
NOTES ON SOME FUNGI FROM NEW GUINEA

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In 1943 and 1944 a few parasitic fungi were found by the author in Papua and the Mandated Territory of New Guinea. Opportunities for collecting were limited and the present list is by no means exhaustive for the areas mentioned. Cummins (1940, 1941A, 1941B) has recorded a large number of rusts from New Guinea (collections by Mrs. M. S. Clemens), and it is probable that many fungi of other groups will be recorded when an organized search for them is made.

I wish to thank Mr. S. T. Blake who has checked the identity of the plant host species, and Mr. G. H. Hardy who determined the genus of an insect host.

ASCOMYCETES.

Cordyceps muscae P. Hennings. (Engl.Jahrb. XXV. 507. 1898).

Host: *Sarcophaga* sp. (Calliphoridae, Diptera). Bomana, near Port Moresby, Papua. May 1944.

The insect host of this species was found dead in a resting position on a twig. Hennings, when describing this species, used only gross morphological characters, the perithecia being recorded as immature. The specimen from Bomana agrees with Hennings' description, and in it also the perithecia are immature.

Phyllachora sp.

Host: *Paspalum scrobiculatum* L. Terapo, on south coast of Papua. 2 September 1943.

USTILAGINALES.

Cintractia axicola (Berk.) Cornu. (Ann.Sci.Nat.Bot. 279. 1883).

Host: *Fimbristylis dichotoma* (L.) Vahl. Wau. 6 December 1943.

Cintractia sp.

Host: *Ischaemum indicum* (Houtt.) Merrill. Wau. 7 December 1943.

UREDINALES.

Puccinia digitaliae Pole Evans. (Ann.Bolus.Herb. II. p. 111. 1917).

Host: *Digitalia adscendens* (H.B.K.) Henrard. Lalapipi, on south coast of Papua. 25 August 1943.

Cummins (*loc.cit.*) has recorded this rust on *Digitaria pertenuis* Buse, *Digitaria pruriens* (Fisch.) Buse and *Digitaria* sp. from several localities in the Mandated Territory of New Guinea.

Puccinia rufipes Diet. (Engl.Bot.Jahrb. XXXII. p. 48. 1902).

Host: *Imperata cylindrica* (L.) Beauv. var. *major* (Nees) C. E. Hubbard.
Lalapipi, on south coast of Papua. 30 August 1943.

This rust is widespread on *Imperata* in tropical and sub-tropical Africa and Asia. It is recorded by Cummins (*loc.cit.*) from the Mandated Territory of New Guinea, and it has recently been recorded from Queensland (Langdon 1948).

DEUTEROMYCETES

Helminthosporium ravenelii Curtis & Burk. (Nth.Amer.Fung. n. 628).

Host: *Sporobolus diander* (Retz) Beauv. Wau. 7 December 1943.

This fungus, causing "Sooty Head" disease of the inflorescence, is common on *Sporobolus* spp. in various parts of the world.

Darluca filum Cast. (Cat.Pl.Mus.Suppl. p. 53. 1851).

Host: *Uredo* sp. on the leaves of *Fimbristylis dichotoma*. Wau. 7 December 1943.

This parasite of the rust fungi appears to be worldwide in its distribution.

Sphacelia spp.

The imperfect stages of ergot disease were found on a number of grasses. The identity of the species of *Claviceps* (to which the *Sphacelia* spp. undoubtedly belong) is not known with certainty, but as indicated below, some at least probably belong to species recorded in Australia recently (Langdon 1942). *Cerebella* sp. was found associated with the sphacelias on the New Guinea hosts.

Hosts: *Capillipedium parviflorum* (R.Br.) Stapf. Wau. 7 December 1943.

This is the first record of an ergot on this host species. The closely related species, *Capillipedium spicigerum* S. T. Blake has been recorded as a host of *Claviceps pusilla* Ces. in Queensland (Langdon *loc.cit.*).

Capillipedium sp. Bulolo. 2 October 1943.

This species of *Capillipedium* differs from the Australian species *C. parviflorum* and *C. spicigerum*, and is a new host species for ergot.

Themeda australis (R.Br.) Stapf. Wau. 7 December 1943.

This species is a common host of *Claviceps pusilla* Ces. in Australia. Possibly this sphacelia belongs to that ergot.

Paspalum longifolium Roxb. Terapo, on south coast of Papua. 2 September 1943; Wau. 7 December 1943.

Digitaria violascens Link. Lalapipi, on south coast of Papua. 2 September 1943; Wau. 3 October 1943.

The conidia from the sphacelia on this host resemble those of the ergot of *Digitaria longiflorum* (Retz) Pers. (*Claviceps glabra* Langdon).

Digitaria sp. Laloki River, about 8 miles north-east of Port Moresby. 7 May 1944.

Both the sphacelial and sclerotial stages of a species of *Claviceps* were found on this host. The sclerotia were quite different from those of *Claviceps glabra* Langdon and did not conform to the description of the sclerotia of *Claviceps digitariae* Hansford. This specimen has been lost.

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