

FLORAE MALESIANAEE PRECURSORES VII<sup>1)</sup>  
NEW MALAYSIAN FLACOURTIACEAE

by

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*Casearia amplexens* Sleum. sp. nov. — *Arbuscula* 1.5 m alta; ramorum apicibus dense breviter flavidio-pilosis, partibus vetustioribus cito glabratris corticeque cinerascente obtectis. *Folia* elliptico-oblonga vel oblonga, apicem versus breviter (1—2 cm) subcaudato-acuminata, apice ipso paullo falcato obtusa, basi late cuneata fere rotundata, inferiora usque ad 2 mm longe petiolata, superiora subsessilia, membranacea, arête pellucido-punctata et -lineata, petiolo, costa nervisque subtus brevissime pilosulis exceptis glabra, in secco brunnescentia, utrinque opaca, regulariter crenato-serrata (dentibus obtusiusculis glandula terminatis 1 mm altis et c. 3—6 mm distantibus), 9—15 cm longa, 4—4.5 cm lata, costa utrinque elevata, nervis lateribus utroque latere 6—8 curvato-ascendentibus praeter marginem excurrentibus supra subimpressis, subtus elevatis, venis supra obscuris, subtus parum conspicuis. *Stipulae* reniformes fere amplexentes, membranaceae, 4—6 mm altae, 6—8 mm latae, persistentes. *Flores* pro axilla 1—2 fere sessiles, in statu nondum plane evoluto tantum visi; bracteae paucae membranaceae glabrae 1—2 mm longae. *Calyx* tubulosus, carnosulus, c. 3 mm longus, extus fulvo-sericeus, intus glaber, lobis oblongis c. 1 mm longis. *Stamina* 10, alte ad faucem inserta; filamenta glabra, medio dilatata, alternatim 0.6 et 0.3 mm longa. *Staminodia* rudimentaria parum pilosa. *Ovarium* columnare, glabrum, c. 3 mm longum, 1 mm crassum. *Fructus* carnosus, ruber, 1.5—2 cm longus, 1 cm diam., trivalvis, basi calycis lobis accrescentibus 4 mm longis et 1.5 mm latis fultus, 2 mm longe pedunculatus.

NEW GUINEA. W. New Guinea, 4 km SW of Bernhard Camp, Idenburg Riv., rain-forest undergrowth, 850 m: L. J. Brass 13470 (A; L, typus), fl. fr. March 1939.

*Casearia angiensis* Sleum. sp. nov. — *Frutex* 3 m, ramulis ad apices subferrugineo-pilosis, nigrescentibus, obscure lenticellatis. *Folia* ovato-oblonga, apice breviter (1 cm) obtuse acuminata, basi late cuneata, vel interdum subrotundata, parum inaequilateralia, subcoriacea, in secco viridescenti-olivacea, parum nitentia, supra glabra, subtus ad costam et nervos laterales laxissime, ad angulos costae cum nervis semper persistenter flavidio- vel subferrugineo-tomentosula ceterum glabra, valde manifeste pellucido-punctata et -striata, integra vel interdum apicem versus remote

<sup>1)</sup> VI in Reinwardtia Vol. III.

glandulis brevissimis denticulata, (5)7—9(10) cm longa, 2.5—4 cm lata, costa nervisque in sicco bene flavescentibus seu discoloribus supra parum vel vix elevatis, subtus prominentibus, nervis lateralibus curvatis utroque latere 4—5(6), venis manifeste transversis, cum venuulis utrinque dense laeteque reticulato-prominulis; petiolus laxe adpresse pilosus 6—9 mm longus. *Flores* viridescentes, ad fasciculos paucifloros dispositi, eodem tempore flore unico evoluto (rarius floribus duobus evolutis); bracteae paucae minutissimae (0.5 mm) dense ferrugineo-pilosae; pedicelli sicut calyx breviter laxe adpresse ferrugineo-pilosi, c. 4—5 mm longi. *Calyx* 2.5 mm longus, fere usque ad basin 5-lobus. *Stamina* 10, 5 normalia filamentis filiformibus glabris 1 mm longis, 5 alia, ut videtur, haud bene evoluta, filamentis 0.5 mm longis. *Staminodia* 10, filiformia, imprimis apice pilosa, 0.5 mm longum. *Ovarium* ovoideum 3 mm longum, glabrum, stylo brevi. *Fructus* nondum plane maturus ellipsoideus c. 1.2 mm longus, glaber.

NEW GUINEA. N.W. New Guinea, Manokwari Distr., Angi Gita Lake, in moist forest, 1800 m: A. Kostermans 2116 (BO; L, typus), fl. fr. Oct. 1948.

*Casearia archboldiana* Sleum. sp. nov. — *Arbuscula* 3—8 m alta, ramulis juvenilibus in sicco nigrescentibus glaberrimis, in partibus vestustioribus laxe lenticellosis epidermideque dissoluto marmoratis. *Folia* elliptica vel subovato-elliptica, apice breviter (1—1.5 cm longe) obtuse subcaudato-acuminata, basi in petiolum attenuata, paullo inaequilateralia, firmule subcoriacea, utrinque nitida, supra in sicco intense brunnea, subtus dilutiora, supra glabra, subtus ad angulos nervorum cum costa flavescenti-tomentosula ceterum glabra, juniora sat dense manifesteque pellucido-punctata haud lineata, matura fere impunctata, integra, 4.5—7.5 cm longa, (2)2.5—3.5 cm lata, costa supra bene, subtus valde prominente, nervis lateralibus utroque latere 4—5 sursum ascendentibus margine obscure inter sese curvato-conjunctis, supra parum, subtus manifestius elevatis, venis ± transversis cum venuulis utrinque sat dense laeteque reticulato-prominulis; petiolus glaber 8—10 mm longus. *Fasciculi* pauciflori, floribus eodem tempore 1—2 tantum evolutis; bracteae minutae (0.5 mm), scariosae, dorso breviter pubescentes; pedicelli graciles, glabri, c. 4 mm longi. *Calyx* viridescens, c. 2 mm longus, profunde 5-lobus, lobis extus glabris intus papilloso-puberulis. *Stamina* 8 subaequalia; filamenta filiformia glabra 1 mm longa. *Staminodia* clavata, 0.5 mm longa, dense hirsuta. *Ovarium* angustato-ovoideum, glabrum, 1.5 mm altum. *Fructus* ellipsoideus, ruber, 1.5—2 cm longus, c. 1 em diam.; pedunculus 4 mm longus, 1 mm crassus.

NEW GUINEA. W. New Guinea, 15 km SW of Bernhard Camp, Idenburg Riv., mossy forest, 1800 m: L. J. Brass 12098 (A, BO; L, typus); ibid.: L. J. Brass 12171; ibid., 1700 m, with long drooping branches: L. J. Brass 12325.

