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inter stamina incurvus: stigma capitatum, bilobum: annulus sub stigmatate obsoletus, imberbis. *Capsula* ovoideo-oblonga, $\frac{2}{3}$ supera, loculicida, valvis medio septiferis et placentiferis. *Semina* ovalia, testa tenui nucleo conformi. *Embryo* cylindraceus in albumine copioso carnosus.

N. RAMOSISSIMUS, Nutt. l. c. Herba exilis, Novo-Mexicano-Californica, parvifolia; radice annua; foliis radicalibus ovalibus subdentatis, caulinis bracteisque subulatis; ramis flexuosis racemoso-multifloris pedicellisque filiformibus seu capillaribus patentissimis; floribus pusillis, carneis.

It is worth noticing that the only true Lobeliaceous genus of the Pacific coast of North America is of a distinct tribe, of which the other representative, *Grammatotheca*, is likewise South-African. As Douglase's generic name gives way to Rafinesque's *Clintonia* in Liliaceæ, and is replaced by Torrey's name *Donningia* ('Pacif. R. R. Exped.' iv. p. 116), the name of De Candolle's tribe *Clintoniæ* had best be replaced by that of *Grammatothecæ*.

Enumeration of the Fungi of Ceylon. By the Rev. M. J. BERKELEY, F.L.S., and C. E. BROOME, Esq., F.L.S. Part II., containing the remainder of the Hymenomycetes, with the remaining established tribes of Fungi.

(Read April 3, 1873.)

THE Fungology of Ceylon on a revision of the species, as far as they have come into our hands, amounting to 1190, is exactly such as might be suspected from the climatic conditions of the country. The heat is not so great as might be anticipated from the geographical position, being moderated by sea-breezes, and, at least in the districts whence the specimens have been derived, is much less than that of the neighbouring parts of the Indian peninsula. At Columbo the annual range of temperature is from 76° – $80^{\circ}\cdot3$, at Galle from 70° – 87° , at Jaffnapatam from 70° – 90° , at Trincomalee from $74^{\circ}\cdot3$ – $91^{\circ}\cdot3$, at Kandy, 1457 feet above the sea, from 66° – 86° , at Nuwara Eliya $35^{\circ}\cdot3$ – $80^{\circ}\cdot3$. While the eastern part of the island is hot and dry, the west is moist and favourable to the growth of fungi. The rainfall at Kandy is 85·3 inches, at Columbo 75–80.

A large proportion of the species received come from Pera-

deniya and Nuwara Eliya, where the temperature neither descends so low as to destroy mycelia from excessive cold, nor rises so high as to make the growth of European forms impossible. Accordingly we have multitudes of species of Agarics which differ little from European forms, though they are seldom identical, mixed, however, with a few, especially in the subgenera *Psalliota* and *Lepiota*, which may be characterized as subtropical forms, such as *Agaricus cepæstipes*, *licmadophorus*, and others which occur in our hothouses and are probably imported species. The same may be said also of certain species in other divisions, which occur under similar conditions in other parts of the world, such as *Angelina Leprieurii*.

In the tropical forests the number of species diminishes considerably, and we meet with such common forms as *Polyporus canthopus*, *P. cinnabarinus*, *Guepinia*, &c., with an admixture of new forms. Many of the species are identical with those from the Neilgherries. The new genera are few in number, the most interesting being *Rachophyllum* amongst the *Agaricini*, *Husseia* amongst the *Trichogastres*, *Astrocystis* amongst the *Sphæriacei*, with one or two Mucedinous genera, which may prove to be mere conidiiferous forms of *Sphæriacei* when more accurately examined. It is probable that some interesting Hypogæous fungi will reward future researches, as is indicated by the genera *Tuber* and *Paurocotylis* affording one or more species. Amongst the Epiphyllous Fungi the genus *Ravenelia* is conspicuous, reproducing the American and Indian forms, with one or two at present confined to the island. The parasite which has proved such a pest to the Coffee plantations, *Hemileia vastatrix*, is singular amongst *Uredinei*, as partaking somewhat of the character of *Rhinotrichum* amongst the *Mucedines*. In addition to the above remarks, for which we are greatly indebted to standard geographical works, the following interesting letter from Mr. Thwaites is appended, dated Peradeniya, Sept. 27, 1872.

