

[Running title: "Rev. M. J. Berkeley on Australian Fungi".]

Australian Fungi. — II. Received principally from Baron F. von Mueller.
By the Rev. M. J. BERKELEY, M.A., F.R.S., F.L.S.

[Continued from vol. xiii. p. 177.]

[Read November 18, 1880.]

236. AGARICUS (AMANITA) VAGINATUS, *Bull.* Herbert's Creek (*E. M. Bowman*);
Rockhampton (*A. Thozet*).
237. A. (COLLYBIA) LACCATINUS, *Berk.* Cæspitosus, pileo plano-convexo pallide rufo-
carneo glabro, margine sulcato; lamellis crassis paucis concoloribus; stipite
pallidiore fibrilloso.
Moreton Bay. On dead wood amongst leaves. Has at first sight the appearance
of a variety of *A. laccatus*.
238. A. (OMPHALIA) GOMPHOMORPHUS, *Berk.* Luridus, claviformis, pileo umbilicato;
stipite sursum incrassato fibrilloso rufo, e mycelio candido fibrilloso oriundo;
lamellis angustis.
On the ground in dense scrub. Rockhampton (*A. Thozet*). Pileus about $\frac{1}{3}$ inch
across; stem $\frac{1}{4}$ inch high, 1 line thick, paler than the pileus. Allied to *A. fibula*.
239. A. (PLEUROTUS) THOZETII, *Ber. & Muell.* Pileo flabellato-lobato, e stipite radicante
oriundo. ochroleuco; lamellis concoloribus latiusculis.
Pileus 3 inches across, about 2 long. Stem rooting amongst leaves, which are
bound together by earth and mycelium. Sent originally by F. v. Mueller under the
name of *A. Bowmani*.
240. A. (FLAMMULA) SAPINEUS, *Fr.* On rotten wood in dense scrub. Rockhampton
(*Thozet*).
241. A. (NAUCORIA) PEDIADES, *Fr.* A large form.
242. PAXILLUS CRASSUS, *Fr.* Lamellis usque ad basin decurrentibus.
Rockhampton (*Thozet*). As I have no authentic specimen, it is uncertain
whether this is identical with the species of Fries; but at any rate it is very near to it.
243. RUSSULA SANGUINEA, *Fr.* Burnett's River (*Watson*).
244. MARASMIUS MUELLERI, *B.* Cæspitosus; pileo umbilicato rugoso-sulcato subtiliter
tomentoso fulvo; lamellis distantibus latiusculis ventricosis lignicoloribus adnatis,
margine integris; stipite tenui basi dilatato pulverulento-tomentoso.
Herbert's Creek (*E. M. Bowman*). Pileus 1 inch across; stem 1 inch high, 1 line
thick.
245. M. EQUICRINIS, *Muell.* Pileo parvo ex umbrino lacteo paucisulcato, e fibris
sterilibus repentibus nigris, stipiti similibus oriundo.
Dalrymple Creek (*Lieut. Armitage*), Richmond River (*Mrs. Armitage*);

and in various places, but seldom producing pilei. Nearly allied to *M. tomentillus*, which has very short stems. See 'Grevillea,' vol. viii. p. 153, where it is called *M. crinis equi*. I, however, follow the original name of Mueller.

246. *M. LIGNYODES*, *Berk.* Pileo convexo granulato sulcato; stipite nitido nigerrimo striato; lamellis latis ventricosis umbrinis.

On leaves of *Eucalyptus*. Allied to *M. rotula*.

247. *M. EXOCARPI*, *Berk.* Totus resupinatus albus, lamellis paucissimis, interstitiis latis lævibus.

Rockhampton (*Thozet*). On bark of *Exocarpus latifolius*.

248. *LENTINUS GUILFOYLEI*, *Berk. & Muell.* Pileo umbrino profunde umbilicato glabro, cuticula cartilaginea, margine sulcato; stipite curvato concolori striato; lamellis decurrentibus e sulco prope basin continuatis.

Pileus 2½–3 inches across; stem 2 inches high, ⅓ inch thick.

