

## LICHENES.

By Rev. J. M. CROMBIE, F.L.S.

## Family COLLEMACEI.

## Tribe COLLEMEI.

*Collema*, sp. —?

Several specimens of a *Collema* occur which externally bears some resemblance to young states of *C. flaccidum*, but sterile and with the thallus discoloured so as to be quite indeterminable.

On trunks of trees sparingly.

*Leptogium tremelloides*, Ach.

Sufficiently typical, and also occasionally somewhat atypical.

Common, on the trunks of trees ; fertile.

## Family LICHENACEI.

## Tribe CLADONIEI.

*Cladonia Balfouri*, Cromb.

Thallus minor, basi squamulosus, squamulis parvis, albo-glauculentibus, subfirmulis, crenatis, podetiis simplicibus, brevissimis, apice raro divisis, albo-pulverulentis (vel pulvere subvirescenti-albo obductis), K—, contra squamis K+ (flaventibus); apothecia fusca (ut videtur), rite evoluta non visa.

The general aspect of this plant is sufficiently peculiar to warrant its being regarded as a distinct species, notwithstanding that the specimens seen are probably not fully developed as to thallus. Only a few faint traces of young apothecia are visible, which would refer it to the Phæocarpæ, where it seems to have its affinity in the section of *C. pyxidata*.

On dead stumps of trees ; not common.

## Tribe ROCCELLEI.

*Roccella Montagnei*, Bel., f. teretior, Cromb.

This form is distinguished by the narrow rounded thallus, which gives it more the aspect of *R. phycopsis* than of *R. fuciformis*, which typical specimens more closely resemble.

On rocks ; infertile.

Various and evidently young states, which seem referable to this form, are also present.

## Tribe USNEEI.

*Usnea florida* (L.), *Ach.*

On the branches of trees ; sparingly and infertile.

*Usnea dasypogoides*, *Nyl.*

“Subsimilis *Usneæ dasypogæ*, sed thallo subflavido, lævi, glabro, nec nisi in ramulis vel fibrillis sæpius leviter sparsim setuloso (quibus setulis etiam distinguitur ab *U. trichodea*, *Ach.*). Apothecia ignota.”—*Nyl. in litt.*

These specimens vary considerably in length, the largest being upwards of a foot long. Unfortunately none of them are fertile, though scattered “cephalodia” not unfrequently occur.

Abundant on the branches of trees in the higher parts of the island.

## Tribe RAMALINEI.

*Ramalina gracilenta*, *Ach.*

On rocks and trees in the higher parts of the island ; fertile.

*Ramalina gracilenta*, *Ach.*, f. *nodulosa*, *Cromb.*

Thallus minute, densely branched and fastigate, forming more or less rounded nodules.

This is evidently a young or rather stunted condition of the plant, presenting a somewhat singular appearance. In one specimen a single minute apothecium was visible.

Rare ; on rocks with the type.

*Ramalina farinacea*, *Ach.*, *Nyl.*

On the branchlets of trees ; not common. In higher parts of island. Also found in Mauritius.

*Ramalina farinacea*, *Ach.*, *Nyl.*, f. *pendula* (*Schrad.*).

On the branchlets of trees, with the type.

*Ramalina subfraxinea*, *Nyl.*

Common on the branches of trees in the higher parts, along with *Usnea dasypogoides* ; fertile.

*Ramalina canaliculata*, *Tayl.*

On the branches of trees ; fertile.

*Ramalina canaliculata*, *Tayl.*, f. *brevior*, *Cromb.*

Thallus shorter,  $\frac{1}{2}$ –1 inch ; laciniae rather broader.

On the branches of trees ; fertile, but like the type.

*Ramalina intermedia*, *Del.*, *Nyl.*

On rocks : not uncommon, but sterile.

## Tribe PARMELIEI.

*Parmelia latissima*, *Del.*

Very common on trees and rocks ; sterile.

The thallus is often discoloured, probably from the action of salt water.

*Parmelia subconspersa*, *Nyl.*

Common on rocks ; fertile.