*Casearia arfakensis* Sleum. sp. nov. — *Frutex*, ut videtur; ramuli sat graciles teretiusculi, recentissimi dense minutissime pubescentes, cito glabrescentes et cinerascentes. *Folia* oblonga, apice breviter (1 cm) obtuse acuminata, basi in petiolum brevissimum (± 2 mm longum) attenuata, subsessilia, matura tenuiter chartacea, in sicco brunnea vel saturate olivacea, opaca, glabra, ± distincte striis pellucidis (haud vel parum punctis) obsita, integra usque remote glandulis minutissimis denticulata, 7—9(11) cm longa, 2—4 cm lata, costa supra fere plana subtus prominente, nervis

lateralibus utroque latere 6—7, supra planis vel levissime immersis, subtus parum elevatis, venis transversis supra subobscuris, subtus parum elevatis. *Stipulae* triangulares vix 1—1.5 mm longae, plerumque caducæ, interdum diutius persistentes. *Flores* singuli, in apice axis c. 3 mm longi multi-bracteolati sessiles; bracteæ membranaceæ, ovatae, subacutæ, minute pubescentes, 1.5 mm longae. *Calyx* tubulosus, extus ± dense pubescens, intus glaber, 5 mm longus, in superiore media parte 5-lobus, lobis oblongis obtusis. *Starvina* 10; filamenta crasse filiformia, apice abrupte subulata, glabra, alternatim 1.2 et 0.9 mm longa. *Staminodia* inconspicua, pilos paucos tantum praebentia. *Ovarium* columnare, fere 5 mm longum, sat dense pilosum. *Fructus* haud visus, ex iconè cl. coll. plantæ originali affixo elongato-ellipticus, apice basique attenuatus, 4 cm longus, c. 1 cm crassus, seminibus paucis, arillo sanguineo circumdatis.

NEW GUINEA. N.W. New Guinea, Arfak Mts., near Putat: *O. Beccari*, *P. Papuan*. 878 (FI, typus), fl. fr. Oct. 1872.

**Casearia auriculata** Sleum. sp. nov. — *Arbor*, ut videtur, parva, ramulis cinerascentibus teretibus etiam recentissimis glabris. *Folia* lanceolata, apice satis longe et obtuse acuminata, basi valde attenuata, sessilia, subcoriacea, obscure minuteque pellucido-punctata, utrinque glabra, in sicco nigrescentia et opaca, subintegra, 8—11 cm longa, 1.7—2.5(2.8) cm lata, costa utrinque elevata, nervis lateralibus utroque latere 5—6 supra obscuris vel levissime immersis, subtus parum prominentibus, venis subineconspicuis. *Stipulae* reniformes, ± amplectentes, persistentes, foliosae, 4—5 mm longae, 6—10 mm latae. *Flores* pro axilla 2—3, basi bracteis numerosis membranaceis glabris ovatis c. 1—2 mm longis circumdati; pedicelli crassiusculi breviter pubescentes 2 mm longi. *Calyx* tubulosus, 5 mm longus, extus breviter pubescens, in vivo carneus, lobis oblongis sub anthesi patentibus vel paulo recurvatis c. 1.6 mm longis, 1.2 mm latis. *Stamina* 10, filamentis glabris alternatim 0.5 et 0.3 mm longis. *Staminodia* brevissima pilosiuscula. *Ovarium* columnare, apice infra stigma capitatum paulo contractum, glabrum, 4 mm longum, 1 mm crassum. *Fructus* deest.

NEW GUINEA. N.W. New Guinea, Ramoi: *O. Beccari*, *P. Papuan*. 333 (FI, typus).

**Casearia brassii** Sleum. sp. nov. — *Arbor* 4 m alta; ramuli recentissimi nigrescentes sat dense breviter griseo-patentipilosuli. *Folia* lanceolata vel oblongo-lanceolata, apice gradatim subcaudato-acuminata, acumine c. 3 cm longo parum falcato subacuto, basi attenuata et acuta, chartacea, laxe manifeste pellucido-punctata et -striata, in sicco saturate castanea, supra parum nitentia, subtus opaca, integra vel leviter undulata, supra costa pilosula excepta glabra, subtus ad costam nervosque laterales sat dense patenter pilosa, in facie interdum laxe pilosula vel plerumque glabrescentia, 13—15 cm longa, 3.5—4.5 cm lata, costa supra per totam longitudinem paulo sed distinete immersa, subtus alte prominente, nervis utroque latere 8—9, inferioribus 3—4 suberectis, superioribus magis curvatis, omnibus marginem patentibus ibique obscure inter sese arcuato-conjunctis, supra planis vel obscure impressis, subtus prominentibus, venis transversalibus sat approximatis cum rete venularum supra parum, subtus distinctius prominulis; petiolus sat gracilis, patentipilosulus, in sicco nigrescens, c. 1 cm longus. *Flores* virides, ad fasciculos 4—6-floros dispositi; bracteæ numerosae

ovatae pilosulae, 1 mm longae, pulvinar semiglobosum 2—3 mm diam. formantibus; pedicelli graciles, pubescentes,  $\pm$  4 mm longi. *Calyx* 3 mm, extus adpresso pubescens, sat profunde 5—10-lobus. *Stamina* 10 (raro 12); filamenta crasse filiformia, glabra, alternatim 1.5 et 2 mm longa; antherae ovatae apiculatae. *Staminodia* filamentis similia, 1 mm longa, apice tantum barbata. *Ovarium* elongato-ovoideum, 3 mm longum, sursum ad stylum pilosum, basi glabrum. *Fructus* ignotus.

NEW GUINEA. Papua, W. Div., Upper Wassi Kussa Riv., left branch, in rain-forest fringing river: *L. J. Brass* 8626 (A, typus; BO, L).

*Casearia brideliifolia* Sleum. sp. nov. — *Frutex* 2 m, ramulorum apicibus in secco nigrescentibus glabris vel pilis solitariis brevissimis laxissime obsitis, partibus vetustioribus cinerascenti-corticatis. *Folia* elliptica vel oblongo-elliptica, late breviter acuminata, acumine ipso magis attenuato subacuto c. 1 cm longo, basi  $\pm$  late in petiolum brevissimum crassum c. 2 mm longum glabrum attenuata, in secco saturate brunnea, glabra, subcoriacea, juniora laxe usque subdense punctis minutis pellucidis striisque obsita, matura fere impunctata, utrinque opaca, (10)12—18 cm longa, (5)6—9 cm lata, integra vel leviter undulata, costa supra parum vel vix, subtus bene elevata, nervis lateralibus utroque latere c. 9 areuatis marginem petentibus supra planis, subtus prominentibus, venis distanter transversis subtus tantum prominulis, venuis supra inconspicuis, subtus parum distinctis. *Fasciculi* 3—4-flori; pedicelli crassiusculi glabri 2 mm longi; bracteae paucae, ovatae, ciliatae, 1 mm longae. *Calyx* 2 mm, lobis extus intusque glabris. *Stamina* 10; filamenta filiformia glabra, alternatim 0.6 et 0.4 mm longa; antherae subglobosae 0.3 mm diam. *Staminodia* triangulari-oblonga, applanata, apice fimbriata, 0.5 mm longa. *Ovarium* ovoideum, glabrum, 1.5 mm altum, apice in stylum brevem sat distinctum attenuatum. *Fructus* ellipsoideus, immaturus tantum cognitus c. 6 mm diam., pedunculo 2—3 mm longo.

NEW GUINEA. N.W. New Guinea, Geelvink Bay, Sennen, 10 km inward Nabire, rain-forest, 400 m: *R. Kanehira & S. Hatusima* 12512 (A, typus; BO), fl. fr. March 1940; Dalman, Nabire, in *Agathis* forest, rare, 400 m: *R. Kanehira & S. Hatusima* 12272, fr. March 1940.

