

VII. THE NATURAL HISTORY OF KEDAH PEAK.

V. BOTANY.

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[A short account of the physiography of the mountain and a list of the Vertebrates obtained during the expedition has already been published in this journal (Vol. VI. pp. 219, 244). H.C.R.]

The Mountain of Kedah Peak, Gunong Jerai of the Malays, has been visited by several botanists, the first of whom appears to have been Thomas Lobb, who collected a few plants there which are now in the Kew Herbarium; later, Sir Hugh Low ascended it, accompanied by the well known orchid collector, Boxall. In 1893 I visited it myself and brought down a fairly extensive collection of the plants there. Some account of this trip was published in the Journal of the Royal Asiatic Society Straits branch, vol. 34, p. 23. Mohamed Aniff, of the Penang Gardens, has also been there,* and now we have an excellent collection made by Messrs. H. C. Robinson and C. B. Kloss in December, 1915. The specimens were gathered at a height of from 2,800 to 4,000 feet, and to these are added a few collected at Gurun at the foot of the Peak.

Among these are especially noticeable the additions of two new genera to the flora and both of these species new to science, viz. *Myrioneuron* (*Rubiaceae*) an Indo-Malayan genus, and *Eulalia*, a fine grass allied to Indian species. There are a number of other interesting species in the collection, noticeably the beautiful Jasmine *J. Kedahense*. A tall, white-flowered *Vaccinium* *V. eburneum*, another handsome new *Xyris*†, besides the *X. Ridleyi* formerly obtained by me here, and the very rare *Acriopsis Ridleyi*, of which the only specimen previously known was a single plant found in a pepper garden in Singapore.

The flora of Kedah Peak bears a considerable resemblance to that of Mt. Ophir, especially in the occurrence of lowland seashore plants at this altitude, isolated as they are from the ordinary habitats of these plants by the forests which lie between them and the sea. This is perhaps most marked in Mt. Ophir, but the occurrence here of such plants as *Archytea Vahlis*, *Adinandra dumosa*, *Euthemis leucocarpa*, *Vaccinium Malaccense*, *Aneilema giganteum*, *Isachne rigida*, typically plants of open and usually sandy country distinctly suggest an original flora of a sandy, littoral character of which these

* Gardens Bulletin, Straits Settlements, I. No. 10, p. 353 (July 1916). [A small list of Monocotyledons collected by Mohamid Hariffi shortly before our visit to the Hill.]

† The *Xyridaceae* have unfortunately been omitted from Mr. Ridley's Manuscript but will be published in a subsequent number of this Journal.

littoral plants are the relics. There can be little doubt that Mt. Ophir was at one time an island detached from the mainland as Penang is to this day, and it seems highly probable that Kedah Peak may have been similarly isolated. The absence of any real Siamese element in the flora of Kedah Peak in spite of its practically over-looking the southern Siamese rice fields and heaths with their distinctive Siamese flora, has been noted by me previously, and this collection confirms it, although it includes the handsome *Bauhinia bracteata*, Grah., a plant of Siam which was obtained in the low country round Gurun. The flora of Kedah Peak is typically Malayan, and it is the most Northern Malayan mountain in the peninsula, unless the Gunong Perak range, quite unknown botanically as yet, should also contain a Malayan flora.

MAGNOLIACEÆ.

1. TALAUMA LONGIFOLIA, *sp. nov.*

Talauma mutabilis, var. *longifolia*, Bl. Anon. p. 37.

A shrub 10 to 12 feet tall. Leaves thinly coriaceous, glabrous, lanceolate, long acuminate and shortly narrowed to the base, nerves 7 pairs, slender, reticulations conspicuous, 6 to 8 inches long, 1·7 to 2·5 inches wide, petiole ½ inch long. Peduncle 1·15 inch (in fruit) long, appressed, silky. Bud ellipsoid, beaked, appressed, silky. Petals glabrous, oblong, obtuse, cream or pale yellow, 7 inch long, 3 inch wide. Fruit glabrous, pustular 1·5 inch long, carpels about 6, beaked.

Kedah Peak at 3,900 feet alt. Flowers cream (no. 6040), small tree, flowers pale yellow, scented (no. 6110), also collected here by Mohamed Aniff, Moulmein (Lobb), Pungah (Curtis), Java. The narrower leaves and much smaller flower distinguish this from *T. mutabilis*, Bl.

1A. *Illicium Cambodianum*, Hance. At 3,900 feet (6002). Small tree, rosy cream flowers, at 3,000 feet (6089). Common in all mountain districts in the peninsula.

DILLENIACEÆ.

2. *Acrotrema costatum*, Jack. Flowers sulphur yellow, Gurun (6178), Kedah Peak (6067). Common in hill districts all over the peninsula.

ANONACEÆ.

3. *Goniiothalamus subevenius*, King. Gurun (6174). *Distrib.* Perak.

POLYGALACEÆ.

4. *Polygala venenosa*, Juss. At 3,800 feet. Common in the hill districts 6035.

5. *Salomonina cantoniensis* var. *gracilis*.

Stems slender, simple or little branched, slightly winged with small, nearly sessile ovate leaves above, longer petioled ones below. Fruit with short bristles along the edge.

This has the habit of *S. oblongifolia* but the leaves of *S. cantoniensis* reduced. This latter plant is usually a weed of cultivation and one would hardly expect to find it high upon Kedah Peak.

Flowers purplish at 3,000 feet. No. 6064.

TERNSTROEMIACEÆ.

6. *Adinandra dumosa*, Jack. A variety with very rounded leaves at 3,000 feet. No. 5987. Common in the plains, but it also grows on Mount Ophir at 3,000 feet.

6a. *Eurya acuminata* var *glabra*, Bl. A form with rather larger flowers than the low country form. Small tree 15 to 20 feet, flowers whitish. Gurun No. 6172.

7. *Archytaea Vahlia*, Choisy. On dry ridges, yellowish white. No. 6083. Common in the low country and also on Mt. Ophir.

8. *Ternstroemia japonica*, Thunb. Trans. Linn. Soc. ii. 335.

Small shrub, leaves rather thinly coriaceous, lanceolate, long acuminate, subacute base gradually narrowed, nerves 5-6 pairs, rather conspicuous beneath for a *Ternstroemia*, 2-3'25 inches long, '7 to 1 inch wide, petiole '2 inches long. Calyx lobes ovate obtuse. Fruit globose '3 inches long on a slender pedicel '5 inches long. Seed ellipsoid '25 inches long, red.

