

Flora of Koh Chang.

Contributions to the knowledge of the vegetation in the
Gulf of Siam.

By

Johs. Schmidt.

Part VI.

(K. Schumann: Rubiaceae. — C. B. Clarke: Lythraceae, Melastomaceae, Scrophulariaceae, Acanthaceae. — O. Warburg: Urticaceae. — E. Rostrup and G. Massee: Fungi.)

Rubiaceae

by K. Schumann — Berlin¹⁾.

Dentella Forst.

1. **D. repens** Forst. Char. gen. 20, t. 13. Hook. fil. Fl. Brit. Ind. III, 42.

Lippaya telephioides Endl. Atakta t. 13.

Klong Sarlakpet, in open moist ground near the village (n. 731).

Area: This small dwarfy prostrate plant is a very common weed in moist places from India to Polynesia and Australia.

Oldenlandia Linn.

2. **O. (Euoldenlandia) diffusa** Roxb. Hort. beng. 11; Hook. fil. Fl. Brit. Ind. III, 65.

Klong Sarlakpet, in open moist ground near a village (n. 730).

Area: It is also very common in the East Indies and goes through the tropical Asia as far as to the Philippines and is also recorded from Japan.

3. **O. (Euoldenlandia) pinifolia** Wall. in Don, Gen. Syst. III, 525; Hook. f. Fl. Brit. Ind. III, 60.

¹⁾ A smaller number of specimens have been named by Mr. C. B. Clarke of Kew.

Klong Prao, on rocks in the jungle; Koh Kong on sandy ground near the Sea.

Area: It grows in Behar and Choto-Nagpore and on the Malayan Peninsula; in the Greater Sunda-Island it has yet been found.

4. **O. (*Dimetra*) mollis** Wall. in Don, Gen. Syst. III, 527; Hook. f. Fl. Brit. Ind. III, 59.

Open, dry plains near Lem Dan (n. 30).

Till now it has not been found but in the Southern part of the Malayan Peninsula, on the island of Penang.

5. **O. (*Euhedyotis*) costata** (Roxb.) K. Schum.

Spermacoce costata Roxb. Hort. beng. 10. — *H. vestita* Wall. in Don, Gen. Syst. III, 526; Hook. f. Fl. Brit. Ind. III, 58.

Riverbank in the jungle near Klong Munsé; a shrub (n. 412).

According to the rules of priority of specific names now accepted by the greater part of living botanists, excepted the English, it is not to be avoided to change the name. It is distributed from the subtropical Eastern Himalaya and the Khasia Mountains in the Malayan Peninsula, the Malayan Archipelago and the Philippines.

6. **O. (*Euhedyotis*) lineata** Roxb. Hort. beng. 10; Hook. f. Fl. Brit. Ind. III, 59.

Jungle near Klong Munsé; Klong Son in a pool (n. 119, 654a).

Area: The geographic area is not so far extended as in the last species; from Eastern Bengal it has been found till now only as far as to Chittagong and Tenasserim.

Note. There is collected (sub n. 742) another plant which probably belongs to the same genus, but it is too imperfect for determination.

7. **Argostemma** Wall.

I found in the collection a very dwarfy plant (n. 502) of the habit of this genus with a whorl of 4 unequal leaves on a 1,5 cm. high stem. The flowers are unfortunately very young, and it is therefore impossible to match it.

Ophiorrhiza Linn.

8. **O. mungos** L. Spec. pl. ed. I, 150.

Klong Son, on moist ground in the jungle (n. 631 partim).

Area: The plant is common in the eastern parts of tropical Asia and goes from the Khasia Mountains to New Guinea.

9. **O. Harrisiana** Heyne in Wall. and Arn. Prodr. 405; Hook. f. Fl. Brit. Ind. III, 78.

Klong Majum, alt. 700 ft., on rocks in the un le (n. 606).

Area: A very common and variable plant with numerous varieties which in a later time shall probably partly at least prove as well defined species. It grows in forests on mountains from the Concan to Ceylon and from the Khasia Mountains to Tenasserim; I found it also among the collections from German New Guinea.

10. **O. brachycarpa** K. Sch. n. sp.

Caules adscendentes ad 25 cm. alti teretes apice subtomentosi basi glabrati simplices vel parce ramosi ad 25 cm. longi. Folia ad 8 mm. longe petiolata lanceolata apice acuta vel hoc loco basique acuminata tenuiter herbacea utrinque glabra margine solo scabrido-pilosula ad 2,5—8 cm. longa, 0,8—1,8 cm. lata sicc. obscure viridia; stipulae e basi late triangulari breviter subulatae vix 2 mm. longae ferrugineo-subtomentosae. Cyma pedunculo gracili 1,2—3,5 cm. longo sustentata bis trichotoma; cincinni c. 1 cm. longi; bractee vix conspicuae; flores ad 3 mm. longe pedicellati, pedicelli ut rhachis inflorescentiae et ovarium papilloso; sepala triangularia brevissima; corollae lobi duplo tubum superantes; stamina prope basin affixa prope tubum villosa; capsula transverse lineari-oblonga rubra 1—1,5 mm. alta et 5 mm. lata.

It is distinguished from all other known species of the region by the very short capsula.

Klong Son on moist ground in the jungle. Herb with white flowers (n. 631 partim).

Coptosapelta Korthals.

11. **C. flavescens** Korth. in Ned. Kruidk. Arch. II, 113; Hook. f. Fl. Brit. Ind. III, 35 (partly determined by C. B. Clarke).

Plains near Lem Dan, open jungle near Klong Munsé (n. 222).

Area: This very interesting species has been found on the Malayan Peninsula from Tenasserim to Singapore as well as on the Greater Sunda Islands.

Nauclea Linn.

12. **N. purpurea** Roxb. Corom. pl. I, 41, t. 54; Hook. fil. Fl. Brit. Ind. III, 26.

Riverbank in the jungle near Klong Son, a moderate sized tree (n. 680).

Area: This species has only been found till now on the Western Peninsula; the specimens from Siam are not in the least different from the type.

13. **N. synkorynes** Korthals (det. C. B. Clarke) in Temminck Verh. Naturl. Geschied. [Leiden 1839—1842] p. 158; Miq. Fl. Ind. Bat. v. 2, p. 137; Haviland in Journ. Linn. Soc. v. 33 [1897—98] p. 60.

Klong Son.

Area: In Sumatra, Borneo, Celebes, Cochinchina.

Tarenna Gärtn.

14. **T. asiatica** O. Ktze. Rev. gen. 258.

Rondeletia asiatica Linn. Spec. pl. ed. I, 172. *Webera corymbosa* Willd. Spec. pl. I, 1224; Hook. f. Fl. Brit. Ind. III, 102; *Chomelia corymbosa* (W.) K. Sch. Nat. Pflz. IV, 4, p. 75.

Koh Chang Noi, on rocks in the jungle (n. 698).

Area: This species seems to be a very common plant not only in the Western Peninsula of the East Indies but also in the Malayan Archipelago. It is known under many names. After the rules of priority approved in Germany the above accepted name must be preferred. The name of *Chomelia* Linn. must fall against *Tarenna* because Linné himself had annihilated it, because he had not recorded a species of the genus and it has never been employed after him. The genus *Tarenna* Gaertn. whose type is the above named plant must be put on the head.

Randia Linn.

15. **R. (*Gynopachys*) oppositiflora** (Roxb.) K. Sch.

Webera oppositiflora Roxb. Fl. Ind. I. 698. — *R. densiflora* Benth. Fl. Hongk. 155; Hook. f. Fl. Brit. Ind. III, 112. — *Webera densiflora* Wall. in Roxb. Fl. Ind. ed. II, vol. II, 536.

Common on riverbanks in the jungle all over Koh Chang. A moderate sized tree (n. 397, 422, 524, 529, 591 a, 737 a).

This species has also been mistaken several times and very often taken as a new species and therefore described under many names. The full synonymy compare in the Fl. Brit. India. The oldest name is *Webera oppositiflora* Roxb. and therefore the above accepted name is to be preferred. It is a common plant from East India to North Australia and China.

16. **R. (*Eurandia*) fasciculata** (Roxb.) P. DC. Prodr. IV, 386; Hook. f. Fl. Brit. Ind. III, 109. — *Posoqueria fasciculata* Roxb. Fl. ind. II, 570.

Klung, in dry places (n. 372).

The spiny shrub is widely diffused from the tropical Himalaya to Tenasserim and not uncommon. The flowers are not collected so that I am not quite sure, that the plant is exactly named.

17. **R. (*Eurandia*) armigera** K. Sch. n. sp.

Rami graciles teretes flagellati apice subtomentosi mox glabrati, spinis curvatis vix 1 cm. longis armati. Folia ad 5 mm. longe petiolata, petiolus puberulus, lanceolata vel oblongo-lanceolatae breviter et obtuse acuminata et apiculata supra glabra nervis majoribus puberula ad 5,5 cm. longa et 2 cm. lata; stipulae subulatae ad 4 mm. longae puberulae. Flores ramos abbreviatis terminantes geminati brevissime pedicellati. Ovarium turbinatum sericeo-villosum. Calyx 7 mm. longus ultra medium in lobos subulatos divisus villosus. Corollae tubus calycem superans, lobi oblique lanceolati unilatera-liter ciliolati.

This species is related to *R. fasciculata* but is conspicuously different by the highly split and clothed calyx.

Klong Majum, on riverbank near the Sea. A spiny shrub (n. 616).

18. **R. (*Oxyceros*) longiflora** Lam. Dist. III, 26. Illustr. genres I, 156, fig. 3; Hook. f. Fl. Brit. Ind. III, 111.

Jungle near Klong Son. A spiny shrub with pale yellow, aromatic flowers (n. 652).

Area: Also this species has been described many times and has been put in the most different genera (*Posoqueria*, *Canthium*, *Webera*, *Tocoyena*, *Gardenia*, *Pseudixora*, *Stylocoryne*). It grows from Assam and the Khasia Mountains to Burma and the Malayan Islands.

19. **R. (*Gardenioides*) eucodon** K. Sch. n. sp.

Rami modice validi tetragoni ad nodos dilatati glabri. Folia breviter (ad 8 mm. longe) petiolata oblonga vel oblongo-lanceolata breviter et obtuse acuminata utrinque glabra coriacea. Stipulae triangulares acutae 2 mm. longae intus secernentes. Cyma terminalis dein usurpatione rami ex axilla folii alterius spurie lateralis breviter (vix ultra 1 cm. longe) pedunculata pluriflora crispule puberula mox glabrata; bracteae ovatae acutae 2 mm. longae. Flores ad 1 cm. longe pedicellati erecti. Ovarium pisiforme appresse puberulum. Calyx 4 mm. longus obiter quinquentatus intus sericeus. Corollae coriaceae tubus basalis ad 8 mm. longus, superior campanulatus 4,0—4,5 cm. longus, lobi late triangulares obtusi 10 mm. metientes. Stamina linearia 1,5 cm. longa. Stylus bifidus 3,7—4,0 metiens.