*Casearia carrii* Sleum. sp. nov. — *Frutex* 3 m, ramulis subangulatis brevissime pubescentibus cito omnino glabrecessentibus corticeque cinerascenti obtectis. *Folia* ovato-oblonga, apice breviter (1—1.5 cm) subcaudato-acuminata, apice ipso obtusa vel subacuta, basi in petiolum cuneata, glabra, sed ad costam nervosque subtus sparsissime pilosula, subcoriacea, laxissime obscure pellucido-punctata et -striata, in secco (rubro-)brunnea,  $\pm$  opaca, margine sinuato-serrata (dentibus 1—1.5 mm altis subregulariter 3—6 mm distantibus), 7—14(18) cm longa, 4—6(8) cm lata, costa supra leviter elevata, subtus bene prominente, nervis lateralibus 5—6 curvatis marginem petentibus, supra planis, subtus parum prominentibus, venis transversis supra subobscuris, subtus prominulis; petiolus 3—6 mm longus, glaber. *Flores* albidi, in apice axis crassiusculi c. 3 mm longi dense bracteati 1—2, sessiles; bracteae ovato-acutae, membranaceae, glabrae, 2 mm longae, 1.5 mm diam. *Calyx* 4 mm longus, tubulosus, superne ad lobos extus intusque breviter pubescens, ceterum glabrescens, lobis 5 c. 1.5 mm longis. *Stamina* 10; filamenta crasse filiformia, glabra, alternatim 1 et 0.7 mm longa. *Sta-*

*minodia* inconspicua. *Ovarium* elongatum, 3 mm longum, vix 1 mm crassum, ± dense pilosum. *Fructus* ignotus.

NEW GUINEA. Papua, Centr. Div., Isuarava, secondary forest, 4000 ft.: C. E. Carr 15476 (A; BM, *typus*; K, L), fl. Feb. 1936; Rouna, forest on path to Rouna falls, c. 1100 ft.: C. E. Carr 12462, fl. May 1935.

*Casearia erythrocarpa* Sleum. sp. nov. — *Arbor* parva, 8 m alta; ramuli recentissimi teretiusculi, subpatenter fulvo-hirsutuli, cito glabri. *Folia* elliptico-oblonga, apice breviter (1—1.5 cm) ± oblique obtuse subcuspidato-acuminata, basi late cuneata, membranacea, in siccо brunnea, opaca, subtus paullo pallidiora, supra sparse in facie, densius ad costam et nervos pilosa, subtus densius molliter pilosa, ad costam tomentosa, dense pellucido-punctata et -striata, 12—18 cm longa, 5—8 cm lata, margine sat regulariter subserrato-crenata (denticulis minutis prorsus versis vix 0.5 mm altis et 3—5 mm distantibus), costa supra fere plana, subtus arete prominente, nervis lateralibus utroque latere (10)11—12(14), subarcuatis, margine obscure inter sese curvato-conjunctis, supra planis et in siccо saturate brunneis, subtus parum prominentibus, venis supra inconspicuis subtus vix elevatis sed visibilis et ± transversis; petiolus 1.5—2.5 mm longus, c. 1.5 mm crassus, fulvo-tomentosus. *Stipulae* subulato-lanceolatae 6—8 mm longae, basi 2 mm latae, interdum in utroque latere dentibus 1—2 incisa, acutae, dense pilosae, persistentes. *Flores*, ut videtur, 1—2 pro axilla, basi bracteis membranaceis pluribus subglabris 1.5 mm longis fulti, in reliquis fructibus adhaerentibus tantum visi. *Calyx* c. 2.5 mm longus, extus pilosus, intus glaber, in superiore media parte 5-lobus. *Stamina* 10; filamenta filiformia glabra 0.7 et 0.5 mm longa. *Staminodia* elongato-triangularia, apice barbata, 0.5 mm longa. *Ovarium* haud visum. *Fructus* oblongus, carnosus, ruber, trivalvis, glaber, c. 1.8 cm longus, c. 1 cm crassus; semina 8—10 saturate rubra, arillo membranaceo lacerato.

NEW GUINEA. Papua, West. Div., Fly riv., 528 mile camp, rain-forest undergrowth, 80 m: L. J. Brass 6692 (A, *typus*; BRI, L), fr. May 1936.

*Casearia kostermansii* Sleum. sp. nov. — *Frutex* 3 m; ramuli recentissimi subdense brevissime pubescentes, cito glabrescentes et striati. *Folia* oblongo-ovata, apice sat abrupte breviter (1.5—2 cm) acute acuminata, basi late cuneata usque subrotundata, chartacea usque subcoriacea, dense punctis minutis pellucidis (nec lineis) obsita, in siccо brunnea et opaca, subtus paullo pallidiora, integra vel minutissime glanduloso-denticulata, novella supra ad costam pilosa ceterum glabra, subtus per faciem laxe, ad costam nervosque laterales densius adpresse breviter flavescens-pilosa, matura supra omnino glabra, subtus ad costam, nervos et venas laxe adpresse pilosa ceterum glabra, 15—20 cm longa, (6)7—9(11) cm lata, costa valida supra fere plana, subtus valde prominente, nervis lateralibus utroque latere c. 7 arcuatis, praeter marginem excurrentibus, supra levissime impressis, subtus prominentibus, venis subdense transversis supra obscuris, subtus cum venulis reticulato-prominulis; petiolus pubescens, 1.5 mm crassus, 5—7 mm longus. *Glomeruli* ex axibus brevissimis pluribus dense aggregatis c. 1—1.5 mm longis dense bracteatis formati, multiflori; bracteae scariosae minutae (0.5 mm); pedicelli crassiusculi, glabri, 1.5—2 mm longi. *Calyx* flavidoviridis, glaber, fere 4 mm longus, in superiore  $\frac{2}{3}$  parte 5-lobus. *Stamina* 10; filamenta crasse filiformia glabra, alternatim 0.6 et 0.3 mm longa;

antherae 0.5 mm diam. *Staminodia* brevissima (0.2 mm), dense et satis longe albido-hirsuta. *Ovarium* anguste ovoideo-conicum, c. stylo 2 mm longum, dense longepilosum, stigmate crasso elongato sessili fere 1 mm longo. *Fructus* immaturus tantum cognitus, imprimis apicem versus laxe pilosus; pedunculus crassus 2 mm longus.

BORNEO. S.E. Borneo, Sampit Distr., Sg. Panjakuan (N. of Sampit), dry land, 10 m: *A. Kostermans* 4722 (BO, *typus*; L), fl. March 1948; Sg. Wain region, N. of Balikpapan, low ridge, sandy loam soil, 40 m: *A. Kostermans* 4330, fr. Nov. 1950.