Kedah Peak. Small shrub, seeds brilliant scarlet. No. 6039.

This resembles plants from Khasiya, Siam and Java. The leaves are thinner and more acuminate than in other eastern species. The specimens are all in fruit.

GUTTIFERÆ.

9. *Calophyllum Prainianum*, King? Kedah Peak No. 6039.

Only leaf specimens with reniform galls, but apparently this species.

10. *Garcinia eugenifolia*, Wall. At 3,000 feet. *Distrib.* Malaya.

STERCULIACEÆ.

11. *Buettneria Jackiana*, Wall. Gurun No. 6169. Flowers whitish. *Distrib.* Penang.

12. *Leptonychia glabra*, Turcz. Gurun No. 6153. Shrub about 10 feet. Common all over the Peninsula.

GERANIACEÆ.

13. *Impatiens Griffithii*, Hook. fil.

Kedah Peak 6007. Flowers rich, rose pink. Also collected there by Lobb and myself. It occurs too on Mt. Ophir.

OCHNACEÆ.

14. *Enthemis leucocarpa*, Jack. Kedah Peak at 3,000 feet from Padang upwards, No. 5967. Small shrub, flowers white, anthers pale yellow. This is usually a sea shore plant, but occurs also at the top of Mt. Ophir far from the sea as here.

15. *Gomphia Hookeri*, Planch. Tree about 20 feet tall. Flowers deep rose red at 3,000 feet. No 5989.

Also usually a sea coast plant.

ILICINEÆ.

16. *Ilex patens*, Ridl. var. *tenuifolia*.

Differs from the type in Gunong Tahan in its thinner, more polished leaves and more distinctly winged petiole. Petals 5 or 6.

Shrub, flowers white at 3,000 feet. No. 6105.

CELASTRINEÆ.

17. *Euonymus javanicus*, Bl. Padang to Sch. Small shrub. Capsule salmon pink. No. 5975.

Common all over our hill district.

LEGUMINOSÆ.

18. *Bauhinia bracteata*, Graham. Branches tomentose, reddish. Leaves glabrous, broadly ovate, bifid coriaceous, subcordate, lobes 2.5 inches long, nerves 10 nervules curved parallel, 3.5 m. long and as wide, petiole 2 inches. Panicle large 9 inches long, 7 inches across, branches tomentose. Pedicels 1.5-2 inches long, pubescent, with 2 linear bracts .15 inches long midway. Buds ellipsoid narrowing to tip. Sepals 2, ovate oblong, persistent pubescent, .3 inches long. Petals 5, claw slender pubescent .6 inches long, blade cordate, rounded, greenish white, conspicuously dark veined, edge crisp, back silky hairy, face sparsely hairy, .4 inches long and wide. Stamens 3, fertile .5 inches long, filaments hairy, anthers short, oblong, sterile ones 6 glabrous .4 inches long, filaments subulate gradually narrowed from base, anthers small, ovate. Pistil hairy at base.

Gurun. Flowers greenish white, very handsome. No. 6180. New to the Flora, a native of Siam.

RHIZOPHOREÆ.

19. *Anisophyllea trapezoidalis*, Baill. *A. disticha*, Baill. Gurun No. 6168. Shrub 7 to 8 feet.

Common in most parts of the peninsula.

20. *Pellacalyx saccardianus*, Scort. Gurun No. 6163. Small tree, flowers greenish.

Common in the low country.

HAMAMELIDEÆ.

21. *Rhodoleia Teysmanni*, Miq. At 3,000 feet. No. 5985. Small tree to 20 feet. Sepals yellowish, anthers rose pink. On most of the mountain ranges of the peninsula.

MYRTACEÆ.

22. *Bæckea frutescens*, Linn. From 3,000 to 6,000 feet. No. 6071. Habit very variable. On all the high ranges.
23. *Leptospermum flavescens*, Sm. At 3,000 feet. No. 6082. Usually with the last.
24. *Tristania Merguinsis*, Griff. At 3,800 feet. No. 6034.
- 24A. *Eugenia claviflora*, Roxb. At 2,500 feet. No. 6019. Tall shrub. Flowers white.
25. *Eugenia subdecussata*, Duthie. At 3,000 feet. No. 6080. In fruit. Common in hill ranges.

MELASTOMACEÆ.

26. *Sonerila erecta*, Jack. At 3,000 feet No. 6063. *Distrib.* Penang—Perak.
27. *Sonerila linearis*, Hook. fil. Padang'to Seh upwards Nos. 5957. Flowers deep pink, anthers yellowish, leaves beneath purplish. First collected here by Lobb., but overlooked by King, as the locality, Gunong Jerai, was referred to Burmah by error. Endemic.
28. *Sonerila calophylla*, Ridl. Flowers pink. Stem and leaves very succulent. No. 6068. Endemic to Kedah Peak. First collected by me.
29. *Phyllagathis rotundifolia*, Bl. Gurun. No. 6166. Flowers crimson.
30. *Medinilla Maingayi*, Clark. Epiphytic on *Hydnophytum*. No. 6055. Common in low country south of the Peninsula. Also on Mt. Ophir.
31. *Pternandra paniculata*, Benth. At 1,500 feet. No. 6148. Flowers whitish.

SAMYDACEÆ.

CASEARIA FLEXUOSA, *sp. nov.*

32. Branches flexuous with pale bark. Leaves glabrous, thinly coriaceous, lanceolate, narrowed at both ends, acuminate, acute, nerves 4 pairs, reticulations fine, distinct 3-3.5 inches long, 1-1.25 inches wide, petiole .2. Capitula dense, flowers about 20, rachis finally developing short and thick. Bracts numerous, lanceolate, acute ciliate. Flowers glabrous 1 inch

long, pedicels. Sepals oblong glabrous. Petals (inner pair) obovate orbicular, slightly broader, edge ciliate, stamens nearly as long as the sepals, glabrous, filaments thick, anthers broad obtuse. Staminodes as long as the stamens, oblong linear, villous at the tips, glabrous below. Pistil elongated conic, stigma capitate. Fruit ellipsoid .75 inches long, apricot coloured.

Kedah Peak (Ridley 5218, 5364), (Robinson & Kloss 6025). Penang (Curtis 1019).

BEGONIACEÆ.

33. *Begonia sinuata*, Wall. Flowers white. (No. 6005). Occurs also in Penang.