This very distinct species comes near to *R. exaltata* Griff. but has quite glabrous foliage and a flower with a much shorter groundtube of the corolla.

North-end of Koh Chang in the jungle (n. 717).

A tall tree with bare stem and a dense crown quite covered by white flowers (in March). Corollae white, with violet dots on their inside.

Gardenia Linn.

20. **G. tubifera** Wall. in Roxb. Fl. ind. ed. Carey et Wallich II, 562; Hook. f. Fl. Brit. Ind. III, 117.

Jungle near Klong Munsé, a tree (n. 512).

Area: From the Malayan Peninsula (in its southern part) to Sumatra, Java and Borneo.

Petunga P. DC.

21. **P. racemosa** (Roxb.) K. Sch. in Nat. Pflzf. IV, 4, 80, Fig. 29 A.

Randia racemosa Roxb. Hort. beng. 15; Fl. ind. I, 525. — *Hypobathrum racemosum* J. Kurz, For. Fl. Brit. Burma II, 51. — *Petunga*

Roxburghii P. DC. Prodr. IV, 399. — *P. variabilis* Hassk. in Flora 1845, p. 232.

Jungle near Kong Munsé, a small tree (n. 490).

Area: From East Bengal it is widely diffused in the Eastern Peninsula of the East Indies to Java and Borneo; it grows in swampy forests. The synonymy is very complicated cf. Fl. Brit. Ind. l. c.

Scyphiphora Gaertn.

22. **S. hydrophyllacea** Gaertn. Fr. III, 91, t. 196; Hook. f. Fl. Brit. Ind. III, 125. — *Epithinia malayana* Jack in Mal. misc. I, 12.

Lem Ngoh, Koh Kong, on muddy, sandy or rocky ground near the Sea (n. 598).

Area: In mangrove swamps on the western coast of the Western Peninsula of the East Indies and Ceylon to the Malayan Archipelago, North Australia, New Caledonia and the Philippines, sometimes very copiously.

Diplospora DC. (det. C. B. Clarke).

23. **D. pubescens** Hook. f. Fl. Brit. Ind. v. 3 [1882], p. 124.

Jungle near Klong Son; Koh Chang Noi; a shrub with greenish flowers.

Area: Malay Peninsula.

24. **D. Malaccensis** Hook. f. Fl. Brit. Ind. v. 3 [1882], p. 124.

Jungle near Lem Dan; a shrub.

Area: Malacca.

The Examples, Schmidt n. 412, match the Malacca plant very well; but they are in extremely young flower, so that the identification is insecure.

Mussaenda Linn.

25. **M. lanceolata** K. Sch. n. sp.

Frutex alte scandens. Rami graciles teretes ferrugineo-subtomentosi tarde glabrati ad 55 cm. longi et vix 2,5 mm. diametro. Folia vix 2 mm. longe petiolata, lanceolata attenuato-acuminata et subrostrata basi acuta utrinque tomentosa sericeo-micantia subtus canescentia ad 12 cm. longa et 3 cm. lata vel jam angustiora; stipulae geminatae subulatae 5 mm. longae caducae. Flores apice ramorum capitato-condensati; capitulum vix 5 mm. longe pedunculatum; bracteae subulatae. Ovarium tomentosum. Sepala subulata 4 mm. longa puberula. Corolla 3 cm. longa extus subtomentosa, lobi vix 5 mm. longi ovati breviter acuminati flavi.

From the described species it differs by the very narrow leaves and beautifully clothed flowers.

Jungle near Klong Munsé. A tall liane with white bracts and yellow flowers (n. 521).

Urophyllum Wall.

26. **U. Schmidtii** C. B. Clarke n. sp.

Undique sparsim minute pilosula, foliis oblongo-ellipticis, 16 cm. longis, 55 mm. latis, basi acutis apice acuminatis subcaudatis, nervis utrinque c. 10, petiolo 6 mm. longo; stipulis 8—10 mm. longis, a basi ovata linearilanceolatis dense adpresse villosis; pedunculis axillaribus, 4—6 mm. longis, 3—8-floris; bracteis 4 mm. longis cum stipulis consimilibus, pedicellis 2—5 mm. longis; calyce 3—4 mm. longo, parce scabro-pilosulo, lobis 4—5 depresso-triangularibus; corolla fere glabra.

U. Blumeanum, Hook. f. Fl. Brit. Ind. v. 3, p. 99 (i. e. *Axanthes Blumeana*, Wight in Calc. Journ. Nat. Hist. v. 7 [1847], p. 145) paullo differt ramulis minus ligneis, foliis minoribus, nervis minus numerosis.

Jungle near Klong Son, alt 1000 ft.; a shrub with white flowers (n. 664).

Plectronia Lam.

27. **P. didyma** (Roxb.) Kurz For. Fl. Brit. Burma II, 35. —

Canthium didyuum Roxb. Fl. ind. I, 535; Hook. f. Fl. Brit. Ind. III, 132. *Vanguiera spirostylis* et *V. lucidula* Miq. Fl. Ind. Cat. II, 250 et Suppl. 544. (Partly determined by C. B. Clarke).

Klong Prao, on rocks in the jungle; Klong Munsé; a shrub or a small tree.

Area: It is the most common species of the genus in East Asia. On the Western Peninsula it is found from the Concan southward, on the island of Ceylon it is very common; on the Malayan Peninsula it is widely distributed and is also found in the Malayan Archipelago and South China.

28. **P. siamensis** K. Sch. n. sp.

Rami graciles stricti teretes superne complanati novelli ipsi glabri. Folia ad 1 cm. longe petiolata oblonga breviter acuminata basi acuta utrinque glabra coriacea subtus in axillis nervorum maximorum domatiato-perforata ad 10 cm. longa et 5 cm. lata; stipulae 3 mm. longae ovato-triangulares caducae. Cymae axillares ad 3 cm. longae vix 5 mm. longe pedunculatae vulgo dichotomae, rami cinisimes ad 12 flores referentes, glabrae. Flores pentameri 3 mm. longe pedicellati. Ovarium turbinatum glabrum. Calyx breviter dentatus. Corolla 3 cm. longa alte divisa infra lobos contracta. Drupa globosa 1,8 cm. diametro canunc.

The species is distinguished from all known to me by the poorly branched cymes.

Jungle near Lem Dan. A small tree (n. 622).

29. **P. glabra** Kurz Forest Fl. Burma v. 2, p. 35, in Journ. Asiat. Soc. Beng. v. 46, pars 2 [1877], p. 153 (det. C. B. Clarke).

Canthium glabrum Blume Bijdr. [1826], p. 967; DC. Prodr. v. 4, p. 474; Miq. Fl. Ind. Bat. v. 2, p. 254, in Ann. Mus. Lugd. Bat. v. 4, p. 251; Hook. f. Fl. Brit. Ind. v. 3, p. 133.

The example Johs. Schmidt n. 463, having very young flowers, has been matched, not determined.

Klong Munsé, on rocks in the jungle; a tree (n. 463).

Area: Burma. Malay Peninsula, Java.

30. **P. Schmidtii** C. B. Clarke n. sp. [sub *Canthio*].

Internodiis 6 cm. longis compressis; stipulis 9 mm. longis, 3—2 mm. latis, oblongis, glabris, vix acutis; petiolis 5 mm. longis; foliis 12 cm. longis, 4 cm. latis, oblongo-ellipticis, apice basique acuminatis, glabris, nervis utrinque 10—11; cymis oppositis, 12 mm. in diam., compositis, paucifloris; calycis lobis 4, minutis, paulo pubescentibus; baccis 5—6 mm. in diam. (saltem saepe) 1—spermis.

Species multis aliis affinis, ob stipulas in parte superiore oblongas 2 mm. latas, nullo alio omnino similis. Haviland, n. 929 in Borneo lecta (sp. indscripta) ab inflorescentia copiose multiflora differt.

Koh Chang Noi in the jungle; a shrub with white fruit (n. 698b).

Guettarda Linn.

31. **G. speciosa** Linn. Spec. pl. ed. I. 991; Hook. f. Fl. Brit. Ind. III, 126. — *Nyctanthes hirsuta* Linn. Spec. pl. ed. I, 6. — *Jasminum hirsutum* Willd. Spec. pl. I, 36.

Koh Lom, on rocks near the Sea (n. 715); Rayong, on sandy sea-shore.

Area: It is widely distributed from the East coast of Africa over the East Indies, the Malayan Archipelago to New Guinea and Polynesia. The most natives are very fond of the very lovely smelling flowers.

Stylocoryne Wight et Arn.

32. **S. Wallichii** (Hook. f.) K. Sch. Nat. Pflzfam. IV, 4, 108. — *Webera Wallichii* Hook. f. in Fl. Brit. Ind. III, 105.

Jungle near Lem Dan. A small tree (n. 800).

Area: Till now it has only been found in Malacca and the islands of Penang and Borneo.

Ixora Linn.

33. **I. stricta** Roxb. Hort. beng. 10; Hook. f. Fl. Brit. Ind. III, 145. Klong Munsé and Klong Son, in the jungle (n. 601b, 621a, 801, 826).

Var. **Blumeana** Hook. fil., l. c.

Klong Majum, on riverbank in the jungle (n. 96).

Area: Probably this species is a native of the Moluccas and China; it is now cultivated in various parts of East Asia; S. Kurtz regards it as indigenous in Lower Birma and Tenasserim.

34. **I. amoena** Wall. Cat. n. 6121 D. F. F., in G. Don, Gen. Syst. III, 571; Hook. f. Fl. Brit. Ind. III, 146.

Open ground near Lem Dan, a shrub (n. 25).

Area: It grows at Mergui, Tenasserim and on the island of Penang.

35. ***I. coccinea*** Linn. Spec. pl. ed. I, p. 110; Hook. f. Fl. Brit. Ind. III, 145.

Open ground near Lem Dan.

It is indigenous not only in the Concan on the Western Peninsula of the East Indies n. 25a and very common in Ceylon, but lives also copiously in the district of Cittagong; it is very often cultivated.

36. ***I. dolichophylla*** K. Sch. n. sp.