249. *L. LATERITIUS*, *Berk.* Pileo convexo lateritio glaberrimo, margine involuto; stipite concolori rigido subæquali, lamellis albis erosis adnexis.

Pileus 1–2 inches across; stem 1 inch high, ⅜ thick.

250. *PANUS TORULOSUS*, *Fr.* Moreton Bay (*J. M. Bailey*).

251. *P. ARENICOLA*, *Berk.* Brunneus, pileo e stipite brevitomentoso spathulato, margine inflexo; lamellis postice attenuatis fuscis.

Growing in very sandy soil; the stem and pileus both covered with adhering particles of sand.

252. *P. RIVULOSUS*, *Berk.* Pileo ochraceo striato-rivuloso umbilicato quandoque lobato; stipite excentrico striato-rivuloso demum umbrino, lamellis decurrentibus.

Pileus 2½ inches across; stem short, ½ inch thick. When old, it resembles *Paxillus crassus*.

253. *SCHIZOPHYLLUM MULTIFIDUM*, *Fr.* Moreton Bay (*J. M. Bailey*); Chatham Isles.

254. *BOLETUS THOZETII*, *Berk.* Flavus, pileo granulato-verrucoso; stipite gracili flexuoso; poris liberis.

On poor soil. Rockhampton (*Thozet*, no. 909). A single specimen. Pileus about ½ an inch in diameter; stem 1¼ inch high, about 1/16 thick. Clearly a distinct species, with a very unusual habit. There is *Boletus* from Herbert's Creek gathered by E. M. Bowman, which is very like some European species, but which cannot be determined safely.

255. *POLYPORUS (MERISMA) SCABRIUSCULUS*, *Berk.* E stipite cylindrico biunciali repetitive ramosus, ramis sexuncialibus; pileis spathulatis subtiliter pubescentibus scabriusculis; poris amplis.

Pores 1/16 inch across. Forming a very large mass.

256. *P. (MERISMA) SULFUREUS*, *Fr.*
257. *P. (PLEUROPUS) PICIPES*, *Fr.*
258. *P. (PLACODERMEI) FERREUS*, *Berk.* Guilfoyle.
259. *P. (RESUPINATI) VAPORARIUS*, *Fr.* On a resupinate form of *P. ferreus*.
260. *DÆDALEA INTERMEDIA*, *Berk.* Dimidiata pallida zonata, antice e poris radiato-regulosa quandoque impressa; poris magnis hic illic elongatis.
Pileus 2½ inches wide, 1½ long; pores 1/16 inch wide.
261. *MERULIUS AUREUS*, *Fr.* On rotten wood. Rockhampton (*Thozet*, no. 865).
262. *PHLEBIA CORIACEA*, *Berk.* Pileo spathulato coriaceo fusco, venis irregularibus.
On the ground. Rockhampton (*Thozet*, no. 853). Pileus 2½ inches long, 1 inch across, in front spathulate, attenuated behind.
263. *GRANDINIA OCELLATA*, *Fr.* Chatham Islands.
264. *G. GRANULOSA*, *Nees*, var. *OCHRACEA*. Rockhampton (*Thozet*, no. 918).
265. *THELEPHORA CARYOPHYLLEA*, *Pers.* Burnett's River (*Watson*).
266. *STEREUM CAPERATUM*, *Berk. & Mont.* Tweed, Guilfoyle (*Schomburgk*); Moreton Bay (*J. M. Bailey*, no. 18).
267. *S. SPONGIÆPES*, *Berk.* Pileo infundibuliformi spongioso-tomentoso radiato-plicato-rugoso, margine fimbriato; stipite subæquali spongioso, hymenio ochroleuco radiato-rugoso.
Illawarra (*Johnson*). Pileus 2 inches across, ¾ inch high, densely spongy. Closely allied to *S. caperatum*, but the pileus is persistently spongioso-tomentose, and the spongy clothing of the stem is very different from that of the species just mentioned.
268. *STEREUM THOZETII*, *Berk.* Pileo infundibuliformi tomentoso demum radiato-striato subzonato pallido; hymenio rimoso ex albido castaneo polito.
Rockhampton (*Thozet*, no. 920). Pileus ½–1 inch across; stem ¾ inch high, attenuated downwards.
269. *S. LOBATUM*, *Kze.*, var. *RESUPINATUM*. Chatham Islands (*Johnson*, no. 720).
270. *PENIOPHORA DEGLUBENS*, *Berk.* Pallida, effusa crassa deglubens, extus tomentosa, hymenio velutino.
Herbert's Creek. A coarse species. Hymenium like that of *P. velutina*, Cooke.