*Casearia microcarpa* Sleum. sp. nov. — *Frutex* 1—2.5 m, ramis divaricatis, ramulis recentissimis subteretibus ± dense breviter vel brevissime flavescens-pilosus, cito glabrescentibus et longitudinaliter striatus, griseo-corticatis, lenticellis oblongis sparsis. *Folia* elliptico-oblonga, apice breviter (1 cm) subacute acuminata, basi in petiolum attenuata, tenuiter chartacea usque membranacea, minutissime pellucido-punctulata vel impunctata, costa utrinque brevissime flavid-pilosa excepta glabra, in sicco brunnea et opaca, integra vel in foliis recentissimis minutissime remoteque serrata, (6)8—12(13) cm longa, 3—5(6) cm lata, costa supra parum elevata, subtus prominente, nervis lateralibus utroque latere 6—8 subarcuatis interque sese ± parallelis, nervis lateralibus intercalaribus nonnullis minus distinctis, omnibus supra ± impressis, subtus prominentibus, venis transversis supra obscuris, subtus parum elevatis; petiolus pubescens 2—5 mm longus. *Stipulae* subulatae, pubescentes, subpersistentes, 3—5 mm longi, basi c. 1 mm lati, cito firmulae usque subcoriaceae. *Glomeruli* 5—8-flori; bracteae minutae (0.5 mm), pubescentes; pedicelli graciles, glabri, ± 2 mm longi. *Calyx* tenuis, vix 2 mm longus, in  $\frac{2}{3}$  sup. 5-lobus, glaber. *Stamina* 10; filamenta crassiuscula filiformia, (sub)glabra, alternatim 0.8 et 0.6 mm longa; antherae minutae, 0.25 mm diam. *Staminodia* obconica, 0.5 mm, apice tantum dense pilosa. *Ovarium* ovoideum, c. 1.5 mm longum, apice in stylum columnarem brevem abiens ibique laxe pilosum, basin versus glabrum. *Fructus* prob. immaturus, subglobosus, apice extremo excepto glaber, c. 8 mm diam.

NEW GUINEA. N.W. New Guinea, Geelvink Bay, Chaban, Nabire: *R. Kanchira* & *S. Hatusima* 11858 (A, *typus*; BO), fr. Feb. 1940; Mc Cluer Gulf, Jakati near Babo, 50 m: *Aet* (Exp. Lundquist) 144, fl. May 1941. N.E. New Guinea, Sepik Distr., August Riv.: *J. S. Womersley*, N.G.F. 3846, fr. Sept. 1949.

To *C. microcarpa* probably also belongs the following collection:

S. New Guinea, Sg. Si-éra (Djéra) near Uta, 7 m: *Aet* (Exp. Lundquist) 269, fr. June 1941.

*Casearia monticola* Sleum. sp. nov. — *Arbuscula* (6 m) vel frutex; ramuli novelli graciles nigricantes glaberrimi. *Folia* oblonga vel oblongo-lanceolata, apice breviter (0.5—1 cm) subcurvato-acuminata, apice extremo obtusiuscula, basi cuneata, aequilateralia vel interdum paullo inaequilateralia, tenuiter chartacea, in sicco saturate brunnea, opaca, integra vel undulato-crenata, glabra, interdum subtus costa laxissime pilis solitariis induita, obscure vel haud pellucido-punctata vel lineata, 5—10 cm longa, (2)2.5—4(3.5) cm lata, costa supra vix elevata, subtus bene prominente, nervis lateralibus utroque latere 4—5 arcuato-ascendentibus, infimis e basi laminae ortis, supra fere planis subtus parum elevatis, venis venulisque sat dense reticulatis utrinque prominulis; petioli glabri nigrescentes ± 5 mm longi. *Glomeruli* summi parum conspicui, inferiores manifestiores et sub-

globosi, 4 mm diam. attingentes, e ramulis vel axibus brevissimis compositi, multiflori; flores pallide virides; bracteae numerosissimae, minutae, 0.5 mm diam.; pedicelli graciles, laxissime pilosi, 4—5 mm longi. *Calyx* membranaceus, 2 mm longus, lobis extus intusque laxe brevissime adpresso subferrugineo-pilosus. *Stamina* 8 vel 10; filamenta teretiuscula circumsparsa, alternatim 0.9 et 0.6 mm longa; antherae subglobosae 0.3 mm diam. *Staminodia* clavata, dense subferrugineo-villosa, 0.4 mm longa. *Ovarium* elongato-ovoideum, sensim in stylum attenuatum, 1.5 mm longum, in inferiore parte pilosum, superne glabrum. *Fructus* deest.

NEW GUINEA. Papua, Centr. Div., Isuarava, forest, 4500 ft.: C. E. Carr 15522 (A; BM, *typus*; L), fl. Feb. 1936; ibid., Boridi, forest, 5000 ft.: C. E. Carr 13400, fl. Sept. 1935.

*Casearia olivacea* Sleum. sp. nov. — *Arbor* 4—5 m, ramulis junioribus teretibus glabris, gracilibus, brunnescensibus. *Folia* ovato-oblonga, apice 1.5—2 cm longe subcaudato-acuminata, acuta, basi in petiolum brevissimum ± 2 mm longum attenuata, chartacea, olivacea, opaca, glaberrima, integra, (9)10—15 cm longa, 3—5 cm lata, densissime minute pellucido-punctulata, costa supra parum elevata, subtus prominente, nervis lateralibus utroque latere 5—6 valde arcuatis praeter marginem excurrentibus, superioribus 2—3 inter sese conjunctis, supra obscuris, subtus prominulis, venis distansibus ± transversis subtus tantum prominulis, reticulatione obscura. *Fasciculi* 4—6-flori; flores albidi; bracteae minutae (0.5 mm), dense albido-pubescentes, glomerulos parvos formantes; pedicelli laxe pilosi, ± 1.5 mm longi. *Calyx* laxe subadpresso pilosus, intus puberulus, 3 mm longus, profunde 5-lobus. *Stamina* 10; filamenta crasse filiformia, laxe brevissime circumsparsa, alternatim 1.1 et 0.8 mm longa; antherae subglobosae 0.4 mm diam. *Staminodia* 0.5 mm longa, albo-hirsuta. *Ovarium* anguste ovoideum, 2.5 mm altum, subdense pilosum, stylo brevissimo. *Fructus* ellipsoideus, subglaber, ruber, viridi-striatus, 3—3.5 cm longus, c. 2—3 cm diam.; pedunculus pubescens c. 4 mm longus.

NEW GUINEA. Papua, Western Div., Gaima, lower Fly Riv., east bank, common in rain-forest undergrowth: L. J. Brass 8272, fl. fr. Nov. 1936; Lake Daviumbu, Middle Fly Riv.: L. J. Brass 7783 (A, *typus*; L), fl. Sept. 1936; Fly Riv., 528 mile camp, on low ridge, 80 m: L. J. Brass 6814, fr. May 1936; Palmer Riv. 2 miles below junction Black Riv., 100 m: L. J. Brass 6931, fr. June 1936; Fly Riv., d'Albertis anno 1877 (FI). Central Div., Sogeri region, H. O. Forbes, *Pl. Papuan*. 415.