Rami graciles novelli ipsi glabris. Folia ad 1 cm. longe petiolata ampla lanceolata attenuato-acuminata basi angustata chartacea utrinque glabra nervis majoribus c. 11 utraque mediani parte percursa ad 26 cm. longa et 6 cm. lata stipulae e basi lata subulatae 7 mm. longae intus villosae. Pannicula corymbosa sessilis pari solitario ramorum aucta modice congesta 4 cm. diametro glabra; bractee bracteolaeque filiformes, inflorescentiae rami ramulique et ovarium globosum papillosae. Calyx quadri-lobatus, lobuli ovati obtusi. Corolla vix 2 cm. longa, lobi lineari-lanceolati 5 mm. longi. Stilus 6 mm. longus tubum corollae superans clavatus. Fructus didymus glaber 6 mm. longus.

This species is allied to *I. fulgens* from which it differs by the form of the foliage and the shorter corolla.

Jungle near Klong Munsé, a shrub (n. 813).

37. ***I. nigricans*** Wight et Arn. (det. C. B. Clarke).

Prodr. [1834], p. 428; Wight Ic. t. 318; Moritz Verz. Zoll. Pfl. p. 65; Kurz For. Fl. v. 2, p. 23; Hook. f. Fl. Brit. Ind., v. 3, p. 148.

I. laxiflora Hassk. in Flora v. 28 [1845], p. 227 syn. excl.

Pavetta nigricans Miq. Fl. Ind. Bat., v. 2, p. 272, Suppl. p. 222, in Ann. Mus. Lugd. Bat. v. 4, p. 196.

P. acutiflora Korth. in Ned. Kruidk. Arch. ser. 1, v. 2, pars 2 [1850], p. 262.

P. subulata Teysm. et Binn. in Natuurk. Tijdsch. Ned. Ind. v. 3 [1855] p. 403.

The Koh Chang example agrees closely with the Java examples which have the calyx-segments 2 mm. long, linear acute: peduncle 4 cm. long; petioles 10—15 mm. long.

Klong Son in the jungle; a shrub (n. 825).

Area: Throughout India, Malaya.

Coffea Linn.

38. ***C. fragrans*** Wall. Cat. n. 8450 in Hook. f. Fl. Brit. III, 154.

Klong Majum, on riverbank near the Sea; a shrub with white flowers (n. 539, 619a).

Area: It is known from the district of Silhet and Tenasserim.

39. **C. (*Lachnostoma*) *Schmidtii*** K. Sch. n. sp.

Rami florentes graciles teretes apice quadrangulares glaberrimi. Folia ad 5 mm. longe petiolata lanceolata vel oblongo-lanceolata breviter et obtuse acuminata basi acuta utrinque glabra subcoriacea nervis 3—4 tantum utraque mediani parte percursa ad 10 cm. longa et 3 cm. lata; stipulae subulatae vix 3 mm. longae caducae. Florum parvorum fasciculi brevissime pedunculati. Ovarium glabrum. Calyx obiter dentatus 0,5 mm. longus. Corollae tubus 2 mm. longus, lobi aequilongi oblongi, unilateraliter emarginati fauce albo-villosus. Antherae sessiles 2 mm. longae. Stili 2,5 mm. longi rami acuti longiusculi.

This species stands nearest to *C. Jenkinsii* Hook. fil. but it differs by still fewer and stronger nerves. The flowers are much smaller.

Klong Son, riverbank in the jungle. A shrub with pale yellow flowers (n. 690 a).

Psychotria Linn.

40. **P. sarmentosa** Bl. Bijdr. 904; Hook. f. Fl. Brit. Ind. III, 165.

Klong Munsé, Koh Chang Noi, climbing on trees in the jungle. Fruit white (n. 835, 697).

Area: It is distributed from Canara and Ceylon, where it ascends to 1300 m., to the Malayan Peninsula and Archipelago.

41. **P. fulva** Hamilt. in Wall. Cat. n. 8336 (B. excl.) in Hook. f. Fl. Brit. Ind. III, 169.

Klong Munsé, Klong Son in the jungle; a shrub with pink fruit (n. 123, 625 a, 824).

Area: It grows in Assam and the Khasia Mts. to 1300 m. and goes to Pegu.

42. **P. serpens** Linn. Mant. II. 204.

Nipple, alt. 2000 ft., in open jungle. A shrub with white flowers (n. 667).

Area: It is only known from China.

43. **P. Jackii** Hook. f. Fl. Brit. Ind. III, 167.

Mouth of Klong Majum; jungle near Klong Son (alt. 1000 ft.). A shrub with greenish flowers (n. 538, 664 a).

Area: It is only known till now from the Malayan Peninsula.

Chasalia Commers.

44. **C. curviflora** (Wall.) Thwaites, Enum. 150, 421; Hook. f. Fl. Brit. Ind. III, 176.

Klong Munsé, Klong Prao, Klong Sarlakpet in the jungle (n. 435, 718, 741 a).

Area: One of the most common species of the whole family; it is widely distributed in the Ghats southwards from Bombay and in Ceylon; from the Eastern Himalaya its area extends to Tenasserim, the Malayan Peninsula, Archipelago to Borneo.

Hydnophytum Jack.

45. **H. formicarum** Jack in Trans. Linn. Soc. XIV, 124.

Var. **siamense** Becc. Malesia II, 167, t. 48, fig. 12—17.

A very common epiphytic plant all over the area explored especially on trees near the sea (n. 200 d, 576).

Area: The species is widely spread from the peninsula of Malacca to Java, Borneo, Celebes and is the only species of the genus which goes as far as to Cochinchina and Siam; the variety has already been found in the gulf of Siam by Pierre (n. 45) on the Island of Phu-Quoc.

Lasianthus Jack.

46. **L. cyanocarpus** Jack in Trans. Linn. Soc. XIV, 125; Hook. f. Fl. Brit. Ind. III, 179.

Jungle near Klong Munsé. A shrub (n. 278).

If indeed *Triosteum hirsutum* Roxb. Fl. Ind. I, 538 is identical with this plant, the name is to be changed. It is an Eastern species which ranges from the Eastern Himalaya to Borneo.

47. **L. strigosus** Wight in Calc. Journ. nat. hist. VI, 512; Hook. fil. Fl. Brit. Ind. III, 189.

Jungle near Klong Munsé. A shrub (n. 837).

Area: Generally the plant is supposed only to be a Ceylon one and a citizen of the Deccan Highlands; but surely it also grows in the Malayan Archipelago: I have seen it in several specimens from New Guinea.

48. **L. lucidus** Bl. Bijdr. 997; Hook. f. Fl. Brit. Ind. III, 184.

Jungle near Klong Son (alt. 1000 ft.). A shrub (n. 667 b ex. p.).

Area: It is widely distributed from the Khasia Mountains to Java.

49. **L. caloneurus** K. Sch. n. sp.

Rami pro rata elongati graciles florentes 25 cm. longi et 3 mm. diametro appresse strigulosi. Folia ad 1 cm. longe petiolata ampla lanceolata breviter acuminata et cuspidata basi acuta nervis majoribus 6 tantum utraque mediani parte percursa pulchre transverse verrulosa supra glabra vix nitidula subtus in nervis strigulosa opaca ad 21 cm. longa et 5,5 cm. lata; stipulae triangulares 4 mm. longae strigulosae caducae. Flores plures fasciculati sessilibus. Ovarium quadriloculare strigulosum ut calyx 2 mm. longus dentibus ovato-lanceolatis. Corolla extus strigulosa 4 mm. longa, lobis margine

tantum pilosulis. Stilus brevis quadrilobus. Drupa ellipsoidea 4 mm. longa glabra.

This species is allied to *L. laurifolius* Hook. f. but is conspicuously different by its smaller flowers, tetramerous ovary and leaves which are percursed by a smaller number of nerves.

Riverbank in the jungle near Klong Son. A shrub with white flowers (n. 683).

50. **L. oligoneurus** K. Sch. n. sp.

Rami graciles teretes superne complanati novelli puberuli ad 20 cm. longi et basi 2 mm. diametro. Folia vix 5 mm. longe petiolata, petiolo pilosulo, oblonga vel oblongo-lanceolata rarius subobovato-oblonga breviter acuminata basi acuta supra glabra subtus in nervis tantum minutissime pilosula transverse venulosa utrinque opaca sicc. cinereo-viridia nervis 3 tantum ad summum 4 utraque mediani parte percursa 12 cm. longa et 4,5 cm. lata; stipulae triangulares strigillosae 3 mm. longae. Flores sessiles parvi pauci fasciculati. Drupa coerulea globosa 5 mm. longa trilocularis loculis 2 abortivis calyce 1 mm. longo dentibus ovato-lanceolatis coronata.

This species is very peculiar by the siaric indumentum the few nerves and the trilocular drupe.

Jungle near Klong Munsé. A shrub with blue, shining fruit (n. 390).

51. **L. Schmidtii** K. Sch. n. sp.

Rami graciles teretes superne complanati ferrugineo-subtomentosi. Folia ad 3 mm. longe petiolata oblonga acuminata basi acuta nitidula supra glabra, ciliolata subtus pubescentia mollia sicc. olivacea nervis 8 majoribus utraque mediani parte percursa ad 9,5 cm. longa et 4 cm. lata. Flores pauci solitarii vel geminati axillares sessiles. Ovarium quadriloculare ferrugineo-villosum. Calyx 2,5 mm. longus, lobis lanceolatis puberulis. Drupa globosa sepalis conniventibus coronata 4 mm. diametro.

The olivaceous colour of the dried villous leaves is very significant. The foliage ist not very large.

Jungle near Klong Son. A shrub (n. 667b).

Damnacanthus Gaertn.

52. **D. indicus** Gaertn. Fruct. III, 18, t. 182; Hook. f. Fl. Brit. Ind. III, 158.

Klong Munsé, on rocks in the jungle. A spiny shrub (n. 282).

Area: The common opinion was that this plant is a native of China; afterwards Griffith found it on the Mishmi Hills (Upper Assam). It is very often cultivated.

Morinda Linn.

53. **M. citrifolia** Linn. Spec. pl. ed. I, 176; Hook. f. Fl. Brit. Ind. III, p. 155.

Lem Dan, Koh Kahdat, on sandy sea-shores; Koh Lom, on rocks near the Sea (n. 167, 557 a).

Area: Wild and cultivated for its yellow colour widely through India; it is particularly fond of the sea shore and grows behind the mangroves.

Rennellia Korth. (det. C. B. Clarke).

54. **R. speciosa** Hook. f. Fl. Brit. Ind. v. 3, p. 158.

Morinda speciosa Kurz For. Fl. Burma v. 2, p. 62, in Journ. Asiat. Soc. Beng. v. 46, pars 2 [1877], p. 152.

Species forsan ad *Tribrachyam* (si *Tribrachya* Korth. a *Rennellia* Korth. genus diversum sit habendum) olim transferenda.