*Parmelia atrichoides*, *Nyl.*

On rocks ; sparingly and infertile.

## Tribe STICTEI.

*Stictina dissimilis*, *Nyl.*

On trees ; sparingly and infertile.

*Stictina agyracea*, f. *insidiata*, *Nyl.*

Thallus somewhat densely covered with isidia.

On trees ; sparingly and infertile.

*Sticta aurata*, *Ach.*

On trunks of trees and dry places, with *Parmelia latissima*; infertile.

## Tribe PHYSCIEI.

*Physcia flavicans*, f. *crocea* (*Ach.*).

Rare ; on the branches of trees. Only on Mount Piton, near south end ; sterile.

*Physcia speciosa* (*Wulf.*).

Abundant, on trees and on boulders ; fertile.

*Physcia ægialita* (*Ach. Syn. p. 179*, sub *Lecanora*).

On rocks ; fertile, but very sparingly gathered, only a single small specimen being present.

*Physcia picta* (*Sw.*).

On bark of Pandanus, not uncommon.

## Tribe PYXINEI.

*Pyxine petricola*, *Nyl.*

“Thallus glaucescens, laciniis subintricato-contiguis, adnatis (latit. 1 millim. vel angustioribus), late diffusus ; apothecia nigra, planiuscula, lecideina, marginata (latit. 1 millim. vel minora), vel margine extus epithallino obducta, intus obscura ; sporæ 8næ, nigrescentes, oblongæ, biloculares, longit. 0·011-0·015 millim., crassit. 0·0045 millim. ; epithecium cæruleo-nigricans ; paraphyses graciles ; hypothecium subincolor. Iodo gelatina hymenialis bene cærulescens.

“Species certe bene distincta notis allatis. Thallus K=.”---*Nyl. in litt.*

On rocks ; sparingly.

## Tribe LECANOREI.

*Pannaria rubiginosa*, f. *cinerascens*, *Nyl.*

Thallus greyish ; otherwise similar to the type.

On rocks. This species occurs only in the higher parts of island. Only two apothecia visible on the specimen.

Two other sterile specimens may belong also to this form.

*Pannaria rubiginosa*, var. *dispartita*, *Nyl.*

“Forsan propria species, thallo tenuius diviso, effuso. Apothecia non visa.”—*Nyl. in litt.*

On rotten stumps on the ground; sparingly.

*Pannaria luridula*, *Nyl.*

“Thallus luridus, squamulosus, squamulis crenatis vel crenato-lobatulis, subintricatis; apothecia testaceo-rufa vel testaceo-rufescentia (latit. circiter 1 millim. vel minora), bene lecanorina, margine thallino crassiusculo crenato; sporæ ellipsoideæ, longit. 0·016–0·025 millim., crassit. 0·009–0·011 millim. Iodo gelatina hymenialis cærulescens.

“Affinis *P. immixtæ*, *Nyl.*, sed color thalli luridus et hypothallus niger ullus vix visibilis etc.”—*Nyl. in litt.*

On the ground; rare.

*Coccocarpia molybdæa*, *Pers.*

Not uncommon on bark of trees; infertile.

*Heppia Rodriguezi*, *Cromb.*

Thallus cervino-luridus, adnato-squamulosus, squamulis planiusculis vel alibi convexiusculis, subanguloso-rotundatis (latit. 1–2 millim. vel sæpius minoribus, crassit. circiter 0·25 millim.), contiguis aut subdispersis; apothecia rubello-carnea, concaviuscula, innata (latit. 0·2–0·3 millim.); thecæ polysporæ; sporæ breviter ellipsoideæ vel oblongo-ellipsoideæ, longit. 0·004–0·006 millim., crassit. 0·0025–0·0035 millim., paraphyses gracilescentes. Iodo gelatina hymenialis cærulescens, dein thecæ præsertim violaceæ rubescentes.

This is a fine species, which is at once distinguished by the colour of the apothecia. The syngonimia are usually sufficiently small, and then contain but few gonimia. With the exception of the colour of the apothecia, it presents almost the appearance of *Lecanora cervina*, *Pers.* (*squamulosa*, *Schrad.*).

