-7 mm. longis praecipue superne fusco-pilosis, dentibus brevibus valde incrassatis ; corolla calycem paullo excedens 4-5-lobata (lobis late oblongis truncatis) 5 mm. lata

extus solum in parte superiore pilosa intus in orificio pilosa in tubo glabra; filamentis vix notatis; stylo fere 2 mm. longo, stigmatе conspicue capitellato; ovario dense piloso; capsula demum glabrata 6 mm. longa. — Peru: west of Huancabamba, 3200 m. Piura (*Weberbauer* 6046 type, Field Museum).

This shrub appears to be distinct from all other species with such small leaves and large solitary heads in its extreme wooliness. The last character, obviously, has suggested the name.

**Buddleia lanata** Benth., var. **peruviana** Macbr. var. nov. — Fruticosa adscendente-erecta; inflorescentia multo-ramosa; pedunculis ad 2 cm. longis; glomerulis numerosis. — Peru: below Ayavaca, 2300 m., Piura (*Weberbauer* 6360 type, Field Museum).

I thought at one time to separate this specifically on the basis of apparent differences in size and pubescence in the flowers but on further examination these characters seem to me to be only of degree. The shrub, however, is much more branched than in the typical state and the numerous somewhat smaller heads are borne on slenderer and longer peduncles.

**Strychnos placida** Macbr. spec. nov. — Fruticosa praeter cymis axillaribus obscure pulverulentis glabra; ramulis pergracilibus teretibus; internodiis 4-6 cm. longis; petiolis supra sulcatis 7 mm. longis; foliis ellipticis basi acutis apice bene attenuato-acuminatis, vel anguste caudato-acuminatis plerumque circa 15 cm. longis et 5 cm. latis characeis-membranaceis pallide olivaceo-viridibus utrinque nitidulis valde triplinerviis; nervis supra impressis subtus valde prominentibus; cymis 1-1,5 cm. longis; pedicellis fructiferis 1,5 mm. longis; baccis ellipsoideis monospermis ad 22 mm. longis; seminibus compresso-peltatis 14 mm. longis, 9 mm. latis, testa fusco-squamosa. — Peru: Yurimaguas (*Williams* 5313 type, Field Museum).

This *Strychnos*, as a South American species presumably harmless, is, even in fruit distinct from all species that have come to my attention and appears to resemble two now known also from Peru, viz., *S. macroura* Gilg and *S. Ulei* Gilg. The leaves of the former are 3- (not pli-) nerved and those of the latter are smaller and proportionately broader.

**Strychnos guianensis** (Aubl.) Baill., var. **trichina** Macbr. var. nov. — Differt forma typica foliis ad basin vix vel haud acutis etiam cum ramulis glabris vel glabratis. — Peru : Manfinfa on the Upper Rio Nanay, Loreto (*Williams* 1102 type, Field Museum).

Since the lower leaves of this species are often subcordate this particular collection may best be treated as a variety resting largely on the paucity of hair. It is not nearer to other related species as the key in *Flora Brasiliensis* would seem to indicate.

**Roulinia cordata** (Vell.) Macbr. comb. nov. = *Asclepias cordata* Vell. *Fl. Flum.* 110, (1825); 3 : pl. 56 (1827). = *R. fluminensis* Dcne. in DC. *Prod.* 8 : 517, 1814.

Decaisne merely renamed this Brazilian plant which is now known from eastern Peru in the collection of Llewelyn Williams (512 ; 8221).

I have elsewhere (*Field Mus. Bot.* 8 : 112, 1930) commented on the validity of identified Vellozo names.

**Oxypetalum arvensis** (Vell.) Macbr. comb. nov. = *Asclepias arvensis* Vell. *Fl. Flum.* 3. pl. 63 ; text 111 (1825). = *A. multicaulis* Vell, l. c. pl. 60 ; text l. c. = *O. campestris* DC. *Prod.* 8 : 585, 1844.

Although *A. multicaulis* is printed first on page 111 I should choose the name *arvensis* as being the more appropriate, inasmuch as position on the page does not invalidate the name selected where two or more are synonyms, as is here evidently the case. However, in this instance the choice is necessary because of *O. multicaulis* Fourn., another and valid species.

**Oxypetalum umbellatum** Gardner in Hook, *Lond. Journ. Bot.* 1 : 179 (1842), is not to be replaced, it may be remarked here, by the earlier name for the same plant, i. e., *Asclepias nitida* Vell. *Fl. Flum.* pl. 59. text 110 (1825), since this cognomen is now employed in the genus *Oxypetalum* ; cf. Malme, *Arkiv. Bot. Stockh.* 21, 2 : 28 (1927).

**Macrostegia Ruiziana** Nees, DC. *Prod.* 11 : 218 (1847). — When photographing the *Acanthaceae* at Dahlem my attention was called to this monotypic genus by its similarity to three collections which I had previously laid aside for study as probable *Verbenaceae* or *Solanaceae*. Surprised, on comparing my material (Iquitos, *Williams* 4195 ; *Candollea* V. Avril 1934.

Klug 1492 ; 1254) with that of Nees' that there appeared to be no difference I consulted Professor Mildbread, always kindly helpful, and he at once, noticing a fruit on the Williams' sheet, suggested *Vitex*. With this clue it soon was proved that all the specimens, including the Nees', were referable to the widely distributed *Vitex triflora* Vahl or a race of that variable plant; cf. Huber, *Bol. Mus. Goeldi* 5 : 212 (1908). *Macrostegia* Nees, l. c. is, then, this plant and of course, as a much later name, passes into synonymy.

As a matter of fact, the Nees' type is curiously acanthaceous in aspect, the three leaflets having separated from the petiole so that they were accepted as simple leaves by the author and later by Lindau in *Pflanzenfamilien*. And, as the specimen is in flower the acanthaceous illusion is augmented by the striking suggestion of that family provided by the corolla and anthers. The scars of attachment at the tip of the petiole, are, however, clearly apparent on critical examination. Nevertheless Nees' error was easy to make and I for one have nothing to say, — recalling the cherry I described as a *Lycium*, and so forth.

**Capsicum mendax** (von Heurck & M. Arg.) Macbr. comb. nov. = *Solanum mendax* von Heurck & M. Arg. *Obs. Bot.* 61 (1870).

As already indicated by Bitter, *Rep. Spec. Nov.* 17 : 332, 1921, this is a species of *Caspicum*, sens lat. The original in the Conservatoire Botanique, Spruce 5050, is from Ecuador rather than Peru, as has been recorded. But *Weberbauer* 6051 from northern Peru is the same.

**Verbena Briquetii** Macbr. nom. nov. = *V. hystrix* Briq. *Ann. Conserv. Bot. Genève*, 4 : 15, 1910, not *Phil. Anal. Univ. Chile* xc : 610 (1875).

In the course of photographing this and other types of Dr. Briquet in this group of plants in which he took so great an interest my attention has come to the conflict in names as indicated above. It is with pleasure that I rename this Argentinian species in memory of the distinguished author.

**Lippia floribunda** Briq. *Ann. Conserv. Bot. Genève* 236, 1900 (not Philippi) is the same species, I regret to note, as *L. Schlimii* Turcz. *Bull. Soc. Nat. Mosc.* 36, 2 : 204, 1863, both names being founded on *Schlim* 97. Evidently Dr. Briquet overlooked the Turczaninow name.