Jungle near Klong Munsé, alt. 900 ft. (n. 122).

Area: Tenasserim, Borneo.

Borreria G. F. W. Mey.

55. **B. hispida** (Linn.) K. Sch. Natürl. Pflzf. IV, 4. *Spermacoce hispida* Linn. Spec. pl. ed. 1, 102; Hook. f. Fl. Brit. Ind. III, 200.

Dry open ground near Lem Dan. A small creeping herb. (n. 484).

Area: A very common weed throughout whole East India, the Malayan Archipelago as far as to S. China, it grows also in Madagascar.

Lythraceae

by **C. B. Clarke** — Kew.

Ammannia Linn.

1. **A. peploides** Spreng.

Syst. v. 1 [1825] p. 444; Kurz in Journ. Asiat. Soc. Beng. v. 46 [1877], pars 2, p. 84; Hook. f. Fl. Brit. Ind., v. 2, p. 566; Vidal Pl. Vasc. Filip. p. 138; Hemsl. in Journ. Linn. Soc. v. 23 [1886—8] p. 303.

A. repens Mart. in Acad. Muench. Phil. v. 6 [1820], p. 150; DC. Prodr., v. 3, p. 80.

Ameletia Indica DC. Prodr. v. 3, p. 76; Blume Mus. Bot. v. 2, p. 135, t. 47.

A. elongata Blume Mus. Bot. v. 2, p. 135.

A. acutidens Miq. Flor. Ind. Bat. v. 1, pars 1, p. 617.

Rotala Indica, Koehne in Engl. Jahrb. v. 1 [1881], p. 172.

Plains near Lem Dan (n. 305).

Area: A weed in wet cultivations, from Persia to the Philippines.

Pemphis J. R. et G. Forst.

2. **P. acidula** J. R. et G. Forst.

Char. Gen. Pl. [1776], p. 67, t. 34; DC. Prodr. v. 3, p. 89; Blume Mus. Bot. v. 2, p. 128, t. 43; Miq. Fl. Ind. Bat. v. 1, pars 1, p. 619; Kurz For. Fl. Burma v. 1, p. 518, in Journ. Asiat. Soc. Beng. v. 46 [1877], pars 2, p. 86; Hook. f. Fl. Brit. Ind. v. 2, p. 573; Vidal Pl. Vasc. Filip., p. 138; Koehne in Engl. Jahrb. v. 3 [1882], p. 133; Hemsl. in Journ. Asiat. Soc. Beng. v. 23 [1886—8], p. 305.

Lythrum Pemphis Linn. f. Suppl., p. 249.

Maclellandia Griffithiana Wight Ic. Pl. Ind. Or., t. 1996.

Koh Kahdat, common on the sandy seashore (n. 323).

Area: Inhabits the Tropical seashore of the Old World.

Lagerstroemia Linn.

3. **L. Flos-Reginae** Retz.

Obs. v. 5 [1789], p. 25; Kurz For. Fl. Burma, v. 1, p. 524, in Journ. Asiat. Soc. Beng. v. 46 [1877], pars 2, pp. 87, 88; Hook. f. Fl.

Brit. Ind., v. 2, p. 577; Vidal Pl. Vasc. Filip., p. 139; Hemsl. in Journ. Linn. Soc. v. 23 [1886—8], p. 305.

L. Muenchhausia Lam. Encycl. v. 3 [1789] p. 375, Illustr. t. 473, fig. 2.

L. Reginae Roxb. Corom. Pl. v. 1, p. 46, t. 65; DC. Prodr. v. 3, p. 93; Blume Mus. Bot. v. 2, p. 126, t. 41 A; Miq. Fl. Ind. Bat. v. 1, pars 1, p. 623.

L. speciosa Pers., Syn. v. 2 [1807], p. 72; Koehne in Engl. Jahrb. v. 4 [1883], p. 28, non DC.

Meunchhausia speciosa Linn. Mant. Alt. [1771], p. 243.

Adambea glabra, Lam. Encycl. v. 1, p. 39.

Koh Chang.

Area: Also in East and South India, in Malay Peninsula and Archipelago, and in China.

4. *L. floribunda* Jack in Malay Miscell. v. 1 [1820], p. 38; DC. Prodr. v. 3, p. 93; Miq. Fl. Ind. Bat. v. 1, pars 1, p. 623; Kurz For. Fl. Burma v. 1, p. 522, in Journ. Asiat. Soc. Beng. v. 46, pars 2 [1877], pp. 87, 88; Hook. f. Fl. Brit. Ind. v. 2, p. 577; Koehne in Engl. Jahrb. v. 4 [1883], p. 34; Hemsl. in Journ. Linn. Soc. v. 23 [1886—8] p. 305.

North-end of Koh Chang on rocks near the sea (n. 628a).

Area: Also in Burma, Malay Peninsula and Islands, and China.

Sonneratia Linn. f.

5. *S. alba* Smith in Rees Encycl. v. 33 [1819] [Yy 2]; DC. Prodr. v. 3, p. 231; Blume Mus. Bot. v. 1, p. 338; Miq. Fl. Ind. Bat. v. 1, p. 497; Kurz For. Fl. v. 1, p. 526, in Journ. Asiat. Soc. Beng. v. 46, pars 2 [1877], p. 89; Hook. f. Fl. Brit. Ind. v. 2, p. 580.

S. acida Benth. Fl. Austral. v. 3, p. 301 partim.

Very common all over the area explored with the mangroves (n. 44 etc.).

Area: Inhabits the Tropical seashore of the Old World.

Melastomaceae

by **C. B. Clarke** — Kew.

Melastoma Linn.

1. **M. Malabathricum** Linn. ed. 1, p. 390, ed. 2, p. 559; Wight Illustr. t. 95; Naud. in Ann. Sc. Nat. ser. 3, v. 13 [1850], p. 284; Miq. Fl. Ind. Bat. v. 1, pars 1, p. 507 (calycis descr. emend.); Kurz For. Fl. Burm. v. 1, p. 503, in Journ. Asiat. Soc. Beng. v. 46 [1877], pars 2, p. 55; Triana in Trans. Linn. Soc. ser. 1, v. 28 [1873], p. 59; Hook. f. Fl. Brit. Ind. v. 3, p. 523 cum. syn.; Cogn. in DC. Monogr. v. 7, p. 349.

Jungle near Klong Majum (n. 607 a).

Area: In India very common; in Malaya, the Philippines, Australia, Polynesia, frequent (ex Cogniaux).

2. **M. polyanthum** Blume in Flora v. 15 [1831], p. 481, Mus. Bot. v. 1, p. 52, t. 6; Korth. Verh. Nat. Gesch. p. 225; Naud. in Ann. Sc. Nat. ser. 3, v. 13 [1850], p. 287; Miq. Fl. Ind. Bat. v. 1, pars 1, p. 507; Triana in Trans. Linn. Soc. ser. 1, v. 28 [1873], p. 59; Hook. f. Fl. Brit. Ind. v. 2, p. 523; Cogn. in DC. Monogr. v. 7, p. 354.

M. Malabathricum Jack in Trans. Linn. Soc. ser. 1, v. 5 [1825], p. p. t. 1 figg. a—g; Blume Bijd., p. 1076; Benth. Fl. Austral. v. 3, p. 292 partim.

M. brachyodon Naud. in Ann. Sc. Nat. ser. 3, v. 13 [1850], p. 292.

In dry open places near Lem Dan, very abundant (nn. 27, 160).

Area: In South India, Malaya, the Philippines, Australia; frequent.

3. **M. sanguineum** D. Don in Mem. Soc. Wern. v. 4 [1822]. p. 289; Sims Bot. Mag. [1821], t. 2241; Blume Mus. Bot. v. 1, p. 55; Naud. in Ann. Sc. Nat. ser. 3, v. 13 [1850], p. 281; Miq. Fl. Ind. Bat. v. 1, pars 1, p. 504; Triana in Trans. Linn. Soc. ser. 1, v. 28 [1873], p. 60; Hook. f. Fl. Brit. Ind. v. 2, p. 524.

M. decemfidum, Roxb. Hort. Beng. 1813—4 sine descript.; Jack in Trans. Linn. Soc. v. 14 [1822—5], p. 6; Blume Mus. Bot. v. 1, p. 55; Naud. in Ann. Sc. Nat. ser. 3, v. 13 [1850], p. 282; Kurz For. Fl. Burma v. 1, p. 503, in Journ. As. Soc. Beng. v. 46 [1877] pars 2, p. 75; Cogn. in DC. Monogr. v. 7, p. 345.

Nipple alt. 2000 ft., in the jungle (nn. 607 a, 672 a).

Area: Frequent in the Malay Peninsula and islands, extending to South China and the Philippines.

4. **M. villosum** Loddige Bot. Cab. 1824, tab. 853; Bot. Mag. 1826, tab. 2630; Cogn. in DC. Monogr. v. 7, p. 356.

Pteroma villosum DC. Prodr. v. 3, p. 152.

Dissotis villosa Triana in Trans. Linn. Soc. v. 28 [1873] p. 57.

Osbeckia Saigonensis O. Kunze Rev. Gen. v. 1, p. 247.

Koh Chang.

Area: Also known from Siam and Cochinchina.

Pternandra Jack.

5. **P. coerulescens** Jack in Malay Miscell. v. 2, n. 7 [1822], p. 61; Triana in Trans. Linn. Soc. ser. 1, v. 28 [1873], p. 153; Kurz For. Fl. Burma v. 1, p. 509, in Journ. Asiat. Soc. v. 46 [1877], pars 2, p. 79; Hook. f. Fl. Brit. Ind. v. 2, p. 551; Cogn. in DC. Monogr. v. 7, p. 1103.

Ewyckia cyanea Blume Rumphia v. 1 [1835], p. 24, t. 8, Mus. Bot. v. 1, p. 6, fig. 1; Miq. Fl. Ind. Bat. v. 1, pars 1, p. 568.

E. Jackiana Walp. Rep. v. 5, p. 724.

Jungle near Kloug Munsé.

Area: Malay Peninsula. Malaya to the Philippines.

Memecylon Linn.

6. **M. floribundum** Blume Mus. Bot. v. 1 [1849], p. 361; Triana in Trans. Linn. Soc. v. 28 [1873], p. 158; Cogn. in DC. Monogr. v. 7, p. 1162.

M. tinctorium Blume Bijdr., p. 1094.

M. laurifolium Naud. in Ann. Sc. Nat. ser. 3, v. 18 [1852], p. 277; Miq. Fl. Ind. Bat. v. 1, pars 1, p. 576.

Klong Prao, on rocks in the jungle (n. 706 d).