*Casearia oreogenes* Sleum. sp. nov. — *Arbor* parva vel frutex, ramulis junioribus apicibus angulato-compressis, in secco nigrescentibus minuteque pubescentibus, partibus vetustioribus teretibus glabris cito griseo-corticatis. *Folia* subovato-elliptico-oblonga, apice sensim breviter obtuse acuminata, basi latissime cuneata vel subtruncata, basi ipsa brevissime in petiolum protracta, subcoriacea, juniora ad costam laxe pilosula, matura omnino glabra, etiam matura manifeste sat dense pellucido-punctata et -striata, utrinque subnitida, in secco saturate brunnea, integra vel remote subtiliter glanduloso- (interdum subsinuato-)denticulata, 15—20 cm longa, 6—9 cm lata, costa supra fere plana subtus valida et in secco rubescente, nervis lateralibus utroque latere 10—11 parum curvatis marginem petentibus inter sese subparallelis, venis transversalibus supra vix, subtus manifestius prominulis ibique cum venuulis sat dense reticulatis; petiolus sat crassus (± 1.5 mm), laxe pubescens, 4—7 mm longus. *Fasciculi* 3—4-flori; bracteae

paucae ovatae pubescentes, vix 1 mm longae; pedicelli sicut calyx in sicco nigrescentes, crassiusculi, glabri, 2—3 mm longi. *Calyx* glaber, subcoriaceus, fere 5 mm longus, sat profunde 5-lobus, lobis acutiusculis intus laxissime brevissimeque pilosulis. *Stamina* 10; filamenta filiformia, glabra, alternatim 2 et 1.5 mm longa; antherae subglobosae 0.4 mm diam. *Staminodia* subdeltoideo-oblonga, applanata, dense albido-hirsuta, 1 mm longa. *Ovarium* ovoideum, sat dense pilosum, 2 mm altum, stigmate sessili. *Fructus*, ut videtur, fere maturus ellipsoideus, laxe pilosus vel glabrescens, ruber, c. 1.8 cm longus, 1.5 cm diam., pedunculo 3 mm longo.

NEW GUINEA. N.E. New Guinea, Morobe Distr., Sattelberg to Wareo, hill woods, 2000—3000 ft.: *M. S. Clemens 1724* (L, *typus*), fl. fr. Feb. 1936.

*Casearia papuana* Sleum. sp. nov. — *Frutex* 1—1.5 m, ramulis gracilibus teretibus glabris, in sicco saturate brunneis. *Folia* ovato-lanceolata, apicem versus gradatim acuminata, apice ipso subfalcato obtusa vel acuta, basi late in petiolum cuneata, rigide membranacea usque subcoriacea, impunctata, integra, glabra, subnitentia, in sicco (nigrescenti-)brunnea, 12—17 cm longa, (2.5)3—5 cm lata, costa supra fere plana, subtus bene prominente, nervis lateralibus utroque latere c. 7—8, inferioribus 4—5 praeter marginem excurrentibus, superioribus inter sese curvato-conjunctis, supra vix, subtus distincte elevatis, venis transversis supra parum conspicuis, subtus sat dense cum venuulis reticulatis; petiolus glaber 3—4 mm longus. *Flores* albescenti-viridescentes ad summos axium brevissimorum (3—4 mm) dense bracteatorum 2—3, axibus ipsis plerumque solitariis; pedicelli 1.5 mm longi; bracteae scariorae minutae ovatae vix 0.5 mm longae. *Calyx* 2 mm longus, glaber, 2 mm longus, usque ad medium 5-lobus. *Stamina* 10; filamenta incrassata glabra, alternatim 0.9 et 0.6 mm longa. *Staminodia* inconspicua, ad pila nonnulla reducta. *Ovarium* elongato-ovoideum, pilosum, fere 2 mm longum, stigmate sat minuto capitellato. *Fructus* ellipsoideus ruber vel aurantiacus, 2 cm longus, 1 cm diam.

NEW GUINEA. N.W. New Guinea, Nabire, Bivouac Prao, 30 km inward of Nabire, rain-forest, 100 m: *R. Kanchira & S. Hatusima 12795*, fl. March 1940; ibid., Dalman, in *Agathis* forest, 500 m: *R. Kanchira & S. Hatusima 12100*; ibid., Ayeryat, in fringing forest on rocky slope, 300 m: *R. Kanchira & S. Hatusima 12614* (BO, *typus*), fl. March 1940; ibid., rain-forest, 300 m: *R. Kanchira & S. Hatusima 12732*, fr. red.

Probably conspecific specimens with somewhat wider leaves from the Moluccas belong here:

ARU. Wokam: *O. Beccari* (coll. 4349, 4350, FI), fl. fr. March 1873. Trangan (Lutor): *O. Beccari* (coll. 4351, 4351a, FI); ibid.: *Treub* (BO), anno 1893; ibid.: *Buwalda* 5388.

*Cascaria rinoreoides* Sleum. sp. nov. — *Frutex* 3 m altus, glaberrimus; ramuli recentissimi subangulati, demum teretes, in sicco flavescentes. *Folia* ovato-oblonga, apice breviter (1—1.5 cm) sensim subacute acuminata, basi in petiolum attenuata, subcoriacea, rigidula, in sicco flava vel dilute olivacea, subtus opaca et pallidiora, margine subobscure remoteque crenato-serrata usque fere integra, 8—12 cm longa, 3—4.5 cm lata, costa supra parum, subtus bene prominente, nervis lateralibus marginem versus curvato-ascendentibus supra vix, subtus parum elevatis, venis ± transversis cum venuulis utrinque rete sat densum distincte elevatum formantibus; petiolus c. 1 mm crassus, ± 1 cm longus. *Flores* sessiles, in statu juvenili

tantum visi, solitarii vel 2—3-fasciculati, interdum in apice axis multi-bracteolati vix 1 mm longi dispositi; bracteae membranaceae ovatae sub-acutae glabrae 1.2 mm diam. *Calyx* glaber, carnosulus, 2 mm longus, profunde 5-lobus. *Stamina* 10 aequilonga; filamenta glabra, 0.5 mm longa. *Staminodia* brevissima parce pilosa. *Ovarium* crasse ovoideum, pilosum. *Fructus* ellipsoideus, c. 1.8 cm longus, 1.2 cm diam., aurantiacus.

NEW GUINEA. N.W. New Guinea, Geelvink Bay, Paterna, 40 km inward of Nabire, rare, 300 m: *E. Kanekira & S. Hatusima* 11955 (A, *typus*; BO), fl. fr. Feb. 1940.