"It might be supposed by any one arriving here in the middle of our dry weather, that this must be the most unfavourable place for the growth of such moisture-loving plants as Fungi; but let him wait till the humid atmosphere and October rains have set in, and he will be not a little surprised at the rapidity with which cryptogamic plants of many kinds, not only Fungi but Mosses, Lichens, and Hepaticæ, begin to make their appearance, just as in England during the same month of October. Clusters of

Agarics appear on the ground where there happens to be any thing organic going to decay. The grass (for we have fine park-like breadths of grass here) is spotted with the beautiful *Agaricus dolichaulos* and with other species; the sense of smell is often offended by the unpleasant odour of Phalloids; and there is in every forest or shrubby spot the same peculiar smell that one is sensible of in similar places in England, arising from the various kinds of Fungi growing amongst the decaying fallen sticks and leaves.

“ From scarcely above the sea-level to an elevation of five or six thousand feet, but little difference is observable in the fungous vegetation, the surface of the soil in the depths of the forests at these respective elevations not possessing so great a difference of temperature as to cause much diversity in the Fungi which affect them. There are of course some few species which are not found within so wide a zone of altitude, but apparently very few. The above remarks refer to the humid central and southern districts: I have not had much opportunity of collecting Fungi in the very much drier northern parts of the island during their short wet season; but I should be disposed to believe that, with the exception of the Epiphyllous kinds, and of the corky *Polypori* &c., the species would be found to be far less numerous than in the moister climate of the south. Upon no occasion have I remained long enough in our highest hills to make a very careful collection of the species of Fungi to be found upon them. So far as I observed, Fungi appeared to me less abundant generally than in the warmer more sheltered parts of the island. At an elevation of more than 7000 feet, I found a single specimen of a new species of *Phallus* of a deep red colour, which has not occurred to me elsewhere. *Aseroë actiniformis* is usually met with at an elevation of about 5000 feet, and it is sometimes rather common upon the ground under coffee-trees. *Husseia* I have always met with on the sandy margins of forest-streams.”

It is curious that, though the genus *Agaricus* is so prolific in species, not a single *Cortinarius* has occurred, while *Lactarius* is also absent, *Russula* being represented by a single species. *Marasmii* and *Lentini* are, as might be expected, abundant. *Boletus* presents a single species only. The *Myxogastres* are mostly European species, which agrees with what has been observed in other tropical or subtropical countries.

The following is a rough estimate of the species according to

their distribution, as regards those which are European, those which occur in the West-Indian Isles and the southern United-States provinces, those which are widely diffused, and those which have hitherto been detected in Ceylon only. The species enumerated are 1190; of these rather more than one sixth (191) are European species, rather more than one twenty-fourth (49) are species of the West Indies and Southern United States, more than a tenth (122) are widely dispersed species, while more than two thirds (820) are peculiar to Ceylon. The number of cosmopolitan species does not amount to 10. The genus *Agaricus* alone comprises rather more than one third, *Marasmius* one twenty-seventh, and *Polyporus* one sixteenth.

342. *AGARICUS (CREPIDOTUS) REVERSUS*, *B. & Br.* *Minimus, primum convexus; pileo cum stipite brevi, demum reflexo, albo-pruinato; lamellis cinnamomeis (no. 394).*

On decayed wood.

Spores $\cdot 00025$ long*.

343. *A. (CREPIDOTUS) PEZIZULA*, *B. & Br.* *Pusillus pezizæformis pallidus pulverulentus; lamellis tabacinis (no. 395).*

On dead herbaceous stems.