Area: Endemic in Java (so far as known to Cogniaux).

Scrophulariaceae

by **C. B. Clarke** — Kew.

Adenosma R. Brown.

1. **A. coeruleum** R. Br. Prodr. [1810], p. 443; Hook. f. Fl. Brit. Ind. v. 4, p. 263 cum syn.

Pterostigma villosum Benth. Scroph. Ind., p. 21; Miq. Fl. Ind. Bat. v. 2, p. 678.

P. strictum Griff. Notul. v. 4, p. 96, Ic. Pl. Asiat., t. 417, fig. 3.

Stemodia coerulea Benth. in DC. Prodr. v. 10, p. 381.

Herpestis lanuginosa Blume Bijl., p. 747.

Klong Sarlakpet, rice field (n. 727d).

Area: Extends from India throughout Malaya to Australia.

2. **A. capitatum** Hance in Journ. Linn. Soc. v. 13 [1873], p. 114; Benth. in Benth. et Hook. f. Gen. Pl. v. 2 [1876], p. 949; Hook. f. Fl. Brit. Ind. v. 4, p. 264; Hemsl. in Journ. Linn. Soc. v. 26 [1890] p. 184.

Stemodia capitata Benth. in Bot. Reg. t. 1470 in nota.

Pterostigma capitatum Benth. Scroph. Ind. p. 21, in DC. Prodr. v. 10, p. 380, Fl. Hongk. p. 248.

Erinus bilabiatus Roxb. Fl. Ind. v. 3, p. 92.

Koh Chang, plains near Lem Dan (n. 158).

Area. Common in India and the Malay Peninsula; also in Banka, Borneo, Tonkin.

Scoparia Linn.

3. **S. dulcis** Linn. Sp. Pl. ed. 1, p. 116, ed. 2, p. 168; Gaertn. Fruct. v. 1, p. 251, t. 53, fig. [10]; Beauv. Fl. d'Owar. v. 2, p. 86, t. 115; Benth. in DC. Prodr. v. 10, p. 431; Miq. Fl. Ind. Bat. v. 2, p. 699; Hook. f. Fl. Brit. Ind. v. 4, p. 289.

In dry open ground near Lem Dan (nn. 17, 157).

Area: A weed, in the tropics of both Hemispheres.

Limnophila R. Br.

4. **L. diffusa** Benth. in DC. Prodr. v. 10 [1846], p. 387; Hook. f. Fl. Brit. Ind. v. 4, p. 266; non G. Don.

In wet ground near Lem Dan (n. 146).

Area: A rice-field weed, in Eastern and Southern India, in the Malay Peninsula and Sumatra.

Vandellia Linn.

5. **V. crustacea** Benth. Scroph. Ind. [1835], p. 35, in DC. Prodr. v. 10, p. 413; Wight Ic. Pl. Ind. t. 863; Miq. Fl. Ind. Bat. v. 2, p. 690; Hook. f. Fl. Brit. Ind. v. 4, p. 279 cum syn.; Hemsl. in Journ. Linn. Soc. v. 26 [1890], p. 189.

Capraria crustacea, Linn. Mant., p. 87.

Jungle near Klong Majum, on rocks.

Area: A weed, in the Tropics of the Old World.

Bonnaya.

6. **B. veronicifolia** Spreng. Syst. v. 1 [1825], p. 41; Benth. in DC. Prodr. v. 10, p. 421; Wight Ic. Pl. Ind., t. 1411; Miq. Fl. Ind. Bat. v. 2, p. 696; Hook. f. Fl. Brit. Ind. p. 4, p. 285; Hemsl. in Journ. Linn. Soc. v. 26 [1890], p. 192.

Gratiola veronicifolia Retz Obs., fasc. 4, p. 8; Roxb. Corom. Pl. v. 2, p. 130, t. 154; Blume Bijl., p. 745.

Plains near Lem Dan (n. 182).

Area: A small weed in South East Asia.

7. **B. verbenifolia** Spreng. Syst. v. 1 [1825], p. 42; Benth. in DC. Prodr. v. 10, p. 421; Wight Ic. Pl. Ind., t. 1412; Miq. Fl. Ind. Bat. v. 2, p. 697.

B. veronicifolia var. Hook. f. Fl. Brit. Ind. v. 4, p. 285; Hemsl. in Journ. Linn. Soc. v. 26 [1890], p. 192.

Gratiola racemosa Roxb. Fl. Ind. [ed. Carey et Wallich], v. 1, p. 139.

Rice-field at Lam Dan (n. 251).

Area: A small weed in South East Asia.

Acanthaceae

by **C. B. Clarke** — Kew.

Ebermaiera Nees.

1. **E. subcapitata** C. B. Clarke n. sp.

Foliis 25 mm. longis, 11 mm. latis, utrinque angustatis, subtus pallidioribus secus venas minute pubescentibus, petiolis 4 mm. longis; spicis terminalibus, subcapitatis 15—20 mm. in diam.; bracteis calycibusque ciliato-pilosis; bractea 9 mm. longa, lanceolata; calyce 5 mm. longo, segmentis 4 linearibus 1 paullo latiore; corolla 8 mm. longa; antheris, polline, stylo, capsula, seminibus omnino generis.

On river banks in the jungle near Klong Munsé. Flower light mauve (nn. 122, 271).

Area: Also in Borneo (Haviland nn. 3514, 3587).

Hygrophila Nees.

2. **H. quadrivalvis** Nees. in Wall. Pl. As. Rar. v. 3 [1832], p. 80, in DC. Prodr. v. 11, p. 89; C. B. Clarke in Hook. f. Fl. Brit. Ind. v. 3, p. 408; Miq. Fl. Nederl. Ind. v. 2, p. 778.

H. obovata, Wight Ic. Pl. Ind. Or., t. 1489.

H. salicifolia, T. Anders. in Journ. Linn. Soc. v. 9, p. 456.

Ruellia quadrivalvis, Wallich List n. 2374 (plagula 1).

— Rheede Hort. Malabar v. 2, t. 46.

Rice-field near Lem Dan (nn. 178, 241, 315).

Area: Throughout British India; Malaya; Tonquin. This species may be esteemed a Var. only of *H. salicifolia*, Nees; in which case its area will extend to Australia and Tropical America.

Strobilanthes Blume.

3. **S. rufescens** T. Anders. in Journ. Linn. Soc. v. 9 [1867], p. 472; C. B. Clarke in Hook. f. Fl. Brit. Ind. v. 3, p. 430 cum syn.; Lindau in Engler und Prantl Pflanzenfam. v. 4, Abtheil. 3b, p. 305 (sect. Buteraea).

Ruellia rufescens, Roth Nov. Sp. Pl., p. 304.

Buteraea ulmifolia Nees in Wall. Pl. As. Rar. v. 3, p. 84 et in DC. Prodr. v. 11, p. 196.

Typischer Rippenpollen i. e. *Strobilanthes*, Lindau.

Klong Son, in the jungle (n. 637a).

Area: Also in Burma and Malaya.

4. ***S. parvibracteatus*** C. B. Clarke n. sp.

Ramis apice rufo-hirsutis; foliis ovatis, vix acutis, parvis (usque ad 35 mm. longis); spicis usque ad 3 cm. longis, 8 mm. latis (quam *S. rufescentis* gracilioribus); calyce 9 mm. longo, usque ad basin 2-partito; bractea 4—5 mm. longa ovata, rotundata; ceteroquin ut *S. rufescens*.

Frutex rigidus, ramosus. Folia, quam *S. rufescentis*, crassiora hirsutiora. Spicae approximatae. Calyx ei *S. rufescentis* simillimus. Corolla quam *S. rufescentis* minor — capsula cum seminibus omnino ut *S. rufescentis*. — An *S. rufescentis* forma?, a qua inprimis differt bracteis quam calyces multo brevioribus.

Klong Majum (alt. 700 ft.), on rocks in the jungle (n. 609); flowers light blue with white veins.

Acanthus Linn.

5. ***A. ilicifolius*** Linn. Sp. Pl. ed. 1, p. 639; ed. 2, p. 892 partim; Blume Bijdr., p. 806; Benth. Fl. Austral. v. 4, p. 458; Kurz For. Fl. Burm. v. 2, p. 241; C. B. Clarke in Hook. f. Fl. Brit. Ind. v. 3, p. 481, in Dyer Fl. Trop. Afr. v. 5, p. 108; Lindau in Engl. und Prantl Pflanzenf. v. 4, Abtheil. 3 B, p. 319.

A. Doloarius Blanco Fl. Filip., p. 487.

Dilivaria ilicifolia Nees in Wall. Pl. As. Rar. v. 3, p. 98, in DC. Prodr. v. 11, p. 268.

Delivaria ilicifolia Miq. Fl. Ind. Nederl. v. 2, p. 820.

— Rheede Hort. Malab. v. 2, p. 93, t. 48.

Lem Ngob, in mangrove-swamp (n. 48).

Area: Common on sea coasts from Africa to Australia and Oceania.

Var. ***integrifolia*** T. Anderson in Thwaites Enum. Pl. Zeyl., p. 232.

Foliis fere vel omnino integris.

Lem Ngob, mangrove-swamp (n. 821).

Area: This Var. occurs with the type in India, Malaya, Oceania.

Eranthemum Linn. partim.

6. ***E. Zollingerianum*** Nees in DC. Prodr. v. 11 [1847], p. 455 (syn. *E. dianthero*, Blume excl.).

E. crenulatum Nees in Wall. Pl. As. Rar. v. 3, p. 107, in DC. Prodr. v. 11, p. 453 pro magna parte; non Lindley.

E. Malaccense C. B. Clarke in Hook. f. Fl. Brit. Ind. v. 3, p. 498.

Koh Chang, common in the jungle, especially on rocks (nn. 121, 392, 449).

Area: Extends from Malacca to the Philippines; Java, Zollinger n. 44; Koh Kong, Murton (n. 25).

7. **E. album** Nees in DC. Prodr. v. 11 [1847], p. 455; Miq. Fl. Ind. Nederl. v. 2, p. 837; C. B. Clarke in Hook. f. Fl. Brit. Ind. v. 3, p. 498.

Jungle near Lem Dan (n. 83).

Area: Known from Pegu, Andaman Isles, Nicobar Isles, Chittagong and Penang.

8. **E. Pumilio** C. B. Clarke n. sp.

Culmis ligneis, 2 dm. longis; foliis parvis (4 cm. longis 12—15 mm. latis), utrinque angustatis, nervis minute pilosis; spicis (vix racemis) 7 cm. longis, 4—7-floris, minute glanduloso-pubescentibus; bracteolis minutis; calyce 5 mm. longo; corollae tubo 26 mm. longo, lobis 11 mm. longis; capsula 17 mm. longa pilosa, in dimidia parte superiore 4-sperma.