34. *BEGONIA SIBTHORPIOIDES*, *sp. nov.*

Rhizome tuberous .2 inches long, oblong, covered with golden hairs, stems very slender, 2-4 inches long, red, glabrous. Leaves in distant pairs, orbicular, cordate, crenulate, glabrous, nerves from base 6, .5 inches long and as wide, red beneath, petiole .2-.8 inch long. Stipules hardly .1 inch long, triangular lanceolate, ciliate. Male flowers 2-3 subterminal on slender erect branches 1 to 3. Bracts sheathing, lanceolate, acuminate. Sepals 2, oblong obtuse, narrowed towards the base. Petals 2, as long and wide, but subacute. All white. Anthers in a small globose head on a filament-pedicel as long. Fruit .1 inch long with one large oblong rounded wing .2 inches long, the other ones hardly developed. At 3,800 feet. No. 6047.

Flowers rose pink. Leaves red beneath. A very curious little plant with leaves like those of *Sibthorpia europea* in form.

ARALIACEÆ.

35. *ARTHROPHYLLUM OVATUM*, *sp. nov.*

A woody shrub. Leaves opposite paired, ovate to elliptic, base cuneate, rather long and sharply acuminate, edge thickened, coriaceous, nerves 3 to 5 pairs, sunk above, elevate beneath, 3.5 inches long, 1.75 inches wide, petiole 1.25-2 inches long. Umbels 2.5 inches long of 15 rays each, jointed half way, where is a caducous pair of small leaves. Flowers in umbellules of about 20. Pedicels .2 inches long. Buds subglobose, pointed. Calyx lobes short, rounded. Petals greenish yellow, triangular, lanceolate, acuminate .1 inch across. Stamens shorter.

No. 5995. Woody shrub 10 feet high, flowers greenish yellow. Also on Gunong Semangkok in Selangor (Ridley 15617).

36. *ARTHROPHYLLUM NITIDUM*, *sp. nov.*

Small shrub. Leaves 12 inches long, pinnate, leaflets 9-15 coriaceous, oblong or elliptic lanceolate, base often oblique 2.5 to 3.25 inches long, 1 inch wide, petiolule .25 to .4

inches long, terminal leaflet ovate acuminate, narrowed to the base, 2.5 inches long, 1.75 inches wide, petiole .75 inches long polished above nerves, inconspicuous above, visible beneath, fine 3 to 4 pairs. Umbels 11 to 12, of 18 to 20 flowers, peduncle 1-1.25 inches long, pedicels .2, umbels subtended by 1 to 3 phyllous leaves longer than them. Buds obovoid, blunt, Calyx lobes distant, blunt, rounded, short. Petals oblong, obtuse subtriangular. Stamens as long.

Small shrub (No. 6093).

37. *Dendropanax Maingayi*, King. At 3,000 feet. No. 6104. Shrub, flowers greenish.

At 3,900 feet. No. 6014. Shrub, flowers waxy-white.

Distrib. Mt. Ophir, Perak.

RUBIACEÆ.

38. *Ophiorrhiza tomentosa*, Jack. Kedah Peak (No. 6037).

Distrib. Penang, Perak.

Oldenlandia diffusa, Roxb. By sides of streams. Kedah Peak. Flowers white. No. 6147.

Distrib. Trop. Asia.

39. *Hedyotis capitellata*, Wall. Gurun. Creeper, flowers greenish-white. No. 6175.

Common all over the peninsula.

40. *Hedyotis pedunculata*, King, Kedah Peak. At 3,000 feet. Flowers lilac.

Endemic.

41. *Hedyotis flexuosa*, Ridl. Kedah Peak. (5988). Also Mt. Ophir and Batu Pahat.

42. *Hedyotis macrophylla*, Wall. Gurun. Flowers white. No. 6177.

Distrib. Malacca, Penang.

43. MYRIONEURON MICROCEPHALUM, *sp. nov.*

A shrub, branches slender, pale coloured. Leaves lanceolate, membranous, long acuminate, narrowed to the base, nerves 6 pairs, inarching within the margin, 4 inches long, 1-7 inches wide, .2 inches long. Stipules .1 inch long, tubular, with two broad acute points and two subulate bristles. Inflorescence terminal of 2-3 short branches, peduncle less than .1 to .2 inches long. Flowers few 3-4, subsessile. Bracts lanceolate as long as the flower, acuminate. Ovary obconic with wavy ridges. Calyx-lobes 5 linear, acuminate. Corolla hardly longer, tube very short, cylindrical lobes much longer, linear acuminate, .2 inches long.

Gurun. No. 6180a.

The genus *Myrioneuron* occurs in India and Borneo, but this is the first species recorded from the Malay Peninsula.

It is very distinct from the other species, which have large heads of flowers in its only having 3 or 4 quite small ones on a short peduncle. There is no fruit on any of the specimens and only a few flowers and some buds. The stamens and style in the two I could examine were destroyed by some hymenopterous insect.

44. *Argostemma unifolium*, Benn. Kedah Peak, on rocks at 3,000 feet. Flowers white. No. 6116.

Distrib. Penang.

45. *Urophyllum streptopodium*, Wall. Gurun. Mixed with *Myrioneuron* No. 6180a.

Common whole Peninsula.

46. *Pavetta indica* var. *polyantha*. Kedah Peak at 3,500 feet. No. 6119.

Common all over the Peninsula.

47. *Ixora Brunonis*, Wall. Gurun. Flowers white, slightly scented. No. 6176.

Distrib. Penang, Perak, also Burmah.

48. *Ixora stricta*, Roxb. Gurun. Six feet tall. Flowers salmon pink. No. 6161.

Distrib. Indo-Malaya.

49. *Ixora congesta*, Roxb. Kedah Peak at 1,500 feet. Ten feet tall, orange red. No. 6150.

Distrib. Burmah, Malaya.

50. *Ixora arguta*, Br. Gurun. Shrub, flowers white. No. 6141.

Distrib. Whole Peninsula.

51. *Canthium didymum*, Gaertn. Kedah Peak 2,500 to 3,200 feet. Shrub, flowers greenish 6132.

Common all over the Peninsula.

52. *Randia macrophylla*, Benth. Gurun 6179, 6157. Whole Peninsula and Sumatra.

53. *Hydnophytum formicarium*, Jack. Kedah Peak at 3,000 feet. No. 6054, 6076.

Whole Peninsula.

54. *Psychotria polycarpa*, Hook, fil. var. Kedah Peak. Creeper, fruit white. No. 6032.