**Casearia ripicola** Sleum. sp. nov. — *Arbor* 6—15 m alta, innovationibus ferrugineo-tomentosis, ramulis eito glabratris teretiusculis, in sicco rubro-brunneis longitudinaliter striatis denseque lenticellis oblongis albescentibus obtectis. *Folia* elliptica usque oblongo-elliptica rarius oblonga, apice late acuminata atque in acumen obtusum vel subacutum brevem (0.5—1 cm) contracta, basi cuneata usque (sub)rotundata, integra vel venulosa (glandulosa) ultra marginem laminae prorumpentibus distanter minutissime denticulata, in sicco saturate fuscescenti-brunnea, subtus paullo pallidiora, chartacea, crebre, sed interdum haud bene visibiliter pellucido-punctata haud -lineata, supra subnitida et costa nervisque lateralibus exceptis glabra, subtus initio per faciem, imprimis ad costam et nervos tomentosula, maturitate glabrescentia sed ad costam et nervos et angulos nervorum cum costa diutius pilosa, (6)8—13(15) cm longa, (3)4—6.5 cm lata, costa supra leviter impressa, subtus crasse prominente, nervis lateralibus utroque latere 8—9 curvatis plerumque angulo fere recto a costa abeuntibus arcte intersese parallelis supra planis vel levissime immersis, subtus prominentibus, venis venulisque, utrinque rete sat densum parum sed visibiliter elevatum formantibus; petiolus breviter rufo-pilosus, ± 5 mm longus. *Flores* ad fasciculos paucifloros vel multifloros dispositi, albescenti-virescentes vel flavidi; bractae numerosae 1 mm longae; pedicelli sat graciles, sub anthesi 8—14 mm longae, sicut bracteae et calyx fusco-ferrugineo-pubescentes. *Calyx* 3 mm, fere usque ad basin 5-lobus, lobis elliptico-oblongis obtusis intus pilosulis. *Stamina* 10; filamenta crasse filiformia, pilosula, alternatim 2 et 1.7 mm longa. *Staminodia* filamentis similia, sed apice barbellata, 1 mm longa. *Ovarium* ovoideum, 1.5 mm longum, albido-pilosum, apice in styli columnnam fere glabram 1 mm longam contractum. *Fructus* ellipsoideus, aurantiaco-flavidus, maturus 2.5 cm longus, c. 1.5 cm crassus, laxe pilosus.

NEW GUINEA. N.W. New Guinea, Bele Riv., 18 km N.E. of Habbema Lake, 2200 m camp, common in second growth rain-forest: *L. J. Brass* 11356, fl. Nov. 1938; ibid., undergrowth of local flood plain forest: *L. J. Brass* 11544 (A, BO; L, *typus*), fl. fr. Nov. 1938; ibid., 9 km N.E. Habbema Lake, second growth forest on moist soil, 2700 m: *L. J. Brass* 10825, fl. Nov. 1938.

A glabrescent, but apparently conspecific form:

NEW GUINEA. Papua, Centr. Div., Uniri Riv., c. 2150 m: *C. E. Carr* 15188, fl. Jan. 1936; Lala Riv., c. 1900 m: *C. E. Carr* 14073, fl. Dec. 1935; below the Gap, 2150 m: *C. E. Carr* 15013, fl. Jan. 1936; Mt Tafa, 2400 m: *L. J. Brass* 4911, fl. white May—Sept. 1938.

**Casearia yatesii** Sleum. sp. nov. — *Frutex* vel *arbor*? *Ramuli* omnino glabri, in partibus vetustioribus teretibus tenuiter griseo-corticati. *Folia* oblonga, breviter sensim obtuse acuminata, basi late cuneata usque sub-rotundata, subcoriacea vel firmule chartacea, in sicco dilutius castanea et subnitida, subtus paullo pallidiora, glabra, sat dense manifeste pellucido-

punctata et -striata, regulariter per totam marginem subserrato-dentata (dentibus glandulosis prorsus versis 0.5—1 mm altis, 4—5 mm distantibus), 10—17 cm longa, 5—7 cm lata, costa nervisque lateralibus supra planis vel paullo impressis, subtus valde prominentibus, nervis lateralibus utroque latere (8)9—10 curvato-ascendentibus, venis  $\pm$  transversis cum venulis reticulatis supra parum, subtus distinete prominulis; petiolus rugosulus, glaber, c. 1.5 cm longus. *Flores* in glomerulis multifloris ad nodos ramulorum annotinorum defoliatorum dispositi; bracteae ovatae dense pilosae numerosissimae c. 0.5 mm diam., pulvinar  $\pm$  semiglobosum formantes; pedicelli graciles glabri 6—8 mm longi. *Calyx* tenuis, 4 mm longus, profunde 5-lobus, glaber, haud reflexus. *Stamina* 10 aequalia; filamenta crasse filiformia, glabra, 3.5 mm longa; antherae subcordatae 0.7 mm longae. *Staminodia* rectangulari-clavata, crassa, dense hirsuta, 1.8 mm longa. *Ovarium* anguste ovoideum, 4 mm longum, apice sensim in stylum crassum attenuatum,  $\pm$  dense pilosum. *Fructus* ignotus.

SUMATRA. East coast, Asahan, Gurach Batu: *H. S. Yates* 2116 (BO, typus; L). Probably conspecific: Atjeh, Pulu Beras near Kotaradjah, 40 m: *Koorders* 10607 ♂ (BO).

**Flacourtie inermis** Roxb. var. **moluccana** Sleum. var. nov. — A typo foliis minoribus 5—8(11) cm longis, 3—4(5) cm latis basi truncato-rotundatis recedit.

MOLUCCAS. Halmahera, S. Peninsula, Tilope: *Anang* (Exp. de Haan) 574 (L, typus), fr. Apr. 1938; Weda Distr., coralline limestone in virgin forest: *de Haan* 1712, shrubby tree, used for timber, fr. red Jan. 1949, "halimaditoko" (Tobelo). Morotai, W. slope G. Sabatai, primary forest, small shrub, 150 m: *H. J. Lam* 3568, fr. green. Morotai, west coast, Guguti: *Anang* (Exp. de Haan) 215.

NEW GUINEA. N.W. New Guinea, Mc Cluer, Anacasi by Babo, 50 m: *Aet* (Exp. Lundquist) 84, fr. red. Wissel Lake region, Post to Bubeiro, biv. Prauw, Oderdo to Puro: *P. J. Eyma* 5425, a form with smaller leaves. Near Andai: *Teysmann*; ibid.; *O. Beccari* 629, anno 1872.

**Flacourtie kinabaluensis** Sleum. sp. nov. — *Arbor* gracilis vel frutex, prostratus; ramuli glabri euprei opaci, apicibus vernicoso-nitidi. *Folia* oblongo-ovato usque lanceolato-ovata, subcaudata, apice ipso obtusa, basi rotundata, coriacea, glaberrima, utrinque nitida, costa nervisque lateralibus (6—8(9)-paribus) utrinque prominentibus, venis venulisque utrinque dense reticulatis et prominulis. *Racemi* axillares abbreviati, plerumque ad fasciculos 2—3-floros reducti; pedicelli laxe pilosuli 4—5 mm longi. *Calycis lobi* 4(5) ovati, obtusi, 2 mm longi, extus laxe, intus densius pilosuli. *Flores* ♂: *Stamina* c. 15, filamentis glabris 2 mm longis. *Disci lobi* truncati 8, carnosii. *Flores* ♀ adhuc incogniti. *Fructus* subglobosus 6—8 mm diam., ruber, basi sepalis persistentibus fultus, apice stylis 4 (5) centralibus brevibus (1 mm) ex summo apice radiatis instructus, semina 6—8 appianata continens.

BORNEO. Br. N. Borneo, Mt Kinabalu, Penibukan, 4—5000 ft.: *J. & M. S. Clemens* 30949 (A, BO; L, typus), fr. Jan. 1933; ibid., Penibukan, jungle ridge above camp: *J. & M. S. Clemens* 30886, 30956, 31378 (fl. ♂ cream), 31509; ibid., Penataran basin, forest slope, 4—5000 ft.: *J. & M. S. Clemens* 40164.