It appears to be pezizæform from the first, and not reflexed as in the last.

Spores $\cdot 0004$ long.

344. *A. (PSALLIOTA) PEDILIUS*, *B. & Br.* *Pileo ovato compacto e volva stellata ejusque apicem obtegente oriundo, furfuraceo; stipite cavo farcto sursum attenuato; lamellis angustis albis (no. 1221, cum ic.).*

Pileus ovate, capped with the dark remains of the volva, beneath which it is furfuraceous, fleshy, slightly appendiculate, $1\frac{1}{4}$ inch high, $1\frac{1}{2}$ wide at the base; stem $2\frac{1}{4}$ inches high, 1 inch thick in the middle, obtuse below, attenuated above, with a broad stellate volva at the base, and with a narrow cavity in the centre which is stuffed with white flocci; flesh, like that of the pileus, turning red; gills narrow, free, white.

345. *A. (PSALLIOTA) PODERES*, *B. & Br.* *Pileo hemisphaerico fibrilloso-squamoso sericeo-striato, apice volvæ fragmentis aspero; stipite sursum attenuato; annulo supero amplissimo; volvæ brunneæ margine dentato (no. 1220, cum icone).*

Pileus 2 inches wide, stem $1\frac{3}{4}$ high, $\frac{3}{4}$ thick.

Undoubtedly closely allied to the last, but differs in the hemispherical squamulose striate pileus, less ample volva, and above all in the presence of a large white ring.

* The decimal numbers are parts of an English inch.

long, on the tips of the threads ; sporidia $\cdot 0008$ long, $\cdot 0004$ wide, which in germination send out from one end a number of delicate threads.

1179. *M. FURCATA*, *Lév. Ann. Sc. Nat.* 1846, v. p. 260. (No. 419.)
On leaves of *Atalantia*. Peradeniya, Dec. 1867.
Sporidia $\cdot 0018$ long.

1180. *EUROTIIUM DIPLOCYSTIS*, *B. & Br.* Irregulare, subglobosum vel elongatum, flavum, demum aurantiacum ; ascis globosis pedunculatis e floccis decumbentibus oriundis ; sporidiis octonis ellipticis (no. 291). The ascus itself is soon absorbed, as in the genus *Badhamia* ; the peduncle is long and flexuous, several arising from decumbent branched threads.

This may possibly be a distinct genus ; but we have scarcely sufficient materials to decide.

PHYSOMYCETES.

1181. *PAUROCOTYLIS FULVA*, *B. & Br.* Depresso-subglobosa, extus lateritio-fulva, intus flava ; sporis magnis obovatis (no. 963).
On the ground. Peradeniya, Jan. 1869.
About $\frac{1}{2}$ an inch across, attached by a short, rooting, spongy mass ; spores $\cdot 003$ long.

1182. *P. FRAGILIS*, *B. & Br.* Pallide griseo-flava, fragilissima ; sporis globosis (no. 964),
On the ground. Peradeniya.
About $\frac{1}{4}$ inch across ; so fragile that it crumbles into atoms ; spores $\cdot 002$ in diameter.

SCLEROCYSTIS, *B. & Br.*

Capitulum globosum, tomentosum ; stipes cylindricus ; flocci compositi ; cysti elliptici.

1183. *SCLEROCYSTIS COREMIOIDES*, *B. & Br.* (No. 155.)

Looking at first like a *Coremium* ; head globose, hard, and compact ; flocci rigid, compound ; cysts elliptic, slightly rugose, sometimes giving out in every direction soft hairs.

A very singular plant, of which unfortunately the real nature of the fruit is not apparent.

1184. *MUCOR ARTOCARPI*, *B. & Br.* Fuscus, congestus, floccis inarticulatis versiculis globosis vel obovatis ; sporis subellipticis (no. 234).
On fruit of *Artocarpus integrifolia*.

We do not find any columella.