This is the stiff leaved form which also occurs on Mt. Ophir.

55. *Lasianthus cyanocarpus*, Jack. Kedah Peak at 1,500 feet. Shrub, flowers white, fruit turquoise. No. 6143.

Distrib. Indo Malaya.

56. *Lasianthus appressus*, Hook fil. Gurun. Herb, flowers white, fruit black. No. 6154.

Distrib. Whole Peninsula.

57. *Lasianthus Wrayi*, King. Small shrub, fruits purplish. Kedah Peak 6065.

Distrib. Perak.

58. *Chasalia curviflora*, Thw. Gurun. 6158, 6159.

Common all over the Malay Peninsula, var *angustifolia*.

Kedah Peak at 3,000 feet. No. 6051.

59. *Saprosma pubescens*, Ridl. Gurun. Shrub 7 feet tall. Also on Mt. Ophir.

60. *Cephaelis Griffithi*, Hook. fil. No ticket.

61. *Cephaelis Ridleyi*, King. Kedah Peak 2,500 to 3,000 feet. Shrub, flowers waxy-white.

COMPOSITÆ.

62. *Gynura sarmentosa*, DeC. Kedah Peak at 3,996 feet. No. 6044.

Distrib. Whole Peninsula.

63. *Erechthites valerianifolia*, DeC. *Gynura rosea* Ridl. *Gynura bicolor* King, not DeC.

Kedah Peak beneath the Trig. station, no doubt brought by coolies. Flowers pink. No. 6038.

A South American weed spreading all over the old-world tropics.

VACCINIACEÆ.

64. *Vaccinium eburneum* *sp. nov.*

Tree up to 20 feet tall, much branched. Leaves thickly coriaceous, elliptic ovate, narrowed equally to both ends, apex acute, base cuneate, nerves ascending 3-4 pairs slender, 1-5 to 2 inches long, .5 to .8 inches wide. Petiole .1 inch long. Raceme 1-5 inch long, flowers waxy white, pendulous on one side .25 inch long; pedicels .15 inch long. Calyx lobes ovate, subacute or rounded edges ciliate. Corolla cylindrical, lobes short, ovate, recurved, glabrous. Stamens short, about half the length of the corolla, filaments hairy; anthers oblong, connective, prolonged oblong crenulate, cell-spurs subulate. Style stout pubescent, longer than the corolla, ovary half inferior. Kedah Peak at 3,000 feet. No. 5986.

Allied to *V. Kunstleri*, King & Gamble.

65. *Vaccinium malaccense*, Wight. Kedah Peak. Also collected here by Lobb.

All over the Peninsula, but local.

ERICACEÆ.

66. *Rhododendron jasminiflorum* Hook. Kedah Peak at 3,000 feet. Flowers white, flushed pink. No. 6057. Flowers white, Shrub. No. 6030.

Mt. Ophir and Perak Hills.

67. *Rhododendron Teysmanni* Miq. Small shrub, flowers apricot yellow.

Kedah Peak. No. 5966.

68. *Rhododendron leucobotrys* Ridl. A tall shrub, flowers white. No. 6033.

Endemic on Kedah Peak.

69. *Rhododendron longiflorum* Lindl. Kedah Peak from 3,800 feet upwards. Flowers "Rose dorée." No. 5967.

EPACRIDÆ.

70. *Leucopogon Malayana* Jack. var. *moluccana*.

Kedah Peak at 3,000 feet. No. 5983.

Distrib. of variety Tenasserim collected on Kedah Peak by Low.

MYRSINÆ.

71. *Myrsine Porteriana* Wall. Kedah Peak 3,500 feet. Small shrub, flowers white 6075. *Distrib.* Penang, Pahang, Selangor or Perak and Mt. Ophir.

72. *Labisia pumila* Benth. var. *lanceolata*. Kedah Peak 2,500 to 3,000 feet alt. No. 6125.

Common all over the Peninsula, Sumatra, and Borneo.

73. *Ardisia colorata* Roxb. var. *salicifolia* King. Kedah Peak. Small tree 20-25 feet tall, flowers pink at 3,000 feet. No. 6094.

Distrib. of variety, Perak and Malacca.

74. *Ardisia crenata* Roxb. No specific locality. *Distrib.* Burmah to China and Japan. Common.

GENTIANACEÆ.

75. *Causcora andrographioides*, Griff.

A slender herb over a foot tall, stems 4 angled. Leaves lanceolate, acuminate, acute, narrowed at the base, 3-nerved, 2 inches long, 3 inches wide, lower ones 1.5 inches long, 4 inches wide. Flowers solitary, axillary on pedicels 1 inch long with 2 pairs of small leaves. Calyx 5 inches long, cylindric, narrow, not winged, lobes narrow acuminate. Corolla white 4 inches across, lobes narrow.

Kedah Peak at 3,000 feet. No. 6072.

An addition to our flora. A native of India and Burmah.

OLEACEÆ.

76. *JASMINUM KEDAHENSE* sp. nov.

Jasminum Maingayi var. *Kedahense* King & Gamble.

Climber; branches rather stout, pubescent. Leaves stiffly coriaceous, ovate, base rounded, apex acuminate, blunt, nerves 4 pairs sunk above, elevate beneath, above glabrous, beneath the

nerves and often whole surface of the leaf pubescent, 3 inches long, 2 inches wide, petiole ½ inches long, pubescent. Flowers about 14 crowded in a terminal head, peduncle and pedicels ½ inches long or less, pubescent. Calyx tube obconic, lobes narrow, linear, acuminate, hairy, ½ inches long. Corolla glabrous, tube 1.5 inches long, ½ inches wide.

Kedah Peak at 3,000 feet, Padang, to Seh. No. 598r, 6077. This beautiful Jasmine was first collected by me in fruit only on Kedah Peak. The specimens however were too incomplete for description and Dr. King and Mr. Gamble made it a variety of *J. Maingayi*, Clark, suggesting that it might be a distinct species. The excellent specimens above described show that it is quite distinct.

STYRACEÆ.

77. *Symplocos prunifolia*, Ridl. Shrub, flowers white. Kedah Peak 6096.

Distrib. Gunong Tahan and other mountains.

APOCYNACEÆ.

78. *Alyxia pilosa*, Miq. Creeper or semiscandent shrub, flowers white. Kedah Peak at 3,000 feet. No. 6092.