On rocks; very rare in the Cascade Valley; only a few apothecia visible.

*Lecanora murorum*, var. *lobulata*, (*Smrf.*).

As the thallus is not sufficiently developed in the specimen seen, the plant is somewhat uncertain, although the apothecia and spores agree with this variety. Spores 0·010–0·013 millim. long, 0·006–0·007 millim. thick.

On rocks; not common.

*Lecanora cinnabarina*, (*Sw.*).

Frequent on rocks; in the specimens seen associated with other lichens, and not very characteristic.

*Lecanora aurantiaca*, (*Lightft.*).

On the bark of trees; sufficiently typical, but very sparingly gathered. Spores 0.011–0.016 millim. long. 0.006–0.010 millim. thick.

*Lecanora aurantiaca*, var. *isidiosella*.

A somewhat peculiar variety, which is well distinguished by the thallus being more or less covered with subconcolorous isidia. The apothecia are also smaller and only sparingly present in the few fragments seen.

On the bark of trees, associated with other lichens.

*Lecanora aurantiella*, *Nyl.*

“Subsimilis *L. aurantiacæ* et *erythrellæ*, Ach., sed apotheciis minoribus et innatis, sporis minoribus (longit. 0.010–0.012 millim., crassit. 0.006–0.008 millim.).” —*Nyl. in litt.*

On rocks in the Cascade Valley, associated with other lichens.

*Lecanora leucoxantha*, (*Spr.*).

On the bark of *Mathurina penduliflora*; found in fine fruit.

*Lecanora glaucofuscula*, *Nyl.*

“Thallus glauco-cinereascens (vel humidus cinereo-virescens), tenuis, continuus, passim subrimosus; apothecia fusca, subinnata, plana (latit. circiter 0.05 millim.), margine thallino tenui vel parum distincto cincta; sporæ 8næ, incolores, placodinæ, longit. 0.009–0.014 millim., crassit. 0.006–0.007 millim.; epithecium (in lamina tenui) lutescenti-inspersum (K purpurascens); hypothecium incolor. Iodo gelatina hymenialis intensive cærulescens. Nulli cognitæ affinis, vergens autem versus *L. encephalarti* (Kphb).” —*Nyl. in litt.*

On rocks; sparingly.

*Lecanora glaucofuscula*, f. *biatoroidea*.

This differs from the type only in the apothecia having a more distinctly biatorine appearance.

On rocks; like the type, very sparingly.

*Lecanora apostatica*, *Nyl.*

“Thallus albus vel albidus, tenuis, areolato-rimosus, hypothallo cærulescenti-nigricante passim visibili; apothecia nigra, lecideina, plana, marginata (latit. 0.05–0.07 millim.), intus albida; sporæ 8næ, incolores, placodinæ, longit. 0.011–0.015 millim., crassit. 0.005–0.008 millim.; paraphyses mediocres; epithecium et perithecium cærulescenti-nigrescentia; hypothecium incolor. Iodo gelatina hymenialis intensive cærulescens.

“Est species e stirpe *Lecanoræ diphyodis*, proxima *L. Kurzii* (Kphb.). Affinitas videtur inter *Lecanoras*, etiamsi apothecia lecideina. Thallus K flavens. Spermogonia arthrosterigmatibus munita; spermatia minutula, oblongo-cylindrica, longit. 0.002 millim., crassit. 0.0006 millim.” —*Nyl. in litt.*

Not uncommon on cindery rocks.

*Lecanora obliquans*, Nyl.

"Differt thallo cinerascente tenuissimo continuo. Occurrit quoque epithecio albo-suffuso. Forsan propria species."—Nyl. *in litt.*

Very common on rocks, giving them a white appearance.

*Lecanora carneofusca*, Nyl.

