THREE ADDITIONS TO THE FUNGI OF NEW SOUTH WALES.

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(Plate xiii., figs. 9-13.)

The three species of Fungi here recorded are new for New South Wales. Two of them have hitherto been found in Victoria, and one of these is also a Brazilian form. The species of *Stilbum* found upon dead insects are few in number, only four being given in Saccardo's Universal Index of Fungi, 1897, and their distribution is very varied—one belonging to N. America, another to the Tropics, a third to France, and a fourth to Australia.

The species of *Stilbum* found on dead wood among moss had no reproductive bodies, but it is otherwise fully described in the hope that it may yet be found in the reproductive stage.

Isaria cicadæ, Miq.—Cicada Club.

(Plate xiii., fig. 9.)

Stroma projecting forward from dorsal surface of head at joint between antennæ, slender, chocolate-brown, fully $2\frac{1}{2}$ in. long and 1 line thick, slightly twisted, with minute stump alongside stem at base and forking at apex, each fork about $\frac{1}{2}$ inch long and terminating bluntly; hard and compact, with interior white tissue and brown bark-like outer portion. Conidia borne at apex of slender filaments, hyaline, cylindrical, obtuse at both ends, 8-9 × $3\frac{1}{2}$-4 μ.

On *Cicada*. Orange, New South Wales (R. T. Baker), and previously recorded from Victoria.

References.—Miquel, Ann. Sci. Nat. p. 378 (1838); Saccardo, Syll. Fung. Vol. iv. p. 595 (1886); Cooke, Veg. Wasps and Plant Worms, p. 284 (1892); and Handb. Austr. Fungi, p. 383 (1892).

This species was first found on the larva of a Cicada in Brazil, and Miquel considers that it developed after death and not on the living insect. It is described by Cooke as cylindrical, tough, branched in the upper portion and producing cylindrical obtuse conidia.

Stilbum formicarum, Cooke & Mass.—**Ant Stilbum.**

(Plate xiii., figs. 10-12.)

Stems (7) black, slightly flexuous, hair-like, smooth, up to 5-6 mm. long, slightly thickened at base. Capitulum obovate to elliptic, rosy to rose-pink, about 250 μ long. Conidia hyaline, elliptic-ovate, $5\frac{1}{2}$-7 × 2-$2\frac{1}{2}$ μ.

On dead Ants among moss. Ballina, New South Wales (Rev. W. W. Watts).

Seven stems arose from various parts of the ant's body—two from the lower surface of the head and five from the sides of the body. They vary considerably in size from 1 mm., and gradually become a little more slender towards the head. The hyphæ of the stem are clear brown externally and hyaline internally, and composed of elongated, septate, firmly united filaments.

This species was first described by Cooke & Massee on a dead ant, from Cheltenham, Victoria, in Grevillea, Vol. xviii., 8 (1889), so that it is new for New South Wales.

Stilbum sp.

(Plate xiii., fig. 13.)

Stem black, hair-like, becoming pallid towards head, long (up to 9 in.). Capitulum oval, black, but ruddy-brown by transmitted light, 320 × 170μ. Conidia . . . .

On dead pieces of wood (entangled in moss), August. Ballina, New South Wales (Rev. W. W. Watts).

The hair-like stems are mostly barren, and although several were met with, only one terminated in a head. The outer layer is composed of dark brown, almost black, elongated, narrow, transversely septate filaments enclosing more delicate, hyaline, slender, septate hyphæ. It seems to resemble a *Stilbum*, but the absence of reproductive bodies leaves it in doubt.

EXPLANATION OF FIGURES.

Plate XIII.

Isaria cicadæ, Miq.

Fig. 9.—Conidia (× 1000).

Stilbum formicarum, Cooke & Mass.

Fig. 10.—Portion of stem with head (× 52).
Fig. 11.—External portion of stem (× 1000).
Fig. 12.—Conidia (× 1000).

Stilbum sp.

Fig. 13.—Head at end of black hair-like thread (× 52).