271. HYMENOCHÆTE RUBIGINOSA, *Lev.* Illawarra (*Johnson*).
272. AURICULARIA PUSIO, *Berk.* Pileo postice adnato antice reflexo albo tomentoso rugoso, margine lobato; hymenio purpurascens.
On trunks of trees (*Thozet*, no. 869). A small but distinct species.
273. CORTICIUM ANTHOCHROUM, *Fr.* On *Casuarina equisetifolia*. Rockhampton (*Thozet*, no. 910).
274. *C. VISCOSUM* (*Pers.*), var. *DEGLUBENS*. On very rotten wood (*Thozet*, no. 867). Adnate, with the margin peeling from the matrix.
275. *C. ARACHNOIDEUM*, *Berk.* On rotten wood 6 feet below the surface. Rockhampton (*Thozet*, no. 929).
276. CLAVARIA LÆTISSIMA, *Pers.* Cæspitosa aurantiaca, repetite dichotoma compressa, apicibus dilatatis, subdivisis, fuscis.
South Queensland (*Hartman, Lockyer*, no. 477).
277. HIRNEOLA RUFA, *Berk.* Moreton Bay (*J. M. Bailey*, no. 1).
278. *H. LESUERII*, *Mont.* Moreton Bay (*J. M. Bailey*, no. 28).
279. BATARREA PHALLOIDES, *Pers.* Between Murchison's River and Shark Bay.
280. GEASTER HYGROMETRICUS, *Pers.* Rockhampton (*Thozet*, no. 907).
281. *G. LIGNICOLA*, *Berk.* Peridio exteriore tomentoso-granulato pallido, irregulariter rupto, interiore brunneo, ore fimbriato; capillitio fusco.
Rockhampton (*Thozet*, no. 908). *Thozet* describes the orifice, "teeth of the stellate orifice chestnut, with a tinge of rose when fresh." Nothing of this appears in the dried plant. Allied to *G. mirabilis*.
282. TULOSTOMA MAMMOSUM, *Fr.* Rockhampton (*Thozet*, no. 848).
283. POLYSACCUM PISOCARPIUM, *Nees.* Moreton Bay (*J. M. Bailey*, no. 30).
284. *P. TUBEROSUM*, *Mich.* Par[r]amatta (*Woolfs*).

INODERMA, *Berk.*, n. gen.

Peridium suberosum, fragile, fibris repentibus ramosis omnino percursum, sporæ breviter fusiformes apiculatæ læves hyalinas, floccis immixtæ.

This genus was formerly named *Mesophellia*; but the occurrence of a species with a very fragile peridium requires an alteration. The fibres are composed partly of cells, partly of very delicate threads like those of the capillitium.

285. INODERMA ARENARIUM, *Berk.* Peridium crassum, suberosum. In sandy ground, subterraneous. Harrietteville, Australia Felix. Two inches in diameter.
286. *I. INGRATISSIMUM*, *Berk.* Olidum, peridio crustaceo fragilissimo. Near the river Goulbourn. Subglobose, about 1 inch in diameter;

flocci delicate, dirty white; spores shortly fusiform, spiculate at either extremity, .0004–.0005 inch in diameter. Odour extremely unpleasant. The spores and capillitium are the same as in the other species.

287. PHALLUS WATSONI, *Berk.* Volva tenui fragili, stipite elongato, capite conico rubro minute venoso, apice pervio.

Burnett's River (*Watson*). It looks at first like a *Cynophallus*, but the head is pervious. Head $\frac{5}{8}$ inch high, $\frac{1}{4}$ inch broad at base, stem $2\frac{1}{2}$ inches high.