"Thallus glauco-cinerascens vel glauco-albidus, tenuis, inæqualis, areolato-rimulosus; apothecia carneo-fusca vel rufescenti-fusca, lecanorina (latit. 1 millim. vel minora), margine thallino integro cincta; sporæ 8næ, incolores, placodinæ, longit. 0·011–0·018 millim., crassit. 0·007–0·009 millim.; paraphyses fere mediocres; epithecium sordide sublutescens. Iodo gelatina hymenialis intensive cærulescens.

"Species accedens ad *Lecanoram camptidiam*, Tuck., a qua thallo areolato rimuloso et sporis nonnihil majoribus præsertim differt."—Nyl. *in litt.*

On rocks. Common.

*Lecanora subfusca*, f. *pumicicola*, Nyl.

"Differt a f. *campestri*, Schær. præsertim thallo subdisperso, e granulis sat tenuibus constans vel variantibus convexiusculis, ambitu subcrenatis (latit. 1 millim. vel minoribus), passim contiguis. Apothecia fusca (latit. 1 millim. vel minora); margine thallino integro aut obsolete subcrenulato; sporæ longit. 0·011–0·012 millim., crassit. 0·006–0·007 millim.; paraphyses tenues, molles; epithecium rufescenti-fuscum. Iodo gelatina hymenialis cærulescens, dein violaceo tincta.—Nyl. *in litt.*

This very distinct form may easily be recognised by the above characters of the thallus, &c.

Common on cindery rocks.

*Lecanora subflavicans*, Nyl.

"Thallus albidus vel albido-flavescens, tenuis, granuloso-inæqualis (K+, flavens); apothecia testaceo-lutescentia vel testaceo-pallida (latit. 0·5–0·8 millim.), margine crassiusculo-ruguloso-inæquali vel demum integro cincta; sporæ 8næ, incolores, ellipsoidæ, longit. 0·010–0·012 millim., crassit. 0·006–0·008 millim.; paraphyses gracilissimæ; epithecium inspersum. Iodo gelatina hymenialis cærulescens, dein thecæ violaceo tinctæ.

"Est species quasi intermedia inter *Lecanoram subgranulatam* et *L. albellam*." Nyl. *in litt.*

On the bark of trees; common.

*Lecanora achroa*, Nyl.

"Thallus glaucescens, tenuis, rugulosus, demum rimosus, nigricanti-limitatus (K flavens); apothecia lutescenti-pallida, plana (latit. 0·5–0·6 millim.), superficialia, margine thallino subcrenato vel subintegro cincta; sporæ 8næ, ellipsoidæ, longit. 0·010–0·016 millim., crassit. 0·006–0·008 millim.; paraphyses graciles; epithecium

granuloso-inspersum. Iodo gelatina hymenialis cærulescens, dein thecæ obscure nonnihil violaceæ tinctæ.

“Ex affinitate videtur *Lecanoræ chlaronæ*. Spermatia vulgo leviter arcuata, longit. 0·018–0·023 millim., crassit. 0·0005 millim. (minus arcuata quam in comparanda *L. achroella*, quæ simul aliis notis differt.”—*Nyl. in litt.*

On bark of trees, specially on *Pandanus*.

*Lecanora achroella*, *Nyl.*

“Thallus glaucescens, tenuis, sublævigatus, rimulosus, nigricanti-limitatus (K flavescens); apothecia lutescenti-pallida, plana, subinnata, minuta (latit. circiter 0·3 millim.), margine thallino tenui integro cincta; sporæ 8næ, ellipsoideæ, longit. 0·009–0·014 millim., crassit. 0·006–0·007 millim.; paraphyses graciles; epithecium vix vel parum inspersum. Iodo gelatina hymenialis cærulescens, dein thecæ subviolaceo tinctæ vel violaceo-fulvescentes.

“Ex affinitate videtur *Lecanoræ chlaronæ*. Spermatia arcuata, longit. 0·015–0·018 millim., crassit. 0·0005 millim.”—*Nyl. in litt.*

On the trunks of trees, associated with the preceding.