Corolla and capsule as in other species of the genus. Stems very stout and rugged in proportion to their length. Leaves unusually small for the genus.

Jungle near Klong Munsé, on rocks (nn. 59, 98); flowers pale rose.

Justicia Linn.

9. **J. Gendarussa** Linn. f. Suppl. 1781, p. 85; Blume Bijd. p. 785; Blanco Fl. Filip., p. 14; Kurz For. Fl. Burm. v. 2, p. 247; C. B. Clarke in Hook. f. Fl. Brit. Ind. v. 4, p. 532, in Dyer Fl. Trop. Afr. v. 5, p. 203; Hemsl. in Journ. Linn. Soc. v. 26, p. 244.

Gendarussa vulgaris Nees in Wall. Pl. As. Rar. v. 3, p. 104, in DC. Prodr. v. 11, p. 410; Wight Ic. Pl. Ind. Or. t. 468; Miq. Fl. Nederl. Ind. v. 2, p. 831.

— Rheede Hort. Malab. v. 9, t. 42.

Common in wet places all round Koh Chang (n. 239, 637, 726a, 820).

Area: Also in Africa, India, China, Malaya; often cultivated. In Johs. Schmidt n. 637 the leaves are very broadly lanceolate, as in some examples from the Malay Peninsula.

Adhatoda Nees.

10. **A. Vasica** Nees in Wall. Pl. As. Rar. v. 3 [1832], p. 103, in DC. Prodr. v. 11, p. 387; Miq. Fl. Nederl. Ind. v. 2, p. 829; C. B. Clarke in Hook. f. Fl. Brit. Ind. v. 4, p. 540.

Justicia Adhatoda Linn. Sp. Pl. ed. 1, p. 15 ed. 2, p. 20; Blume Bijd. p. 785; Hemsl. in Journ. Linn. Soc. v. 26, p. 244.

— Rheede Hort. Malab. v. 9, t. 43.

Plains near Lem Dan (n. 414).

Area: Common in India, Malaya; also in Siam, China.

Rungia Nees.

11. **R. parviflora** Nees in Wall. Pl. As. Rar. v. 3 [1832], p. 110, in DC. Prodr. v. 11, p. 469 syn. excl.; C. B. Clarke in Hook. f. Fl. Brit. Ind. v. 4, p. 550 cum syn.

The Koh Chang examples are very small, shrubby; as though growing on rocky ground; the leaves are very small, 10—14 mm. long at most, elliptic or ovate: the spikes and bracts are small, the calyx very villous.

Klong Prao, on rocks in the jungle (n. 706 b).

Area: Common throughout India, Malaya.

Hypoestes R. Br.

12. **H. ? Schmidtii** C. B. Clarke n. sp.

Parva, ramulosa, parce pilosa, foliis ovato-ellipticis 20 mm. longis, 12 mm. latis (foliis lanceolatis 40 mm. longis 9 mm. latis in eodem ramulo interdum additis), petiolo 2—4 mm. longo piloso; spicis parvulis in cymulis depauperatis paucis (saepe 1—3—5) sparsis; bracteis 2 linearibus, admodum inaequalibus (altera 8—10 mm. longa, altera vix 5 mm. longa) 2—3-flores includentibus; sepalis 5 mm. longis, linearibus, pilosis; bracteolis quam sepala vix majoribus; capsula 1 cm. longa, patentim pilosa, in parte superiore 4-sperma (omnino generis); seminibus nigris, a punctis elevatis minutis ornatis.

Flores desunt; genus parum incertum.

Jungle near Klong Majum in chinks of rocks. Flowers light rose (nn. 615 a, 900 a).

Urticaceae

by **O. Warburg** — Berlin.

Ficus L.

Sect. *Urostigma*.

1. **F. pilosa** Reinw. in Blume Bijdr. 446. var. **chrysocoma** King f.
(= *F. chrysocoma* Bl. Bijdr. 443).

Koh Kahdat, sandy sea-shore (n. 579 b).

Area: Tenasserim, Penang (?), Java, Borneo, North Australia.

2. **F. bracteata** Wall. Cat. 4498.

Jungle near Klong Munsé (n. 142, 594 a).

Area: Penang, Perak, Singapore, Java.

3. **F. altissima** Bl. Bijdr. 444 (*F. laccifera* Roxb.).

Koh Lom, on rocks near the sea (n. 846).

Area: Ceylon, Deccan, trop. Himalaya, Assam, Burma, Malayan Peninsula, Andaman Islands, Malayan Archipelago.

4. **F. consociata** Bl. Bijdr. 447. var. **Murtoni** King.

Lem Dan, Klong Majum, Koh Chang Noi, on sandy or rocky ground near the sea (n. 140, 537, 697 a).

Area: Malayan Peninsula, Sumatra, Java; the variety *Murtoni* only in the Malayan Peninsula.

5. **F. glabella** Bl. Bijdr. 452.

Klong Majum, on rocks in the jungle (n. 2001).

Area: East Himalaya, Khasia, Chittagong, Burma, Malayan Peninsula, Malayan Archipelago, South China.

6. **F. retusa** L. Mant. 129.

Koh Kahdat, sandy sea-shore (n. 573), Klong Sarlakpet.

Area: Himalaya, Khasia, Assam, Burma, Malayan Peninsula, Malayan Archipelago, South China, North Australia, New-Caledonia.

7. **F. vasculosa** Wall. Cat. 4482.

Open country near Klong Prao (n. 717 b).

Area: Burma, Malayan Peninsula, Bangka, Java, South China.

Sect. *Synoecia*.8. **F. punctata** Thunb. Fic. 9 var. **falcata** (Miq.) King.

Jungle near Klong Munsé, a climber on trees (n. 526 c).

Area: Malayan Peninsula, Malayan Archipelago.

Sect. *Covellia*.9. **F. hispida** L. f. Suppl. 442.

Open contry at Lem Dan (n. 219).

Area: Ceylon, India, Burma, Malayan Peninsula, Andaman Islands, Malayan Archipelago, South China, Australia.

10. **F. fistulosa** Reinw. in Bl. Bijdr. 470.

Open country near Lem Dan, riverbank in the jungle at Klong Son, a cauliflorous tree (n. 252, 395, 427, 691, 796).

Area: Khasia, Burma, Malayan Peninsula, Malayan Archipelago.

Sect. *Eusyce*.11. **F. villosa** Bl. Bijdr. 441.

Common in the jungle near Klong Munsé, a climber on trees (n. 124, 404).

Area: Malayan Peninsula, Malayan Archipelago.

12. **F. fulva** Reinw. in Bl. Bijdr. 578.

Jungle near Lem Dan, on a riverbank (n. 623).

Area: Burma, Malayan Peninsula, Andaman Islands, Malayan Archipelago.

13. **F. pyriformis** Hook. et Arn. Bot. Beech. Voy. 216. Var. **ich-nopoda** (Miq.) King.

Klong Majum, on rocks in the jungle (n. 93, 617 a).

Area: Assam, Khasia, Burma, Malayan Peninsula, South-China.

14. **F. chartacea** Wall. Cat. 4580 var. **torulosa** (Wall.) King.

Open country near Klong Prao (n. 717 c).

Area: Burma, Malayan Peninsula.

Sect. *Neomorphe*.15. **F. variegata** Bl. Bijdr. 459.

Riverbank in the jungle near Klong Son (n. 693).

Area: Assam, Chittagong, Malayan Peninsula, Malayan Archipelago, South China.

Artocarpus Forst.16. **A. integrifolia** L. f. suppl. 412.

Cultivated every where throughout the area explored.

Area: Deccan Peninsula, cultivated in whole South Asia.

Conocephalus Bl.17. **C. suaveolens** Bl. Bijdr. 483.

Klong Son, on riverbank in the jungle, a tall liane.

Area: East Himmalaya, Khasia, Tenasserim, Malayan Peninsula, Malayan Archipelago, Cambodja.

Trema Lour.18. **T. timorensis** Bl. Mus. Bot. II, 60.

Dry open country near Lem Dan (n. 303).

Area: Tenasserim, Malayan Peninsula, Malayan Islands, South China, North Australia.

19. **T. orientalis** Bl. Mus. Bot. II, 62 (incl. *T. amboinensis* Bl.).

Open country near Lem Dan (n. 243, 301, 477).

Area: Ceylon, India, Assam, Burma, Malayan Peninsula, Andaman Islands, Malayan Archipelago.

Fungi

by **E. Rostrup** — Copenhagen (*Agaricineae* by **Geo. Massee** — Kew).

Myxomycetes.

Lycogala Mich.

1. **L. Epidendron** (L.) Buxb.

On trunks of dead trees.

Area: Common almost everywhere.

Stemonitis Gled.

2. **S. fusca** Roth.

Area: Common everywhere.

Uredinaceae.

Uredo Pers.

3. **U. Fuirenae** Rostr. n. sp.

Soris hypophyllis, fuscidulis, lanceolatis, usque 1 mm. longis; uredosporis variis, subsphaeroideis, obovatis v. oblongo-polyedricis, subtiliter aculeatis, longit. 20—30 μ , crassit. 14—20 μ .

In foliis Fuirenae glomeratae.

Tremellaceae.

Hirneola Fr.

4. **H. pellucida** (Jungh.) Fr.

Area: Java.

5. **H. auricularis** Fr.

On trunks.

Area: Brazil.

Calocera Fr.

6. **C. palmata** (Schum.) Fr.

On trunks.

Area: Europe, America.

Thelephoraceae.

Stereum Pers.

7. **S. hirsutum** Willd.

On trunks.

Area: Everywhere.

8. **S. ferrugineum** (Bull.) Fr.

On trunks.

Area: Europe, the West-Indies, Brazil, Ceylon.

9. **S. ochroleucum** Fr.

On trunks of felled trees.

Area: Europe, Florida, Cuba, Venezuela, Tasmania, Borneo.

10. **S. versicolor** (Swartz) Fr.

On trunks.

Area: Mexico, the West-Indies, Africa, Australia.

11. **S. Ostrea** Nees.

On trunks.

Area: Malacca, Java, Australia.

Hymenochaete Lév.

12. **H. rheicolor** (Mont.) Lév.

On dead branches.

Area: India.

Clavariaceae.

Clavaria Vaill.

13. **C. contorta** Holmskj.

On trunks.

Area: Europe, America.

Physalacria.

14. **Ph. changensis** Rostr. n. sp.