Also in Perak, Bujang, Malacca and on Mt. Ophir, and in Sumatra and Borneo.

79. *Ervatamia Malaccensis*, King & Gamble. Gurun No. 6171. Shrub 15 feet, capsules chrome yellow.

Distrib. Whole Peninsula.

ASCLEPIADEÆ.

80. *Dischidia bengalensis*, Colebr. No special locality.

Distrib. India, whole Peninsula, Java, Borneo.

LOGANIACEÆ.

81. *Gaertnera oxyphylla*, Benth. *Gaertnera Koenigii* var *oxyphylla* Clark. Leggy shrub, flowers white, Kedah Peak 2,500 to 3,000 feet alt. No. 6013.

The latter a narrow stiff-leaved form.

This plant has long been mixed with the *Gaertnera Koenigii*, Wight, of Ceylon, as a variety, but it seems to me clearly distinct.

CONVOLVULACEÆ.

82. *LETTSOMIA ARGENTEA*, *sp. nov.*

Shrubby climber, stems ½ inches through, woody shortly, silky hairy. Leaves lanceolate, acuminate, blunt, the mid-rib running out into a small mucro, base narrowed, blunt, subcoriaceous, silky on both sides but densely so on the back, nerves sunk above, elevate beneath about 10 pairs, ⅓ inches long, 1 inch across, petiole ⅓ inches.

Cymes lax, silky, 3-4 flowered, peduncle .5 inches long, pedicels as long. Sepals ovate rounded, sub-equal, stiff, .4 inches long, silky outside, glabrous within. Corolla and stamens not seen. Style .3 inches long, filiform. Berry globose, covered with thick red pulp, 2 celled.

Kedah Peak 2,500 feet to 3,000 feet. A very beautiful plant, silvery silky all over.

SCROPHULARINEÆ.

83. *Torenia peduncularis*, Benth. Kedah Peak at 1,500 feet. No. 6145. Herb, flowers purplish violet.

Distrib. Malaya.

UTRICULARIACEÆ.

84. *Utricularia involvens*, Ridl. Kedah Peak at 3,000 feet. No. 5959. The only known locality.

85. *Utricularia ophirensis*, Ridl. Kedah Peak No. 6112. Flowers purple.

86. *Utricularia striatula*, Sm. *Utricularia orbiculata*, Wall. At 3,000 feet. No. 5976, on rocks among moss, general color of plant pale violet.

87. *Utricularia nigricaulis*, Ridl. Among moss in stream, flowers pale violet. No. 5956.

Distrib. Pahang.

GESNERACEÆ.

88. *Aeschynanthus Lobbianus*, Hook. Kedah Peak 3,000 feet. No. 5997, No. 6049.

Distrib. Malaya.

89. *Didymocarpus citrina*, Ridl. Kedah Peak at 3,000 feet. No. 6004. Endemic.

90. *Didymocarpus sulfurea*, Ridl. Kedah Peak, on rocks, flowers yellow. No. 6052.

Distrib. Selangor and Perak.

91. *Boea elegans*, Ridl. Kedah Peak, on rocks below beacon. Leaves silvery. No. 6062.

Only known locality.

ACANTHACEÆ.

92. *Pseuderanthemum porphyranthos*, Clarke. Kedah Peak, small shrub, flowers lilac. No. 6149.

Distrib. Whole Peninsula.

VERBENACEÆ.

93. *Clerodendron deflexum*, Wall. Kedah Peak at 3,500 feet. 6117. Common all over the Peninsula.

LABIATÆ.

94. *Scutellaria discolor*, Colebr. Kedah Peak at 3,800 feet. No. 6036. Flowers purplish.

* *Distrib.* Indo-Malaya, not common in the Peninsula.

95. *Gomphostemma oblongum*, Wall. Kedah Peak at 1,500 feet. No. 6144. Small shrub, fruit white.

APETALÆ.

PIPERACEÆ.

96. *Piper penangense*, C. de C. Kedah Peak at 3,500 feet. No. 6115; also occurs in Penang.

NEPENTHACEÆ.

97. *Nepenthes gracilis*, Korth. Kedah Peak, Padang To Seh. 3,000 feet, 5969.

98. *Nepenthes ampullaria*, Jack. At 3,000 feet. No. 6050.

BALANOPHORACEÆ.

99. *Rhopalocnemis ruficeps*, Ridl. Rich strawberry red, root stock yellowish. No. 6107.

Distrib. Perak, Penang.

LORANTHACEÆ.

100. *Korthalsella japonica*, Engl. On *Alyxia* and other shrubs. No. 6079. Also collected by me here and on Mt. Ophir.

Distrib. India, China, Japan, Australia.

101. *Loranthus ferrugineus*, Roxb. At 2,800 to 3,000 feet. No. 6131.

Common in the Peninsula.

102. *Elytranthus arenis*, Don. At 3,000 feet. No. 5980. Also collected here by Lobb and myself.

Distrib. Java, Sumatra.

PROTEACEÆ.

103. *Helicia attenuata*, Bl. At 3,500 feet. Tall shrub flowers greenish. No. 6118.

Distrib. Whole Peninsula and Java.

THYMELEACEÆ.

104. *Wikstroemia Candolleana*, Meissn. At 2,800 to 3,000 feet. Small shrub, flowers yellow.

Distrib. Gunong Talian and other mountains of the Peninsula.

SANTALACEÆ.

105. *Henslowia varians*, Bl. A climber, rather slender. Leaves oblanceolate or obovate, obtuse, rounded, narrowed at the base, nerves 5, conspicuous on both sides when dry, 1.75 to 2 inches long, .5 to 1 inch wide, petiole .5 inches long. Flowers yellowish, solitary or 2-4 axillary on very short peduncles with one or more ovate bracts. Perianth tubular .1 inch long, lobes ovate acute. Fruit very small, red, 1 inch through, globose or oblong globose with 5 longitudinal grooves, and transverse ones, making it nodulose.

At 3,000 feet; flowers yellowish. No. 6088.

Distrib. Java.

This is not the plant described in the Materials by Gamble as *H. varians* Bl., which appears to me to be certainly *H. umbellata* Bl. and has shorter tubed flowers, many in an axil, on longer pedicels and a considerably larger fruit. *H. varians* Bl., very well figured in Mus. Bot. I. pl. xliii. has a very small fruit resembling that of *H. buxifolia* Bl. This latter species however is more of an erect shrub with round leaves and is entirely yellow in leaf and stem; usually found in low ground near the sea. It is quite possible that some of the specimens quoted as *H. buxifolia* Bl., from mountain districts, are *H. varians* Bl.