*Lecanora perlutescens*, *Nyl.*

“Thallus flavidus vel albido-flavescens, tenuis, subleprosus, determinatus; apothecia cerino-lutea vel luteo-pallescentia (latit. 0·4–0·6 millim.), plana, margine thallino tenui integro vel evanescente cincta; sporæ 8næ, oblongæ vel ellipsoideæ, longit. 0·009–0·013 millim.; crassit. 0·0035 millim.; paraphyses gracilescentes; epithecium inspersum. Iodo gelatina hymenialis cærulescens, dein lutescens.

“Affinis *Lecanoræ lutescenti* (DC) sed minor, magis determinata, sporæ minores, etc. Thallus et nonnihil apothecia CaCl erythrinose vel aurantiacæ tincta. Spermatia arcuata, longit. circiter 0·016 millim., crassit. 0·0005 millim.”—*Nyl. in litt.*

On the bark of trees.

*Lecanora conizæa* (*Ach.*), *Nyl.*

Entirely similar to our European plant. Thallus CaCl—. Spores 0·010–0·014 millim. long, 0·003–0·004 millim. thick.

On decayed wood, not common.

*Lecanora conizopta*, *Nyl.*

“Thallus albidus, tenuis, opacus, passim rimulosus (K flavens); apothecia carneo-lutea vel luteo-rubella, subinnata, plana (latit. 0·2–0·4 millim.), margine thallino depresso inæquali cincta; sporæ 8næ, ellipsoideæ, simplices, longit. 0·010–0·012 millim., crassit. 0·005–0·006 millim.; paraphyses gracilescentes. Iodo gelatina hymenialis cærulescens.

“Videtur e stirpe *Lecanoræ conizææ*, et notis datis facile agnoscitur.”—*Nyl. in litt.*

Common on rocks, and very abundant in many places.

*Lecanora parella* \* *phlæoleuca*, *Nyl.*

“Thallo tenuissimo albo præsertim differens a typo, et facie apotheciorum subpertusariodea. Sporæ longit. 0·038–0·050 millim., crassit. 0·023–0·025 millim. Fortasse propria species.”—*Nyl. in litt.*

On the bark of trees.

*Lecanora atra*, f. *succedanea*, *Nyl.*

“Differt a *L. atra* europæa saltem spermatiis nonnihil brevioribus (longit. 0·007–0·011 millim., crassit. fere 0·001 millim.).”

On many rocks in the higher parts of the island; more rarely on dead wood and bark of trees.

*Lecanora punicea*, *Ach.*

On the bark of trees; common, as it is in Mauritius.

*Pertusaria velata* (*Turn.*)

On the bark of trees, specially *Mathurina penduliflora*; quite similar to our British plant.

*Pertusaria impallescens*, *Nyl.*

“Thallus albidus, opacus, continuus, tenuis (crassit. circiter 0·2 millim.), sublævis, passim rimosus vel rimulosus (K—); apothecia incoloria in protuberantiis thallinis depresso-convexulis innata, 1–4 in quavis tali protuberantia, ostiolis nigris, punctiformibus, vix prominulis; sporæ 8næ, incolores, solitæ generis, longit. 0·070–0·082 millim., crassit. 0·032–0·040 millim. Iodo gelatina hymenialis intensive cærulescens.

“Notis datis satis distincta species, nec ulli cognitæ affinis. Spermatia peculiaria, aciculari-fusiformia (vel fusiformia utroque apice longe aciculari-producto), longit. 0·007–0·009 millim., crassitie medio vix 0·001 millim.”—*Nyl. in litt.*

On rocks. One of the commonest lichens on the island, giving a white appearance to the rocks.

#### Tribe LECIDEEI.

*Lecidea achroopholis*, *Nyl.*

“Thallus albidus vel pallescenti-albidus, squamulosus, squamulis (latit. circiter 1–2 millim.) adnatis, planis, contiguis vel subdispersis, ambitu sublobatulis vel interdum subcrenatis, subtus nigris; apothecia nigra, planiuscula, marginata (latit. 0·7–1·5 millim.), intus obscura; sporæ 8næ, incolores, oblongæ, simplices (vel obsolete vel spurie 1-septatæ), longit. 0·009–0·014 millim., crassit. 0·0035–0·0045 millim.; paraphyses mediocres apice subpurpurascanti-fusco; epithecium et hypothecium subpurpurascanti-infusata (vel hoc parte supera rufescente). Iodo gelatina hymenialis cærulescens, dein subfulvescens.