288. CYATHUS DESERTORUM, *Muell.* Pallidus, tomentosus, intus glaber, lævis; sporangiis nigris; extus quandoque subtiliter sulcatus.

Darling River. On sand. Peridia about $\frac{1}{5}$ inch in diameter, $\frac{3}{8}$ inch high, including the root, which consists of matted fibres. Spores .0004–.0005 inch long, and nearly as wide.

289. C. PUSIO, *Berk.* Cyathiformis, albidus extus minute depresso-tomentosus, discis pallidis.

On the trunk of *Eucalyptus hemiplæodes*. Rockhampton, no. 793. A very neat little species; spores .0003 inch long.

290. C. FIMICOLA, *Berk.* Cupulæformis, umbrinus, discis concoloribus.

On dung (*Thozet*, no. 859). The whole plant within and without umber, spores .0004–.0005 inch long, narrow.

291. C. PEZIZOIDES, *Berk.* Cupulæformis, extus dense tomentosus, umbrinus.

On decaying herbaceous plants (*Thozet*, no. 856). Unfortunately there are no disks, but the species is clearly distinct.

292. ÆTHALIUM SEPTICUM, *Fr.* On decomposing Bananas. Rockhampton (*Thozet*, no. 847). "Base orange-yellow, cap nankin."

293. CHONDRIODERMA SPUMARIOIDES, *Rostaf.* On roots of reed-like grasses. Rockhampton (*Thozet*, no. 796).

294. CLATHROPTYCHIUM RUGULOSUM, *Wallr.* Moreton Bay (*J. M. Bailey*, no. 9).

295. TILMADOE MUTABILIS, *Rostaf.* On rotten trunks of *Eucalyptus*. Rockhampton, no. 916–930 (*Thozet*).

296. ARCYRIA FERRUGINEA, *Rostaf.* On decayed *Eucalyptus*. Rockhampton (*Thozet*, no. 922).

297. A. NUTANS, *Fr.* Rockhampton (*Thozet*, no. 923). A very pale variety.

298. STEMONITIS FERRUGINEA, *Ehrenb.* Moreton Bay (*J. M. Bailey*, no. 29).

299. TUBULINA NITIDISSIMA, *Berk.* Peridiis nitidissimis aureis, sporis pallidis globosis.
On decayed *Eucalyptus microtheca* (*Thozet*, no. 913).

300. THECAPHORA LEPTOCARPI, *Berk.* Sporis e granis globosis decem consistentibus.
On *Leptocarpus tenax*. Wilson's Promontory. Grains larger than in *T. occulta*.

301. ISARIA FUCIFORMIS, *Berk.* A bright-coloured form, extremely injurious to crops of *Lolium perenne*. The specimens first described were supposed to spring from some germinating grass. This has occurred lately in Sussex.

302. CERATIUM HYDNOIDEUM, *Alb. & Schw.* Rockhampton, on *Eucalyptus* (*Thozet*, no. 849–849 bis).

303. NEMATOGONUM AUREUM, *Desm.* On decayed bark of *Maba obovata* (*Thozet*, no. 931).

THOZETIA, *Berk. & Muell.*, n. gen.

Sporodochium minutum globosum; sporæ hyalinæ oblongæ utrinque seta unica terminatæ.

304. T. NIVEA, *Berk.* On dead wood. Snow-white, hyaline spores oblong, pointed at either end, and terminated with a single long bristle.

305. PSILONIA NIVEA, *Fr.* On bark of *Careya arborea*. Rockhampton (*Thozet*, no. 904). This, like the common production on beech produced by *Adelges Fagi*, is not a true fungus; but as it has been so recorded by Fries, it is thought fit to mention its occurrence here. It arises probably from a different insect.