Henslowia Ridleyi, Gamble. In the account of the flora of Gunong Tahan published in the Journal of the Federated Malay States Museum, Vol. vi., p 170, I described a plant to which I had originally given the name of *H. minor*, but the account of this genus by Gamble being published before this paper was printed I thought that *H. minor* was the plant intended for *H. Ridleyi* by Gamble, as he had given Gunong Tahan as a locality. I therefore gave the description as that of *H. Ridleyi*. I have since found out that the plant intended as *H. Ridleyi* by Gamble is quite a different species, though it occurs in the same localities. The name *Henslowia minor* therefore I restore for the species described as above under the name *H. Ridleyi*.

LAURINEÆ.

106. *NOTHOPHOEBE ANGUSTIFOLIA*, *sp. nov.*

Shrub 4 feet tall. Leaves alternate, coriaceous, lanceolate, acuminate, narrowed at the base, nerves about 10 pairs, very inconspicuous, 3.5 inches long, 1 inch wide, petiole 2.5 inches long. Panicle 1.5 inches long, .5 inches wide, about .5 inches across, sparsely pubescent, pedicels nearly .1 inch long, silky. Flowers dirty yellowish-green, .1 inch long. Buds oblong blunt. Perianth segments subequal, ovate; oblong, obtuse, pubescent, inner row slightly smaller, connate shortly at the base. Stamens, outer row 3 with hairy slender filaments, anthers 4-celled, introrse, second row similar, third row introrse, glands oblong, flat, glabrous. Staminodes

villous. Ovary obovoid, narrowed at the base. Style filiform, rather stout, stigma capitate. At 3,800 feet. No. 5996. Shrub 4 feet tall, flowers dirty yellowish-green.

This is possibly a *Machilus*, of which it has more the habit, but I have seen no fruit.

EUPHORBIACEÆ.

107. *Phyllanthus frondosus*, Wall. Small shrub, flowers pinkish, 3,000 feet. No. 6103.

Common in the hill forests.

108. *Sauropus forcipatus*, Hook. fil. At 1,500 feet. No. 6146. Shrub, flowers yellowish.

Distrib. Malay Peninsula.

109. *Coelodiscus montanus*, Muell. Arg. Gurun. No. 6173. Small shrub 4-5 feet.

Distrib. Malay Peninsula.

Mallotus porterianus, Muell. Arg. 2,800 to 3,200 feet. No. 6129. Small shrub, fruit prickly.

110. *Galearia Lindleyana*, Muell. Arg. Gurun. No. 6170. Large under-shrub 10-15 feet tall.

Distrib. Malaya.

111. *Agrostistachys filipendula*, Muell. Arg. Tall shrub, flowers yellow. 2,500 to 3,000 feet. No. 6017.

Exeocaria quadrangularis, Muell. Arg. Kedah Peak. No. 6126. Hills of the peninsula.

CONIFERÆ.

112. *DaCRYDIUM elatum*, Br. At 3,000 feet. Tree up to 40 feet tall. No. 6053.

Distrib. Tenasserim and mountains of the Malay Peninsula.

113. *Agathis loranthifolia*, Salisb. At 3,000 feet. No. 6106.

Distrib. Penang and Perak hills.

GNETACEÆ.

114. *Gnetum campestre*, Gamble mss. *G. microcarpum* var. *campestre*, Ridl. At 3,000 feet. Padang To Seh. No. 5972.

ORCHIDÆÆ.

115. *Liparis Maingayi*, Ridl. Damp rocks at 3,500 feet. No. 6121.

116. *Dendrobium revolutum*, Lindl. At 3,000 feet. On trees. Flowers white, upper wings of lip brownish, lower more yellowish. No. 5951.

Distrib. From Tenasserim to Rhio.

117. *Dendrobium villosulum*, Wall. At 3,000 feet. Flowers creamy yellow. Sepals faintly striped darker. No. 6113. Lip pale orange. Petals and sepals pale cream, lined with brown. No. 6137.

118. *Dendrobium hymenopterum*, Hook. fil. At 3,000 feet. Flowers pale lilac, sides of column orange. Nos. 5952, 5953.

Distrib. Pahang, Perak and Lankawi.

119. *Desmotrichum Kelsalli*, Ridl. Kedah Peak. Flowers reddish brown. No. 6031.

Distrib. Pahang, Malacca, Perak.

120. *Bulbophyllum longiflorum*, Ridl. At 3,500 feet. Flowers white, petals and sepals with regular lines of magenta. Lip and column orange. No. 6084.

121. *Bulbophyllum concinnum*, Hook. fil. No. 6087. Epiphyte. Flowers pale yellow.

Distrib. Malay Peninsula, and Borneo.

122. *Bulbophyllum Selangorensis*, Ridl. Flowers yellow, lip apricot. No. 6028.

Distrib. Selangor Mountains.

123. *Eria lorifolia*, Ridl. On dead logs at 3,000 feet. No. 6061. Endemic.

124. *Eria floribunda*, Lindl. 6059. In fruit only.

Common in the Peninsula and Borneo.

125. *Eria teretifolia*, Griff. Flowers pale lemon, base of column pale yellow, edged magenta, lip reddish distally. No. 5978.

Common in the hills of the Malay Peninsula and Borneo.

126. *ERIA DILUTA* *sp. nov.*

Rhizome apparently long, creeping, stems erect, remote, $\frac{1}{4}$ inches long, slender, covered with lanceolate, acute brown sheaths, $\frac{1}{4}$ inches long. Leaves narrow, linear, acuminate, acute, base narrowed, 3.75 inches long, $\frac{1}{4}$ inches wide. Raceme subterminal $\frac{1}{5}$ inches long, covered with brown, lanceolate acuminate bracts 2-flowered. Pedicel $\frac{1}{4}$ inches pubescent. Sepals $\frac{1}{3}$ inches long, lanceolate, acute, yellowish-white, laterals nearly $\frac{1}{2}$ inches wide. Mentum short and broad. Petals linear, acute, as long as sepals but much narrower. Lip trifid, as long as sepal, lateral lobes falcate, broad, midlobe oblong, subacute, dilate towards the tip, at the base two short ridges meeting in a V, fleshy, thick, 2 short undulate ridges along the lobe bases, one median running to tip elevate into a prominent keel, undulate. Column long, curved, margin entire, highly elevate, filament rather long. Anther phrygian-cap-shaped and blunt. At 3,000 feet. Flowers yellowish white. Lip and column tinged brownish-pink. No. 5980.