Flavo-brunnea, caespitosa, capitulo globoso, vesiculososo-inflato, membranaceo, glabro, 3—4 mm. diametro, basi circulari perforato; stipite gracili, circiter 1 ctm. longo; sporis ellipsoideis, minutis; cystidiis clavatis, 32 μ l., 12 μ cr.

On trunks.

Hydnaceae.

Hydnum L.

15. *H. conchatum* Fr.

On trunks.

Area: Oahu (Polynesia).

Polyporaceae¹).

Boletus Dillon.

16. *B. lacunosus* Rostr. n. sp.

Pileo e pulvinateo expanso, glabro, laevi, alutaceo; tubulis liberis, mediis, dilute fuscis; stipite gracili, elongato, cylindrico v. sursum attenuato, profunde alato-lacunoso, annulato; sporis ferrugineis, fusiformibus, 13–15 μ l., 6–7 μ cr. — Pileus 4–5 ctm.; stipes 10–12 ctm. long.

In a hollow tree.

17. *B. costatus* Rostr. n. sp.

Pileo dilute fusco, hemisphaerico — pulvinateo, laevi, glabro, 2 ctm. lato; stipite ventricosus, utrinque attenuato, sursum profunde costato-lacunoso, inferne obsolete reticulato, 4–5 ctm. l., usque 2 ctm. crasso, basi curvato; tubulis curtis, liberis; poris minutis; sporis oblongis, ferrugineis, subtiliter striatis, 18–20 μ l., 6–8 μ cr.

Suillus Micheli.

18. *S. changensis* Rostr. n. sp.

Pileo convexo—plano, rubro, laevi, glabro, 2–3 ctm. lato; stipite gracili, cylindrico, saepe compresso, basi incurvo, crassiore; tubulis adnatis; poris mediis, sulphureis; sporis hyalinis, oblongis, 9 μ l., 4 μ cr. Carne secta cyanescente.

19. *S. velatus* Rostr. n. sp.

Pileo convexo-plano, rufo-fusco, rimoso-granuloso, 4 ctm. lato, margine velo crasso, stellatim fissus ornatus; tubulis liberis; poris amplis, angulatis; sporis hyalinis, ellipsoideis, apiculatis, saepe obliquis; stipite cylindrico, gracili, laevi, 5–6 ctm. l., 0,5–1 ctm. cr.

20. *S. hygrophanus* Rostr. n. sp.

Pileo albo, hygrophano, convexo-plano, initio piloso-squamoso, dein glabro, 2–3 ctm. lato; stipite gracili, flexuoso, sursum fibroso-squamoso, 5–6 ctm. l., 2–3 ctm. cr., cartilagineo, albo, nitido; tubulis liberis; poris mediis, inaequalibus, sinuosis; sporis hyalinis, ellipsoideis, 9–10 μ l., 5 μ cr.

¹) As to the genus *Favolus* see the following paper by Masee (p. 367).

Polyporus Micheli.

21. **P. hypopolius** Kalchbr.
On trunks.
Area: Australia.
22. **P. fumosus** (Pers.) Fr.
Area: Everywhere.
23. **P. adustus** (Willd.) Fr.
Area: Everywhere.
24. **P. (Fomes) rugosus** Nees.
Area: Malacca, Ceylon, Guyana.
25. **P. (Fomes) amboinensis** (Lam.) Fr.
Area: Amboina, Java, Singapore.
26. **P. (Fomes) lucidus** (Leys.) Fr.
Area: Everywhere except in the arctic regions.
27. **P. (Fomes) fastuosus** Lév.
Area: Malacca.
28. **P. (Fomes) aruensis** Berk.
Area: Insula oceanica Aru.
29. **P. (Fomes) conchatus** (Pers.) Fr.
Area: Europe, America.
30. **P. (Fomes) australis** Fr.
Area: Widely spread in all tropical regions.
31. **P. (Fomes) applanatus** (Pers.) Wallr.
Area: Everywhere.
32. **P. (Fomes) endophaeus** Berk.
Area: India (Khasia).
33. **P. (Fomes) igniarius** (L.) Fr.
Area: Everywhere.
34. **P. (Fomes) scleromyces** B. et C.
Area: Cuba.
35. **P. (Fomes) sanguinarius** Kl.
Area: Borneo, Mauritius.
36. **P. (Polystictus) xanthopus** Fr.
Area: Common in tropical regions.

37. **P. (Polystictus) atripes** Rostr. n. sp.

Pileo coriaceo-papyraceo, flavo, glabro, radiatim striato, margine tenui, flexuoso-lobato, ciliato; poris minutissimis, decurrentibus; stipite centrali, longo, aterrimo, glabro. — Pileus 4—5 ctm. latus; stipes 4—5 ctm. longus, 4 mm. crassus.

38. **P. (Polystictus) pusillus** Rostr. n. sp.

Pileo papyraceo, umbilicato, obsolete zonato, laevi, glabro, ochraceo, margine crenato; poris mediis, subhexagonis, albidis; stipite centrali, atrofusco, scabro. — Pileus 0,8 ctm. latus; stipes 1,5 ctm. longus, 1 mm. crassus.

In ligno.

39. **P. (Polystictus) luteus** Blume et Nees.

Area: In all tropical regions.

40. **P. (Polystictus) lenziteus** Lév.

Area: Sumatra.

41. **P. (Polystictus) discipes** Berk.

Area: Ceylon.

42. **P. (Polystictus) sanguineus** (L.) Mey.

Area: Common in all tropical regions.

43. **P. (Polystictus) olivascens** Rostr. n. sp.

Pileo suberoso-coriaceo, horizontali, reniformi, fusco-olivaceo, zonato, adpresse sericeo; stipite brevissimo, disciformi; contextu ferrugineo; poris minutis, ferrugineis. — Pileus 1—2 ctm. latus.

Ad truncos.

44. **P. (Polystictus) minutissimus** Rostr. n. sp.

Pileis gregariis, coriaceo-membranaceis, reniformibus, albidis, obscure zonatis, striatis, ca. 2 mm. latis; stipite albo, exacte laterali, curto (0,5—1 mm.); poris rotundis, albis.

Ad ramos corticatis.

45. **P. (Polystictus) albo-luteus** Rostr. n. sp.

Pileo tenui, papyracei, reniformi, 1—2 ctm. lat., albo, nitido, concentricè striato; margine in stipitem brevem, lateralem; basi scutato-dilatatum attenuato; contextu albo; poris minutissimis, luteis.

In ramis.

46. **P. (Polystictus) tigrinus** Rostr. n. sp.

Pileo reniformi-orbiculari, ochraceo, distincte fusco-zonato, radiatim sericeo-striato; stipite laterali, aequali, verrucoso; poris me-

diis, decurrentibus, ochraceis. — Pileus ca. 3 ctm. latus, stipes 1 ctm. longus, 4 mm. crassus.

In ligno.

47. **P. (Polystictus) leuotis** Kalchbr.

Area: Australia.

48. **P. (Polystictus) funalis** Fr.

Area: India, Guinea, Brazil.

49. **P. (Polystictus) purpureo-albus** Rostr. n. sp.

Pileis imbricatis, dimidiatis, postice effusis, coriaceis, tenuibus, rugosis, glabris, fusco-purpureis, margine late albo; hymenio pallido; poris mediis, angulatis; dissepimentibus tenuibus.

Ad truncos.

50. **P. (Polystictus) changensis** Rostr. n. sp.

Pileo tenui, plano, coriaceo, reniformi, glabro, dense concentric striato-sulcato, vernicoso-polito, dilute brunneo, postice atropurpureo, contextu pallido; hymenio cinerascete; poris mediis, exacte uniformibus. — Pileus 4—5 ctm. longus.

In ramis exsiccatis et ad truncos.

51. **P. (Polystictus) crenatoporus** Rostr. n. sp.

Pileo coriaceo, molli, tenui, sessile, albo-villoso, 1—3 ctm. longo, 0,5 ctm. lato, contextu citrino; poris mediis, irregularibus, citrinis; dissepimentibus crenatis.

Ad truncos.

52. **P. (Polystictus) hirsutus** Fr.

Area: Everywhere.

53. **P. (Polystictus) pinsitus** Fr.

Area: Widely spread in tropical regions.

54. **P. (Polystictus) chartaceus** B. et C.

Area: America.

55. **P. (Polystictus) spadiceus** Jungh.

Area: Java.

56. **P. (Polystictus) Schmidtii** Rostr. n. sp.

Pileis coriaceo-rigidis, tenuibus, imbricatis, conchatis, densissime concentric striatis, tomentulosis, cinnamomeis, 1—2 ctm. latis; poris minutissimis, ferrugineis, contextu concolori.

Habitus fere Hymenochaetes rubiginosae.

57. *P. (Poria) carnosus* Rostr. n. sp.

Pileo carnoso, molli, tenaci, resupinato, marginato, contextu ferrugineo, margine obtuso, pallido; poris curtis, mediis, angulatis, inaequalibus, ferrugineis. — Pileus 3—4 ctm.

Ad truncos.

Lenzites Fr.57 (bis). *L. eximia* Berk.

Ad truncos.

Laschia Fr.58. *L. chaugensis* Rostr. n. sp.

Orbicularis, glabra, carnoso-gelatinosa, supra brunnea, glabra, subtus carnea, sessilis, puncto dorsi excentrico affixa, hymenio reticulato-poroso.

Pileus 1—1,5 ctm. latus.

Marasmiaceae¹⁾.**Schizophyllum** Fr.59. *S. commune* Fr.

Area: In omnibus regionibus orbis.

Xerotus Fr.60. *X. changensis* Rostr. n. sp.

Pileo coriaceo, rigido, tenui, sessili, dimidiato, opaco, atro, pulverulento, radiatim sulcato, 2—3 ctm. lato, margine initio integro, dein lobato, subtus rufo, plicis radiantibus, distantibus, integris.

Ad truncos.

Perisporiaceae.**Asterina** Lév.61. *A. Pandani* Rostr. n. sp.

Maculis epiphyllis, atris, rugosis, usque 1 ctm. latis, margine fibrilloso; peritheciis membranaceis, lenticularibus; ascis ovatis, 46 μ l., 33 μ cr.; sporis ellipsoideis, 15 μ l., 13 μ cr.

In foliis Pandani.

Micropeltis Mont.62. *M. Schmidtiana* Rostr. n. sp.

¹⁾ As to the other *Agaricineae* see the following paper by Massee (p. 363).

Peritheciis dimiatio-scutatis, orbicularibus, convexulis, tabacinis, epiphyllis, ambitu plano, membranaceo; ascis fasciculatis, fusiformibus, 50—52 μ l., 10—12 μ cr., paraphysibus filiformibus obval-latis, octosporis; sporidiis anguste fusoides, hyalinis, 5—7-septatis, 20—25 μ l., 5 μ cr.