“Species insignis in stirpe *Lecideæ decipientis*, ut videtur. Thallus firmus K non reagens. Thalamium totum dilute subpurpurascens et K simul cum epithecio et perithecio et hypothecio inferiore purpurascens. Spermogonia supra nigella, intus



incoloria; spermatia tenuiter bacillaria nonnihil vel obsolete curvula (quare subrecta apparent, licet vix unquam sint vere recta), longit. 0·005–0·007 millim., crassit. 0·0006 millim.”—*Nyl. in litt.*

On rocks, usually of a vesicular character.

*Lecidea coccocarpioides*, *Nyl.*

“Thallus albido-glauescens, squamaceus, subadnatus, squamis (latit. 2–5 millim.) inciso-lobatis, incisuris clausis (nec hiantibus) et nigricantibus, ambitu subcrenulato, pagina infera nigra; apothecia nigra, innata, planiuscula, immarginata (latit. 1–2 millim.), interdum 2–3 confluentia, intus obscura; sporæ 8næ, ellipsoideæ vel oblongæ, 1-septatæ (septo saltem spurio), longit. 0·006–0·012 millim., crassit. circiter 0·0035 millim.; paraphyses mediocres; epithecium cærulescens; hypothecium obscure rufescens. Iodo gelatina hymenialis bene cærulescens.

“Species omnino peculiaris et propriæ stirpis. Facie fere *Coccocarpiæ molybdææ*, sed thallus subnitidiusculus, nihil superficie concentrici habet, et ceteroquin est gonidicus.”—*Nyl. in litt.*

On rocks.

*Lecidea melopta*, *Nyl.*

“Thallus albus, tenuis, areolatus, in hypothallo nigro subprædominante instratus; apothecia nigra, in areolis vulgo demum singulatim innata, plana (latit. 0·5–0·7 millim.), immarginata; sporæ 8næ, incolores, ellipsoideæ, longit. 0·008–0·010 millim., crassit. 0·004 millim.; paraphyses non distinctæ; epithecium cærulescens; hypothecium incolore. Iodo gelatina hymenialis bene cærulescens.

“Species bene distincta, et fere urceolariiformis, inter species stirpis *Lecideæ planæ*. Thallus K flavens (I demum nonnihil subroseo tinctus, hæc reactio vero passim obsoleta). Variat thallus crassior (crassit. 0·5 millim.) et pluribus apotheciis in quavis areola (areolis circumcirca lateribus nigris), apotheciis impressiusculis.”—*Nyl. in litt.*

On rocks; common.

*Lecidea disciformis* (*Fr.*), *Nyl.*

On the bark of trees specially *Fætidia mauritiana*, Lam.

*Lecidea triphragmia*, *Nyl.*

On the bark of trees, specially of *Ficus*.

*Lecidea spuria* (*Schær.*)

On decomposed rocks.

*Lecidea immutans*, *Nyl.*

Thallus ochraceo-rosellus (verisimiliter autem typice albidus), areolato-diffractus (crassit. circiter 0·2 millim.), determinatus (K +, flavens); apothecia nigra, superficialia, plana, obtuse marginata (latit. 0·5–0·9 millim.), intus concoloria; sporæ 8næ, fusæ, ellipsoideæ, 1-septatæ, longit. 0·016–0·023 millim., crassit. 0·008–0·010 millim., leviter superficie granuloso-inæquales; paraphyses gracilescentes (non

bene discretæ); epithecium et hypothecium luteo-fuscescentia (aut hoc magis infuscatum). Iodo gelatina hymenialis intensive cærulescens.

“Species bene distincta in stirpe *Lecideæ spuria*. Thallus I-. Spermatia breviter bacillaria, longit. 0·004 millim., crassit. 0·0006 millim.”—*Nyl. in litt.*

On the rocks with the foregoing.