Apparently allied to *Eria nutans*, Lindl. and *Eria ramulosa*, Ridl.

127. *Eria xanthocheila*, Ridl. At 3,500 feet. Sepals whitish-green, faintly veined with reddish. Lip yellow. No. 6120.

Distrib. Malay peninsula.

128. *Eria tenuiflora*, Ridl. At 3,000 feet. No. 6074.

Distrib. Malay peninsula and Borneo.

129. *Ceratostylis gracilis*, Bl. At 3,800 feet. Flowers yellowish, lip pale red. No. 6006.

Distrib. Malay peninsula and islands.

130. *Trichotosia pocolata*, Ridl. Kedah Peak. No. 5999. Also in Perak and Mt. Ophir.

131. *Trichotosia aporina*, Hook. fil. Flowers campanulate, white. At 3,000 feet. No. 5965.

Distrib. Malay peninsula.

132. *Plocoglottis javanica*, Bl. At 1,500 feet. Flowers crimson and yellow. No. 6140.

Distrib. Malay peninsula, Java.

133. *Spathoglottis aurea*, Lindl. The true, deep coloured form (*Spathoglottis Wrayi*) leaves often reddish beneath. No. 5992.

Distrib. Malay and Borneo mountains.

134. *Calanthe angustifolia*, Lindl. At 3,500 feet. Flowers white, ridges to base of lip faintly yellow. No. 5993. Mountains of Malay peninsula.

135. *Calanthe* (*Limatodes*) *gracilis*, Lindl. Stem 3 inches or more. Leaves lanceolate, acuminate plicate, narrowed towards the base, 9 inches long, 1.25 inches wide. Scape slender from the stem below the leaves. 20 inches long, puberulous. Flowers about 15 remote, pedicels .3 inches long. Sepals lanceolate, acuminate, narrow, pubescent outside .4 inches long. Petals linear, lanceolate, acuminate glabrous. Lip spurless, 3 lobed, side lobes long, lanceolate, acute, midlobe fleshy at base, longer, .3 inches long, oblong with a small orbicular, undulate, crenulate, bilobed lamina, claw of midlobe channelled with thick fleshy ridges, and a hairy mass at the base. Column short, thick and free from the lip. At 3,000 feet. Flowers white, sides of lip yellow. No. 5998. *Distrib.* North India, Siam and China. A good addition to our Flora.

136. *Arundina Philippii* var. *Malayana*, Ridl. At 3,000 feet. Tip of lip pale pink, throat yellow. No. 5982. Found here by me also.

137. *Coelogyne perakensis*, Rolfe. At 3,000 feet. Flowers apricot yellow, throat rich chrome. No. 6060. *Distrib.* Perak Hills. Pahang.

138. *Coelogyne pallens*, Ridl. Flowers delicate, greenish-white, edges of lip fringed. At 3,000 feet. No. 6085. Also collected here by Mohammed Aniff. *Distrib.* Perak Hills.

139. *Bromheadia palustris*, Lindl. At 3,000 feet. No. 6073.

140. *Agrostophyllum callosum*, Bl. 2,500 to 3,000 feet. Flowers pale cream. No. 6133.

141. *Acriopsis Ridleyi*, Hook. fil. At 3,000 feet. Padang To Seh. Flowers yellow, spotted with purple, column pinkish. Nos. 5973, 5974.

This is an unexpected discovery. The species was only known hitherto from a single specimen obtained by me on a pepper stump in Singapore, no doubt found by a Chinaman in felling the forest and put to grow on the stake. No other specimen has been seen till in the present collection comes a fine series from the other end of the peninsula.

142. *Oxyanthera elata*, Hook. fil. 2,500 to 3,000 feet. No. 6018.

Distrib. Whole peninsula, Java, Sumatra and Borneo.

143. *Podochilus muricatus*, Schlt. At 3,000 feet. Flowers white, hairy, throat purple. No. 5990.

144. *Podochilus cornuta*, Schlecht. Kedah Peak, no special locality. No. 6090.

145. *Podochilus sciuroides*, Reichb. At 3,000 feet. No. 5952.

146. *Tropidia squamata*, Bl. Flowers white, with a slight greenish cast. No. 6012.

Distrib. Malay Peninsula and Borneo.

147. *Anoectochilus Reinwardtii*, Bl. Flowers white, stem reddish. 3,000 feet. No. 5977.

Also occurs in the Perak Hills, Java and Sumatra.

APOSTASIACEÆ.

148. *Apostasia nuda*, R. Br. Without locality.

Distrib. Whole peninsula.

SCITAMINEÆ.

149. *Costus speciosus*, var. *argyrophyllus*. At 2,800 to 3,200 feet. No. 6128.

Common all over the peninsula.

150. *Globba panicoides*, Miq. At 3,000 feet. No. 6070.

Distrib. Whole peninsula and Sumatra.

151. *Hedychium collinum*, Ridl. Flowers white, heavily scented at 4,000 feet. No. 6027.

The original locality for this species.

BURMANNIACEÆ.

152. *Burmannia disticha*, L. At 3,000 feet. Padang To Seh. Flowers usually large, with many heads, pale blue. No. 5961.

Distrib. Indo-Malaya, China, Australia.

LILIACEÆ.

153. *Protolirion paradoxum*, Ridl. and Groom. On dead leaves at 3,800 feet. No. 6000.

Distrib. All over the Malay Peninsula at high altitudes.

154. *Dianella ensifolia*, Red. 3-4,000 feet. Nos. 5994, 6001.

155. *Dracaena terniflora*, Roxb. About 3 feet tall. Gurun. No. 6165.

156. *Smilax calophylla*, Wall. Kedah Peak, 3,500 feet. No. 6135.

Distrib. Whole peninsula.

157. *Smilax laevis*, Wall. Climber, flowers greenish yellow, at 3,000 feet. No. 6066.

Distrib. Malay Peninsula, China.

FLAGELLARIACEÆ.

158. *Susum malayanum*, Hook fil. Kedah Peak. No. 6,011. Unripe fruit, whitish.

Distrib. Malay peninsula.

PALMAE.

159. *Licuala Scortechinii*, Becc. Short stemmed palm 2,500 to 3,000 feet. No. 6016.