306. CLADOSPORIUM STENOSPORUM, *Berk.* On leaves of *Acacia Lebbek*. Rockhampton (*Thozet*, no. 928).

307. MYLITTA AUSTRALIS, *Berk.* Illawarra (*Johnson*). A small form, scarcely exceeding an inch in diameter.

PHILLIPSIA, *Berk.*, n. gen.

Contextus lentus, cupulæ amplæ disciformes marginatæ, hymenium semper apertum.

To this genus belong *Peziza domingensis*, *Berk.*, *P. Venezuelæ*, *Berk. & Cush.*, *P. Wynnii*, *Berk.*, *P. inæqualis*, *Berk.*, *P. hirneoloides*, *Berk.*, and *P. emarginata*, *Berk.*, of which the penultimate is Australian.

308. PHILLIPSIA POLYPOROIDES, *Berk.* Effusa adnata crassa carnea, hymenio purpureo.

On dead stems of *Vitis*. Rockhampton (*Thozet*, no. 852). Cups more than an inch across; sporidia elliptic, binucleate, .0012–.0013 inch long.

309. PEZIZA THOZETII, *Berk.* Pateriformis, brunnea carnea, ascis gracilibus longissimis, sporidiis uniseriatis ellipticis utrinque papilla terminatis dein minutissime granulatis.

On *Nepenthes* (*Thozet*, no. 934).

310. ASCOBOLUS AUSTRALIS, *Berk.* Brunneus, ascis clavatis, sporidiis ellipticis purpureo-fuscis lævibus, paraphysibus linearibus apice latioribus.
On dung. Rockhampton (*Thozet*, no 851). Sporidia .021–.028 inch long.
311. XYLARIA HYPOXYLON (*Ehrenb.*), var. BOWMANI (*Muel. [sic]*). Gracilis brevis.
On dead wood, King's Creek. Very slender, $\frac{3}{4}$ inch long, or more rarely 1 inch, about $\frac{1}{24}$ inch thick. Perithecia not sufficiently advanced to show the nature of the sporidia.
312. SPHÆRIA SCHOMBURGKII, *Berk.* Peritheciis magnis liberis, ostiolo lineari, sporidiis elongatis biconicis.
A large and beautiful species; sporidia .0013 inch long, fusiform, with a single septum.
313. SPHÆROSTILBE DUBIA, *Berk.* On the bark of *Ægiceras majus*. Rockhampton (*Thozet*, no. 747). This is only in the *Stilbum* state; it is clearly distinct, but no character can be given without the ascigerous form.

I take this opportunity of calling attention to a little understood species of Sowerby, which, indeed, has been entirely neglected by Fries, except so far as a note in the index to the third volume of the 'Systema,' where it is said to be allied to *Coprinus domesticus*, and is not included in the latest list of British species of Fungi. The species in question is *Agaricus acetabulosus*, Sow. t. 303, an allied form having been found by Mr. Drummond at the Swan River. The original specimen is still in existence, attached to the drawing from which the plate was made; and it is clear that it is no *Coprinus*, but is quite as distinct from that as is *Bolbitius*. It must form a separate section in Dermini, which may be called *Acetabularia*, analogous to *Volvaria* and *Chitonia*, and of which there will be two species.

Velum universaliter a pileo discretum; hymenophorum discretum; lamellæ liberæ; sporæ pallide fulvæ v. brunneæ.

1. AGARICUS (ACETABULARIA) ACETABULOSUS, Sow. t. 303. Lamellis hispidis.

2. A. CYCNOPTAMIA, *Berk.* Lamellis pallide cervinis lævibus, stipite corneo.

Sent by Mr. Drummond from the Swan River, where it is said to be very rare. Pileus $\frac{3}{4}$ inch in diameter, stem $1\frac{1}{4}$ inch high, about a line thick. Gills leaving a free space round the top of the stem; spores .0003–.0004 inch in diameter. Volva composed of intricate threads, with a central dark patch, which appears to contain spiral vessels, but the materials are so scanty that it is impossible to speak with certainty. Attached to the specimen is a species of *Arachnion*, Schwein. (the spores are globose and .0002–.0003 inch in diameter), which may be called *A. Drummondii*, *Berk.*