

ON A NEW CORDICEPS.

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BY L. RODWAY.

Plate.

The genus *Cordyceps* comprises a well circumscribed group of Sphæriaceous Fungi, all very similar in habit, structure, and fructification.

Their habit is to commence life within the bodies of insects; usually when these are in the larval stage. Here the ordinary vegetative growth proceeds, namely, development of hyphal tissue. This soon disturbs the comfort and health of the host, who, in most instances, then seeks seclusion and dies. The fungus continues to grow, and absorbs all but the hard chitinous parts. When food runs short, fructification commences. One or more stems, sometimes of considerable length, grows from the host-remains, and towards the end of each stem are developed numerous partially or entirely sunk little sacks. Each sack contains several cylindrical bags or asci. Each ascus contains eight thread-like spores, and each spore splits up into numerous segments. Each segment is the unit of a new individual.

The species of the genus are distinguished by the shape of the spore-bearing body or club. The species are fairly numerous, but the earlier found specimens were small, and consequently interested few, except students of mycology. The discovery of giant forms in New Zealand and Australia, however, brought them within the ken of the curiosity gatherer.

The first to gain this attention was the caterpillar fungus of New Zealand, *C. larvarum*, W., also known as *C. robertsii*, Cooke. This fungus grows on a large caterpillar, the larva of a *Pielus*, but possibly also on other hosts. The club of this species is very slender, many inches in length, and pointed at the apex. The sporiferous portion is very slightly thickened. A few forms closely allied to, if not absolutely identical with this have been found in New South Wales, so it is possible it may yet be found in Tasmania.

Shortly after this, attention was drawn to the fine *Cordyceps* commonly found in Tasmania. In this species, *C. gunnii*, Berk., the club is stout, and of varied length, sometimes attaining six or eight inches; the fertile portion is somewhat thickened, dark coloured, and ends obtusely.

In 1858 Gray described a distinct species found by Mr. Hawkes near Launceston. It is nearly as large as some forms of *C. gunnii*, but the club is much bent, often branched, and the apex abruptly blunt.

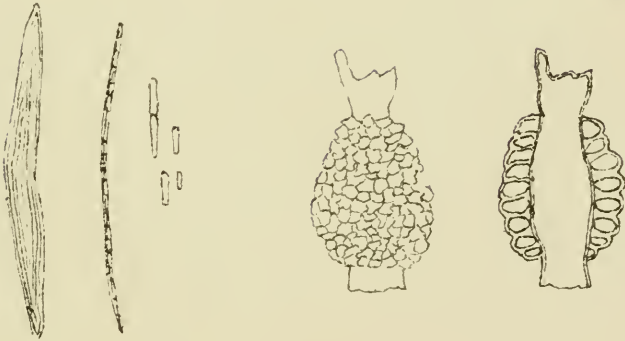
Recently the late Entomologist of New South Wales, Mr. Oliff, in a pamphlet under the auspices of the local Department of Agriculture, drew attention to the forms found in Australia, at the same time describing many forms as new species. I doubt if mycologists will accept them all. *C. selkirki* and *C. coxii* are too close to *C. larvarum*, and *C. trictenæ* owes its existence to an unfortunate oversight. It is founded on a lithograph that the author, in good faith, understood had never been published; unfortunately, however, it is a fac-simile of the plate accompanying Berkeley's description of *C. taylori* (*Sphaeria taylori* Berk.) in Hooker's London Journal of Botany, N.S., Vol. II., 1843. One of these new species, *C. scottianus*, though close to *C. entomorrhiza* Dick, is probably distinct, and is of interest to us, as it has been once found in Tasmania.

Some years ago Mr. H. Stuart-Dove, of Table Cape, sent me a most interesting specimen, that differs markedly from any described species. In habit it approaches *C. taylori*, Berk., in so far that the clubs are numerous, and arise from a cordlike extension of the mycelium, but it differs, not only in size and lesser immersion of the perithecia, but in the sporiferous portion, forming an oblong enlargement near the apex of the club, but leaving a narrow, irregular, barren end. The following description sufficiently explains details:—

*Cordyceps dovei*, n.s. Sporocarp formed of an irregular thick cord-like stipes arising around the head of the host, clubs very numerous, 5—7 m.m. long, the base and apex

slender and barren, perithecial portion ovoid and much thickened. Perithecia numerous, rather large, protruding, causing a coarsely granulated surface, dark red-brown, rest of fungus brown ochre. Asci cylindrical, sporidia 8, filiform breaking up into numerous segments.

On a Coleopterous larva in a decayed trunk of *Fagus cunninghami* at Mount Bischoff, by Mr. H. Stuart-Dove, after whom it is named.



*Cordyrops dovei*, Rod.