Distrib. Malay Peninsula.

160. *Pinanga disticha*, Bl. Gurun. No. 6152.

Distrib. Malay Peninsula and Borneo.

161. *Iguanura Wallichiana*, Hook. fil. Gurun. No. 6151. Small palm stem about 4 feet, flowers white.

Distrib. Malay Peninsula.

162. *Calamus ramosissimus*, Griff. At 2,500 to 3,000 feet. Inflorescence greenish white. No. 6015.

Distrib. Malay Peninsula.

PANDANACEÆ.

163. *Pandanus collinus*, Ridl. Kedah Peak. No. 6127.

Distrib. Mountains of Malay Peninsula.

CYPERACEÆ.

164. *Mariscus Sieberianus*, Nees. Kedah Peak 3,000 to 3,500 feet. No. 6046.

Unusually high for this common lowland plant.

165. *Actinoschænus filiformis*, Benth. At 3,000 feet. No. 6109.
Distrib. Malay Peninsula, China.
166. *Hypolytrum latifolium*, Rich. At 1,000 feet. No. 6142.
167. *Gahnia javanica*, Moritz. At 3,000 feet. No. 5970.
Distrib. All high mountains in the Malay Peninsula and Java.
168. *Gahnia tristis*, Nees. Padang 'To Seh 3,000 feet. No. 5964.
 Usually a sea shore plant, but it also occurs on Mt. Ophir.
169. *Scleria multifoliata*, Bœck. At 3,000 feet. No. 6108.
 Usually a hill plant but it does occur in the low country.
170. *Carex indica*, L. At 3,000 feet. No. 6136.
 Scattered over the peninsula, India and Malay peninsula.

GRAMINEÆ.

171. *Isachne rigida*, Nees. A stiff, erect grass 18 inches tall, leaves stiff, lanceolate, acuminate, acute, coriaceous, glabrous, strongly ribbed, edge denticulate, base cordate 5 inches long, 2 inches wide, sheath smooth or occasionally armed with stiff cilia rising from pustules. Panicle 1 inch long, 7 inches across, spreading, lax, stiff. Outer glumes round pubescent.
 At 3,000 feet. No. 6111. Rare in the peninsula. Only collected in our area at Setul. It occurs often in sandy spots on heaths and dry spots on mountains in Borneo and Java.
Ischæmun Fieldingianum, Rendle. At 3,000 feet. Padang 'To Seh in open spaces. No. 5958.
 Also Mt. Ophir.

172. EULALIA LANIPES, *sp. nov.*

Base of stem and sheaths densely white, woolly. Leaves flaccid, 20 inches long, 2 inches wide, linear, gradually acuminate, bases white-hairy, ligule white-silky hairy. Culms rather slender, terete glabrous except at the top, 20 inches long. Spikes 3-8, six inches long, densely white, hairy. Flowers in pairs, one sessile and one stalked, similar pedicel and outer glumes covered with long white hairs. Glume I and II lanceolate, acuminate, narrow, thin, hairy on the back with long soft hairs. III lanceolate, acuminate, very narrow, sparsely hairy. IV narrow, lanceolate, acuminate. Awn 7 inches long, base dark brown, spirally twisted, apex pale scabrid. Styles purple, short plumed. Caryopsis oblong, ellipsoid, narrowed at base, beaked with the remains of the style, light brown, smooth. At 4,000 feet. No. 6026.

A beautiful grass allied to *E. argentea*, Brngn. Voy. Coq. Bot. p. 92, but with much larger spikes and flowers and long acuminate narrow glumes, and the base of stems woolly.

173. *Oxytenanthera sinuata*, Gamble. At 3,000 feet. No. 6069.
Rather a rare or rarely collected Bamboo. Endemic.

FILICES.

174. *Gleichenia circinata*, Sw. At 3,000 feet. No. 6101.
On all mountains.

175. *Gleichenia flagellaris*, Spr. At 3,000 feet. No. 6102.

176. *Alsophila commutata*, Mett. At 2,800 feet. No. 6042.

High mountains Malay Peninsula.

177. *Hymenophyllum Neesii*, Hook.

178. *Hymenophyllum Blumeanum*, Spr. No tickets.

179. *Davallia solida*, Nees. At 3,800 feet. No. 6045.

Common all over peninsula.

180. *Davallia bullata*, Wall. Kedah Peak. 3,500 feet.
Got this on the precipice at the top of Kedah Peak. It is not common in the peninsula. No. 6130.

181. *Humata angustata*, Sm. At 3,000 feet. No. 5991.

182. *Lindsaya flabellulata*, Dry. At 2,500 to 3,000 feet.
Common on high mountains. No. 6095.

183. *Matonia pectinata*, R. Br. At 3,000 feet. No. 6100.
On all our mountains.

184. *Oleandra neriiformis*, Cav. At 2,500 to 3,000 feet.
Nos. 5979, 6024.

On all our mountains.

185. *Polypodium decorum*, Brack. Kedah Peak. No. 6020

186. *Polypodium* (*Pleopeltis*) *stenophyllum*, Bl. At 2,500 to 3,000 feet. No. 6021.

Common in mountain districts.

187. *Polypodium* (*Pleopeltis*) *incurvatum*, Bl. At 2,500 to 3,000 feet. No. 6022.

Mountains of Malaya.

188. *Dipteris Horsfieldii*, Benn. At 2,500 to 4,000 feet.
Fairly common. No. 6023.

Common on our shores and mountains.

LYCOPODIACEÆ.

189. *Lycopodium Hippuris*, Bl. At 3,500 feet. No. 6078.
Distrib. Malay peninsula.

190. *Lycopodium cernuum*, Sw. At 3,800 feet. No. 6029.
Distrib. All tropics.

191. *Lycopodium phlegmaria*, L. At 3,500 feet. No. 6002
on damp, open ground.

Common all over Tropical Asia.

192. *Selaginella Belangeri*, Spring. *S. proniflora*, Bak.
At 3,000 feet. No. 6097.

Distrib. Malayan mountains.

193. *Selaginella canaliculata*, Spring. Gurun. No. 6174.
Common in hill districts.

MUSCI.

BY C. H. WRIGHT.

194. *Syrrhopodon revolutus*, Dozy & Molk. At 3,000 feet.
No. 6091.

LICHENES.

BY MISS E. M. WAKEFIELD.

195. *Cladonia bellidiflora*, Hærke. At 3,000 feet. No.
6009. Fructification scarlet.