*Lecidea continens*, *Nyl.*

“Thallus lacteus vel sublutescenti-albidus, sat tenuis, continuus, superficie areolato-rimulosus (K flavens, medulla I cæruleo-obscurata); apothecia nigra, plana marginata (latit. 0·5–0·6 millim.), margine fuscescente, intus obscura; sporæ 8næ, fuscae, ellipsoideæ, 1-septatæ, longit. 0·011–0·014 millim., crassit. 0·006–0·007 millim.; paraphyses fere mediocres; epithecium et hypothecium fuscescentia. Iodo gelatina hymenialis intensive cærulescens.

“Ad *Lecideam spuriam* quodammodo accedens et reactionibus conveniens, at thallus alius. Variat perithecium fusco-pallescent. Spermogonia non visa.”

Not uncommon on rocks.

*Lecidea configurans*, *Nyl.*

“Thallus lutescenti-glaucob-albidus, lævis (crassit. 0·5 millim. vel tenuior), subrimulosus, determinatus; apothecia fusco-nigra vel fusca, innata, plana (latit. 0·3–0·5 millim.), immarginata, circumscissa, intus albido-incoloria, demum 2–6 submoniliformi-confluentia (tum quasi lomentaceo-linearia et varie flexuosa); sporæ 8næ, incolores, oblongæ, simplices, longit. 0·011–0·014 millim., crassit. 0·004–0·005 millim.; paraphyses graciles; epithecium sublutescens aut dilute glauco-fuscescens; hypothecium incolor. Iodo gelatina hymenialis cærulescens, dein violascens.

“E stirpe *Lecideæ lævigatæ* species, simplex, facie fere *Lecideæ phæopis*. Thallus K flavens.”—*Nyl. in litt.*

Frequent on rocks with the foregoing.

#### Tribe GRAPHIDEI.

*Opegrapha difficilior*, *Nyl.*

“Thallus macula albescente indeterminata vel obsoleta indicatus; apothecia nigra linearia (longit. 1–2 millim. vel breviora, crassit. fere 0·25 millim.), subsimplicia, recta aut subflexuosa, superficialia; epithecium rimiforme demum arcte angustatum; sporæ 8næ, fusiformes (vetustate obscuratæ), 5–7-septatæ, longit. 0·027–0·033 millim., crassit. 0·004–0·006 millim., hypothecium nigricans. Iodo gelatina hymenialis vinose rubens.

“Sat affinis *Opegraphæ hapaleoidi*, sed thallo, apotheciis et sporis differens. Apothecia sæpius conferta. Spermatia tenuia, rectiuscula, longit. 0·004–0·005 millim., crassit. 0·0005 millim. Comparanda, quoad faciem, cum *O. difficili*, Duf. (quæ non est nisi *O. cinerea*, Chev. ! lignicola), spermatiis aliis mox divergens.”—*Nyl. in litt.*

On decorticated stumps of trees; not common.

*Arthonia phylloica*, *Nyl.*

"Thallus macula alba indicatus; apothecia nigra tenuia erumpentia linearia (longit. 1 millim. vel nonnihil longiora aut breviora, latit. parum 1 millim. excedentia), simpliciuscula aut ramulum unum alterumve emittentia, variantia subastroidea; sporæ 8næ, incolores, oblongæ, 3-septatæ, minutæ, longit. circiter 0·011 millim., crassit. 0·003–0·004 millim.; epithecium subcærulescens. Iodo gelatina hymenialis vinose rubens (præcedente cærulescentia)."—*Nyl. in litt.*

Common on decayed leaves of *Pandanus*.

*Arthonia dendritella*, *Nyl.*

"Thallus macula albo-cinerascente subdeterminata indicatus; apothecia nigricantia, tenuia, innata (latit. 0·1 millim. vel tenuiora), subdendritico-divisa aut simpliciora, sat conferta; sporæ 6–8næ, incolores, oviformi-oblongæ, 3-septatæ, longit. 0·010–0·014 millim., crassit. 0·004–0·005 millim.; epithecium cærulescenti-nigrescens; hypothecium incolor. Iodo gelatina hymenialis subincolor et thecæ vinose violascentes.