**Hydnocarpus pinguis** Sleum. sp. nov. — "Arbor alta". *Ramuli* juniores omnino glabri, subangulati, in secco nigrescentes, vetustiores teretes nigrescenti-brunnei. *Folia* elliptica vel oblongo-elliptica, ampla, apice breviter (1 cm)  $\pm$  abrupte acuminata interdum fere obtusa, basi rotundata vel

latissime cuneata plerumque manifeste inaequilateralia, crasse coriacea, lucidula, glaberrima, integra, (11)13—18 cm longa, (5)7—10(12) cm lata, medio vel parum infra medium latissima, costa, nervis venisque in sicco rubescensibus, costa ipsa supra fere plana, subtus valde prominente, nervis lateralibus utroque latere 6—7-jugis infimis 2 quasi e laminae basi aequaliter tibus, minus distinctis, superioribus a costa angulo acuto ( $40^{\circ}$ ) superne magis curvatis praeter marginem excurrentibus ibique inter sese obscure conjunctis, supra elevatis sed subtus altius prominentibus, venis primariis ± irregulariter transversis, cum venuis rete subdensum utrinque laete elevatum formantibus; petiolus valde crassus (2—3 mm), 2.5—3.5 cm longus, glaberrimus, apice basique ± manifeste incrassatus lenticellisque pluribus subparallelis horizontalibus instructus. *Cymae* axillares, ut videtur, multiflorae, pedunculo crasso 5 mm longo, in specim. deser. floribus plurimis nondum evolutis bracteis involutis; pedicelli crassiuseuli glabri circ. 2 mm longi. *Sepala* 4 chartacea subrotundata glabra, ad apicem tantum obscure fimbriata, 4—5 diam., nondum plane matura. *Petala*. 8 subrotundata, carnosula, dorso densissime aureo-sericea, intus glabra, circ. 2.5 mm diam., nondum plane matura; squamae minutae. *Stamina* circ. 32, nondum bene evoluta, filamentis brevissimis (pilosis ?), antheris oblongo-cordatis.

BORNEO. Sarawak, Kuching: *O. Beccari* 1191 (FI, typus); ibid.: *O. Beccari* 1350, 2699.

**Hydnocarpus tenuipetala** Sleum. sp. nov. — *Arbor* parva. *Ramuli* juniores subteretes cito cortice dilute brunneo obtecti, vetustiores cinerascentes. *Folia* elliptico-oblonga vel subovato-oblonga, apice abrupte breviter (1 cm) subacute acuminata, basi rotundata, aequilateralia, crasse coriacea, in sicco brunnea, subtus pallidiora, matura glabra (novella subtus ad costam et nervos laxe fusco-pilosula), integra, 11—14 cm longa, 4.5—6.5 cm lata, utrinque subnitida, costa nervisque supra parum, subtus valde prominentibus, nervis lateralibus utroque latere (4)5—6 subarcuatis praeter marginem excurrentibus, in sicco atro-nigrescentibus, venis distanter transversis, cum venuis sat laxe reticulatis et utrinque aequaliter bene prominulis; petiolus crassus (2 mm) rugosus supra caniculatus glaber 6—8 mm longus. *Cymae* axillares pauciflorae, pedunculo communi crasso rufo-puberulo circ. 3—5 mm longo; bracteae ovatae plures minutae; pedicelli subglabri 3 mm longi. *Sepala* 4 ovato-rotundata, concava, firmule membranacea, dorso brevissime laxissime pilosa, intus glabra, circ. 4 mm diam. *Petala* 8 tenera, late ovata, circ. 2.5 mm diam., glabra, apice erosa minuteque fimbriata, intus squama petala magnitudine fere aquante crassa dense hirsuta instructa. *Flores* ♂: *Stamina* circ. 14, filamentis gracilibus glabris basi infima dilatatis 2.5 mm longis, antheris cordatis 1.5 mm longis. *Ovarii* rudimentum hirsutum. *Flores* ♀ et fructus desunt.

BORNEO. Sarawak: *O. Beccari* 2245 (FI, typus).

**Pseudosmilia** Sleum. gen. nov. — *Calycis lobi* (sepala) 4, imbricati, basi brevissime in tubum connati. *Flores* ♂ in statu juvenili tantum cogniti: *stamina*, ut videtur 8, alternatim longiora et breviora. *Staminodia* haud bene observata. *Rudimentum ovarii*, ut videtur, praesens. *Flores* ♀ in statu magis evoluto tantum cogniti: *stamina* 8 ut in *Osmelia*. *Staminodia* 4 episepala, squamam crasse carnosam subquadratam apice irregulariter

erosam fere usque ad basin bifidam pubescentem praebentia. *Ovarium* fere cylindricum, sessile, pubescens, placentis 3 multiovulatis. *Styli* 3 divergentes; stigmata crassa biloba. *Capsula* fusiformis, brevissime pedunculata, stylis 3 brevibus crassis, stigmatibus sessilibus obscure bilobis, pericarpio coriaceo, basi sepalis 4 subpersistentibus fulta. *Semina* numerosa sat parva, testa laevi tenui, basi arillo membranaceo instructa; endospermium copiosum albuminoso-oleosum; cotyledones cordati foliacei seseque tegentes; embryo rectus; radicula crassa cylindrica.

*Arbor* dioica. *Folia* alterna, ± disticha, penninervia, petiolata. *Stipulae* subulatae ± caducae. *Inflorescentiae* axillares, subterminales vel caulinae, floribus subsessilibus laxe ad spicam elongatam dispositis, basi bractea bracteolusque duabus in cupulam connatis fultis.

*Pseudosmelia moluccana* Sleum. sp. nov. — *Arbor* parva 2.5—3 m alta, ramulis teretibus gracilibus initio laxe adpresso pilosis, cito glabrescentibus corticeque tenui griseo obtectis. *Folia* elliptico-oblonga, apice breviter (1—1.5 cm) cuspidato-caudata et falcata, subacuta, basi cuneata, tenuiter chartacea, in sicco sordide olivacea vel brunnecentia, subnitida, subtus pallidiora, subtus ad costam et nervos adpresso pilosula ceterum glabra, integra, 10—16 cm longa, 4—6.5 cm lata, costa supra leviter impressa, subtus bene prominente, nervis lateralibus curvato-ascendentibus utroque latere 7—8, infimis e basi orientibus, superioribus 3—4 tantum praeter marginem curvato-conjunctis, omnibus supra obscuris, subtus prominentibus, venis transversis cum venulis rete laxum utrinque elevatum formantibus; petioli graciles supra canaliculati, ± dense adpresso pilosuli, 6—10 mm longi. *Stipulae* subulatae pilosae 3—4 mm longae, pro parte maiore cito caducae. *Inflorescentiae* axillares vel subterminales vel caulinae, spiciformes, 15—20 cm longae; rhachis gracilis apicem versus sensim incrassata, ubique brevisime adpresso griseo-pilosa, vel glabrescens. *Flores* ♂ in alabastro tantum visi. *Flores* ♀ in statu progresso tantum cogniti: *sepala* 4 late ovata, concava, flava, 2 mm longa. *Stamina* 8 haud exserta, antheris cordatis minutissimis polline parentibus; filamenta cylindracea satis crassa. *Staminodia* 2 mm longa. *Ovarium* cylindricum, in media parte subinflatum, pubescentis, in statu evoluto 7 mm longum, 2 mm crassum. *Styli* 1 mm longi. *Infruktescientiae* ad apicem tantum fructum unicum vel fructus 2 gerentes, ceterum vestigiis florum laxe instructae; pedunculi fructiferi 1—1.5 cm longi, c. 1 mm crassi. *Capsula* anguste fusiformis, in medio ± inflata, in sicco grisea, ± glabra, 5—9 cm longa, 1.2—2 cm crassa, apice breviter (c. 1 cm) attenuata, basin versus per 1.5 cm valde contracta quasi stipitata, apice in stylos 3 crassos 2—3 mm longos in sicco inflexos abiens, stigmatibus minutis crassis nigrescentibus. *Semina* 25—30, ± ovoidea, 4—5 mm longa, ± 3 mm crassa.