In foliis Apostasiae Lobbi.

Vizella Sacc.

63. **V. conferta** (Cooke) Sacc.

In foliis Denbrobii.

Area: Dinagepore Indiae.

Sphaeriaceae.

Hypoxyylon Bull.

64. **H. rubiginosum** (Pers.) Fr.

On trunks.

Area: Everywhere.

Dothideaceae.

Phyllachora Nitschke.

65. **Ph. repens** (Corda) Sacc.

In foliis vivis.

Area: India, Natal, Cuba.

66. **Ph. Andropogonis** (Schw.) Karst. et Har.

In foliis Andropogonis Sorghi.

Area: America.

67. **Ph. incarcerationa** (Berk.) Sacc.

In foliis Anonacearum.

Area: Ceylon.

Dothidella Speg.

68. **D. Pterolobii** Rostr. n. sp.

Stromatibus hypophyllis, oblongis, pulvinatis, fusco-nigris, 0,5—1 mm. longis; ascis obsoletis; sporidiis hyalinis, oblongo-clavatis, 1—septatis, 11—12 μ l., 4—5 μ cr.

In foliis Pterolobii Schmidiani.

Excipulaceae.

Dinemasporium Lév.

69. **D. graminum** Lév.

In foliis Imperatae arundinaceae.

Area: Common in tropical regions.

Melanconiaceae.

Pestalozzia de Notaris.

70. *P. Andropogonis* Rostr. n. sp.

Maculis amphigenis, irregularibus, pallidis, nigro-purpureo-cinctis; acervulis gregariis, lenticularibus, fuscis; conidiis fusoides, 20—22 μ l., 7—8 μ cr., 4-septatis, loculis 3 intermediis fuscis, terminalibus hyalinis, apice rostellis 2—3 patentissimis, 16—18 μ longis.

In foliis Andropogonis Sorghi.

Dematieae.

Helminthosporium Link.

71. *H. Ficum* Rostr. n. sp.

Maculis amphigenis, cinereis, distincte limitatis, fusco-marginatis; hyphis caespitosis, longis, fuscis, nodulosis, septatis; conidiis cylindraceis, 3—septatis, rufo-fuscis, 18—20 μ l., 5—6 μ cr.

In foliis Fici retusae.

Agaricineae¹⁾

by **George Masee**, F. L. S.

Principal Assistant (Cryptogams), Herbarium, Royal Gardens — Kew.

The small collection of Agarics from Koh Chang, admirably preserved and accompanied by notes, thus rendering identification possible, has extended the geographical range of several species, in addition to furnishing several new forms, all belonging to existing genera. The most interesting novelty is *Favolus albidus* a species evidently allied to *Favolus sprucei* Berk., from Brazil.

Mycena.

72. *M. cuspidata* Masee n. sp.

Pileus e conico-campanulato subexpansus, umbone valde prominente praeditus; margine undulato, striatus, luteo-brunneus, centro atro-umbrino, 2—3 cm. latus; lamellae confertae fere liberae, ventricosae, pallidae; sporae 4—2,5 μ hyalinae; stipes fistulosus, aequalis, glaber, pallidus, 4—5 cm. longus.

¹⁾ As to *Schizophyllum* and *Xerotus* see the preceding paper by Rostrup (p. 361).

Allied to *M. galericulata* Fr., differing in the strongly umbonate or cuspidate pileus and the smaller spores.

Koh Chang Noi, on a dead tree.

73. **M. lactea** Karst., Hattsv. I, 103; syn. *Agaricus lacteus* Pers., syn. Fung. 394.

Koh Kahdat on a dead tree.

Area: Europe, United States.

Marasmius Fr.

74. **M. discopus** Masee (sp. nov.).

Pileus convexo-expansus demum disco depresso udo striatus, luridus, margine incurvus, 1—2 cm. latus; lamellae liberae, angustae, confertae, albiae; sporae hyalinae, 5×3 ; stipes tenax, fuscus, incurvus, basi disco applanato albicante adnatus, 3—4 cm. longus.

Characterized by the coarsely striate pileus and thin, flattened disc at the base of the stem. Allied to *M. stylobates* Berk. and Curt.

Jungle near Klong Son (alt. 1000 ft.) on the ground.

75. **M. epiphyllus** Fr. Epicr. 386.

Koh Kahdat, Klong Son, on moist ground in the jungle.

Area: Europe, Asiatic Siberia, United states.

76. **M. synodicus** Kunze in Fries' Epicr. 381.

Klong Son, on moist ground in the jungle.

Area: Surinam.

Pleurotus.

77. **P. mitis** Karst., Hattsv. II, 80, syn. *Agaricus mitis*, Syn. Fung. 481.

Koh Kahdat, Klong Son, Klong Majum, on dead trees.

Area: Europe.

78. **P. scabriusculus** Berk. Journ. Linn. Soc. XIII, 157 (1873).

Lem Dan, on a dead stem of *Areca*.

Area: Australia.

79. **P. Guilfoylei** Berk., Linn. Journ. XIII, 158.

Somewhat larger than the typical form, but agreeing in all essential points.

Open dry place near Lem Dan, on stump of a tree.

Area: New S. Wales, Queensland.

Lentinus Fr.

80. **L. praerigidus** Berk. in Hook. Journ. Bot. VI, 132, pl. VIII, f. 1 (1854).

Koh Chang.

Area: India, Province of Behar, Bengal.

81. *L. exilis* Klotzsch in Berk. Exot. Fungi, no. 5, 397.

A very abundant and widely distributed species in the Old World tropics.

Koh Chang, on the stump of a tree.

Area: Central Africa, Mauritius, India, Malaya, Ceylon, Australia, Cuba.

Panus.

82. *P. luteolus* Masee (sp. nov.).

Sessilis, imbricatus; pileus fere membranaceus, lentus, subreniformis, tomento flavo obductus, 3—5 cm. longus; lamellae angustissimae, confertissimae, pallidae, acie acutae; sporae hyalinae, $5 \times 3 \mu$.

Remarkable for the very thin flesh of the pileus, and the exceedingly narrow and closely crowded gills. Allied to *P. aureofulvus* Cooke, from Perak, Malacca.

Jungle near Klong Prao, on dead trees.

83. *P. spathulatus* Masee (sp. nov.).

Caespitosus; pileus tenuis, lentus, pallidus, suborbicularis seu reniformis, margine arete involuto, albidus, 3—5 cm. latus; lamellae confertissimae, angustissimae, acie integrae, albiae; sporae hyalinae, $4 \times 2,5$; stipes exacte lateralis, elongatus, cylindraceus, fibroso-lignosus, pileus concolor, 4—6 cm. longus.

Distinguished from all known species by the elongated stem, and very narrow, densely crowded gills.

Jungle near Klong Son, on the ground.

84. *P. troglodytes* Fries Nov. Symb. Myc. 227.

An interesting discovery, extending the range of a species previously known only from one locality.

Jungle near Klong Munsé, on dead trees.

Area: Ins. St. Thomas.

Claudopus Fr.

85. *C. sphaerosporus* Pat.

Jungle near Klong Son, on stumps of trees.

Flammula Fr.

86. *F. sulphurea* Masee (sp. nov.)

Caespitosus. Pileus convexo-expansus, glaber, margine pellucide striatus sicco levis, laete sulphureus, 1—2 cm. latus; lamellae

distantes, decurrentes, concolores; sporae fulvidae. $6 \times 4 \mu$; stipes e farcto cavus, glaber, sursum attenuatus, flavidus, basi fuscescens, 4—6 cm. altus.

A pretty and distinct species, characterised by the clear yellow colour of every part. Allied to *F. tilopoda* Kalchbr. and Mac-Owan, a South African species.

Jungle near Kloug Son, on the ground.

87. **F. sapinea** Karsten, Hattsv. II, 410.

Syn. *Agaricus (Flammula) sapineus* Fries, Syst. Myc. I, 239; Fries, Icon. tab. 118, f. 3.

A common and widely distributed species, occurring here under the typical form.

Jungle near Lem Dan, on a dead tree.

Area: Europe, India, N. S. Wales, Queensland, N. Zealand, Ceylon, United States, Cuba, Venezuela.

Psilocybe Fr.

88. **P. spadicea** Karst. Hattsv. I, 506.

Syn. *Agaricus (Psilocybe) spadiceus* Fr. Epicr. 225.

Jungle near Kloug Son, on the ground.

Area: Europe.

89. **P. agraria** Karst. Hattsv. II, 505.

Syn. *Agaricus (Psilocybe) agraria* Fr. Mon. II, 304; Fr. Icon., tab. 137, f. 1.

Jungle near Kloug Son, on the ground.

Area: Western Europe.

Panaeolus.

90. **P. albellus** Masee (sp. nov.).

Pileus carnosulus, e convexo-campanulato expansus lividus dein albellus, glaber, 2—3 cm. latus; lamellae confertae, postice attenuato-adnatae, fuliginosae; sporae ellipsoideae utrinque apiculatae, atrofuscae, $20 \times 10 \mu$; stipes e farcto cavus, sursum attenuatus, fibrilloso-pubescent, pallidus, 7—10 cm. altus.

Most nearly allied to *P. campanulatus* L., differing in the adnate gills and larger spores.

On Buffalo dung.

91. **P. campanulatus** Berk., Outl. Fung. 175.

Syn. *Agaricus campanulatus* Linn. Succ. 2, n. 1213.

Like many other coprophilous fungi, the present species has a wide distribution. Size very variable.

On Buffalo dung.

Area: Europe, S. Africa, Ceylon, United States.

Bolbitius Fr.

92. **B. umbonatus** Masee, Eur. Fung. Flora, I, 200.

Lem Dan, on the ground amongst fallen leaves.

Coprinus Pers.

93. **C. domesticus** Fr., Epier. 251; Icon. tab. 170, f. 3.

Syn. *Agaricus domesticus* Pers. Syn. Fung. Eur. 401.

Koh Kahdat on the ground in the jungle.

Area: Europe, United States.

Favolus¹⁾.

94. **F. albidus** Masee (sp. nov.).

Pileus membranaceus, lentus, albidus, glaber, convexo expansus, 1—2 cm. latus; alveoli e rotundato-subhexagoni, radiatim dispositi, albido-straminei aetate pallidi; stipes centralis, subaequalis, concolor, 1,5—2,5 cm. longus.

A very distinct and beautiful species, most nearly allied to *F. sprucei* Berk., from Brazil.

Jungle near Klong Son, on the ground.

¹⁾ As to the other *Polyporaceae* see the preceding paper by Rostrop (p. 357).