"Species e stirpe *Arthronia palmicolæ*, præcipue facie nebuloso-petricola et reactione iodo effecta distincta."—*Nyl. in litt.*

On decayed leaves of *Pandanus*. Frequent.

*Graphis scalpturata*, *Ach.*

On bark of trees.

*Graphis assimilis*, *Nyl. Prodr. Gall.* p. 150 (*N. Gran.* p. 74).

On the bark of trees.

*Graphis analoga*, *Nyl.*

On the bark of trees, associated with other lichens.

*Glyphis cicatricosa*, var. *favulosa* (*Ach.*) *Nyl. N. Gran.* p. 108.

On bark of trees, not uncommon.

*Glyphis tricosula*, *Nyl.*

"Thallus albus vel albidus, opacus, tenuissimus, tenuiter nigricanti-limitatus; apothecia nigra, subcæcio-pruinosa, dendroideo-divisa, sparsa, parum ramosa (divisionibus latit. 0·2 millim. vel tenuioribus); sporæ 8næ, oblongæ, 4-loculares, longit. 0·011–0·012 millim., crassit. 0·005–0·006 millim. (demum infuscatæ); hypothecium fuscum.

"Est *Glyphis* facie *Medusulæ tricosæ* simplicioris, notis allatis satis tute distinguenda."—*Nyl. in litt.*

On stems of *Pandanus*.

## Tribe PYRENOCARPEI.

*Verrucaria 5-septatula*, *Nyl.*

"Thallus macula albida indistincta vel nigricanti-limitata indicatus; apothecia pyrenio integre nigro, supra denudata convexula (latit. 0·2–0·5 millim.); sporæ 8næ,

incolores, fusiformes 5-septatæ, parvæ, longit. 0·013–0·018 millim., crassit. 0·004–0·005 millim.; paraphyses sat graciles, non confertæ. Iodo gelatina hymenialis non tineta.

“Species videtur e stirpe *Verrucaria chloroticæ*, sed paraphyses minus confertæ, quamobrem sit potius stirpis *Verrucaria 5-septatæ*, Nyl. Pyrenoc. p. 58.”

On *Pandanus* stems, not uncommon.

*Verrucaria chlorotica*, *Ach.*

On rocks; probably not uncommon, and quite similar to the European plant. Spores 0·018 millim. long, 0·0045 millim. thick.

On rocks; common.

*Verrucaria denudata*, *Nyl. Pyrenoc.* p. 49.

On the bark of trees.

*Trypethelium cruentum*, *Mnt.*

On the bark of trees. Spores 0·026–0·036 millim. long., 0·012–0·015 millim. thick.

*Trypethelium cruentulum*, *Nyl.*

“Forsan subspecies *Trypethelii cruenti*, Mnt., Nyl. Pyrenoc. p. 73, a quo differt præcipue sporis minoribus (longit. 0·018–0·025 millim., crassit. 0·008–0·011 millim.)”  
—*Nyl. in litt.*

On the rough bark of trees; notably on *Fœtidia mauritiana*.

*Pyrenastrum americanum*, *Spr.*

On the bark of trees; frequent on *Pandanus*.

## FUNGI.

By the Rev. M. J. BERKELEY, M.A., F.L.S.

*Agaricus* (*Pleurotus*) *Balfouri*, *Berk.*

Imbricatus, conchiformis; pileo primitus subtiliter pulverulento pallide umbrino, demum glabrescente ruguloso spadiceo, margine involuto, lamellis in basin incrassatam decurrentibus, primum venosis obtusis, antice reticulatis, demum latis acie crenulatis dentatisve concoloribus.

Pilei 1½ inch wide when fully developed, but often much less, especially when densely imbricated; occasionally the pileus is merely excentric, the gills running down to a distinct attenuated stem, with the gills reticulated above; in highly developed specimens they are two lines broad.

Is not at all common. Endemic.