MOLUCCAS. Morotai, G. Sangawo, common, 800 m: A. Kostermans 1045 (L. typus), fr. May 1949. Morotai, W. slope of the G. Sabatai, in primarv forest. 200 m: H. J. Lam 3570 (BO), ♂ fl. in bud June 1926, "mutinguti" (Alf.). Halmaheira, Tasoa-Gn. Sembilan, common in thinned forest, 300 m: D. R. Pleyte 239, fl. ♀ and fr 24. Sept. 1951.

*Ryparosa baccaureoides* Sleum. sp. nov. — *Arbor* parva, 3 m; ramuli subteretes, in sicco rubro-brunnei, adpresso ferrugineo-pubescentes tandem glabrescentes, lenticellis (elongato-)ellipticis sparsis. *Folia* elliptica vel

ovato-elliptica, apice acute acuminata, basi late cuneata usque rotundata, subcoriacea, in siccо brunneo-olivacea, supra subnitida et glabra, subtus pallide olivacea et opaca, glabra vel plerumque ad nervos venasque pilis minutis pallidis obsita, (11)13—20(22) cm longa, (5)6—9(12) em lata, costa supra leviter impressa subtus valde prominente, nervis lateralibus utroque latere 5—6 curvato-ascendentibus interque sese praeter marginem conjunctis supra fere planis, subtus prominentibus, venis imprimis subtus sat dense reticulato-elevatis; petiolus saturate ferrugineo-pubescent, serius glabrescens, longitudinaliter striatus, 2.5—4 (interdum usque ad 9) cm longus. *Inflorescentiae* ♂ et ♀ racemose spiciformes sat breves (8—12, raro usque ad 20 cm) e trunco ortae, interdum ♂ axillares; rhachis ± dense ferrugineo-pilosa; pedicelli 3 mm longi; bracteae minutae. *Calycis lobi* 3, ovati, extus ferrugineo-pilos, intus fere glabri, c. 3 mm diam. *Petala* 5 oblonga, acuminata, ex coll. albida, extus griseo-sericea, intus subglabra, in siccо saturate rubra, 3 mm longa, 2 mm lata; squamae ovatae, crassae, dilute aureo-villosae, 2 mm diam. *Stamina* 5, filamentis in columnam glabram 4 mm longam connata. *Inflorescentiae* femininae caulinae tantum cognitae, solitariae vel 2—3 fasciculatae; rhachis satis crassa (2 mm), sub anthesi pendens, angulata, 20—30 cm longa, sat dense ferrugineo-pilosa; pedicelli 1.5 mm. *Calycis lobi* et *petala* quam in floribus ♂ paullo maiora. *Staminodia* 5, ad filamenta brevia reducta. *Ovarium* ovoido-subglobosum, dense ferrugineo-hirsutum, stigmate sessili 3—4 (vel interdum 5)-lobato, lobis ipsis obovatis radiatis profunde impressis apiceque leviter bilobis. *Fructus* (fere maturus) trispermus depresso-globosus vel rotundato-trigonus, vel (seminibus 4) subquandangularis vel (seminibus 2) transverse oblongus, c. 1.5—2 cm altus, 2—2.5 cm crassus, brunneo-hirsutus et rugosus; pedunculus 2 mm crassus.

BORNEO. Br. N. Borneo, Mt Kinabalu, path to Ranau, 4800 ft.: C. E. Carr, Sing. F. N. 26990 (SING, typus), ♂ & ♀ fl. Apr. 1933; ibid., Tenompok, 5000 ft.: J. & M. S. Clemens 28109, fr., 28109a, fr., 28848; ibid., Gurulau spur, 4500 ft.: J. & M. S. Clemens 50502; ibid., Dallas, 3000 ft.: J. & M. S. Clemens 26597; ibid., near Lodge: J. & M. S. Clemens 29375.

*Ryparosa kostermansii* Sleum. sp. nov. — *Arbor* 14—20 m, trunco tabulato 12—30 cm diam. *Folia* oblonga, apice sat abrupte acute acuminata (1—1.5 cm), basi cuneata, firmule chartacea, supra olivacea et glabra, subtus pallidiora, opaca, subtus per totam faciem sat dense pilis minutis pallidis appressis (sub lente tantum bene visibilibus) obtecta, (10)12—20 cm longa, (3)4—7 cm lata, integra, costa supra leviter immersa, subtus prominente pilisque brevibus substrigosis obsita, nervis lateralibus utroque latere 2 (rarissime 3, extremis subobscuris) erectis et elongatis supra parum, subtus bene prominentibus, venis ± obscure transversalibus, venuis utrinque distincte reticulatis sed parum elevatis; petiolus sat tenuis (1—1.5 mm), c. (1)1.2—1.8 cm longus, appresse sericeo-olivaceo-pilosus. *Inflorescentiae* adhuc incogniti. *Ovaria* evoluta et *fructus* immaturi pauci ad racemos axillares breves (5—9 cm) digesti; rhachis sat gracilis, 1.5 mm diam., dense pilis appressis olivaceis obtecta; pedicelli 1 mm diam.; fructus fere maturus depresso-globosus, in siccо saturate olivaceus brevissime tomentosus, ultro dense minuteque tuberculatus; stigmata 2 late reniformia, sessilia, in ovario approximata, in fructu immaturo (1.5 cm diam.) 1—2 mm distantia. *Semina* 1—2.

BORNEO. S.E. Borneo, Peak of Balikpapan (G. Beratus), 640 m: *A. Kostermans 7564* (BO, *typus*; L), fr. immat. July 1952; *ibid.*, on sandstone, 700 m: *A. Kostermans 7373*, fr. immat. July 1952; Sg. Wain region, N. of Balikpapan, low hills, 30 m: *A. Kostermans 4589*, sterile Nov. 1950; Martapura, Djungur, 350 m: *b.b. 10386*. W. Borneo, Melawi, 345 m: *b.b. 28347*; *ibid.*, 375 m: *b.b. 26026*; Tajan, 100 m: *b.b. 14189*.

Probably conspecific specimen:

BORNEO. Sarawak, Gunong Silang For. Res.: *Egon, For. Dep. A 917* (Herb. Kepong): *Fructus depresso-globosus*, 2.5—3 cm altus, 3.5—3.5 cm diam., minute tuberculatus punctisque albescens adspersus, semina 1—2 continens; pericarpium coriaceum 1 mm crassum; pedunculus 2—5 mm longus, 2—3 mm crassus.