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AUSTRALIAN CICADIDÆ.

THE MATING OF CYCLOCHILA AUSTRALASIÆ, Don.
AND THOPHA SACCATA, Amyot.

By W. J. RAINBOW, F.L.S., F.E.S., Entomologist.

(Plate xi.)

A short time ago, Mr. T. M. McGregor, of Rockdale, presented to the Trustees, a green male of *Cyclochile australasia*, Don, ("Green Monday"), and a female of the "Double-drummer," *Thopha saccata*, Amyot, which he had taken *in cop*. last summer, when collecting around Sydney. Numerous instances of insects of distinct species and genera taken in the act of coition, have, from time to time been recorded in the Old World, but this appears to be the first instance of the kind reported from Australia.

Mr. McGregor informs me that when his attention was attracted to these insects, he at first thought he had discovered an unusually large Cicada, and it was not until he had captured them, that he discovered he had secured two Cicadas of distinct genera in the act of coition. These when taken were placed in the cyanide bottle. When captured the female was suspended to a branch, which she had firmly grasped with her legs, whilst the male was hanging head downwards, but grasping his partner round her abdomen. Fig. 1, in the accompanying plate gives a side view of the insects in cop.; fig. 2 illustrates the male Cyclochila australasia, and fig. 3, the female, Thopha saccata.

The following is a brief list of references bearing on the subject:

Low (F.)—Records two fertile copulations of distinct species of Zygænidæ: Z. carniolica, Scop., male, with Z. ephidles, Linn. Verh. Zool.-bot. Ges. Wien, xvi., 1866, p. 951.

Andrews (W. V.)—On the Copulation of Distinct Species of Lepidoptera. Canadian Entomologist, iv., 1872, pp. 78 and 79.

Frey and Wullschlegel.—Hybrids occurring naturally between Deilephila vespertilio, Esp., and D. hippophaes, Esp.; D. elpenor, Linn., and D. porcellus, Linn.; and Smerinthus ocellatus, Linn., and S. populi, Linn. Mittheil. Schw. ent. Ges., iv., 1874, pp. 206-210.

- Reuter (O. M.)—Sur l'hybridisation chez les Insectes. Ent. Tidskr., i., 1880, pp. 174-177. On Abnormal Pairing in Insects, and the questions arising therefrom. Efv. Finsk. Soc., xxiii., 1881, pp. 1-30. The writer discusses the various instances which have occurred in various orders of Insects of different species, or even different genera, pairing; and also copulation "inter mares."
- Suchelet (A.)—L'hybridite dans la Nature. Rev. Quest. Sci., xxiv., 1888, pp. 180-187.
- Rodgers (J. T.)—Results of Copula between two different varieties. *Entomologist*, xxii., 1889, pp. 49-50.
- Heyden (L. V.)—Ueber copula verschiedenartiger Coleopteren. Deutsche ent. Zeitsch., 1889, p. 212. Six cases, some between species of different genera.
- Weed (C. M.)—Copula between Aphididæ of Different Genera. Insect Life, iii., 1891, p. 290.
- Fletcher (W. H. B.)—Hybridism of Zygænia loniceræ, Esp., and Z. filipendulæ, Linn. Trans. Ent. Soc., 1891, p. ix.
- Tutt (J. W.)—Hybrid between Amphidasis prodromaria, W. V., and A. betularia, Linn. Trans. Ent. Soc. 1891, p. xvi.
- Escherich (C.)—Die biologische Beduntung der "Genitalanhänge der Insekten" (Ein Beitrag zur Bastard frage.) Verh. Zool.-bot. Ges. Wien., xlii., 1892, pp. 225-240, pl. iv.
- Standfuss (M.)—Ueber die Hybridation bei den Insekten. Mittheil. Schw. ent. Ges., viii., 1892, pp. 386-396.
- Rudow (F.)—Hybrid of Libellula quadrimaculata, Linn., and L fulva, Müll. Soc. Ent. Zurich., viii., 1893, p. 84.
- Rocquigny (G. de)—Copulation of Satyrus and Vanessa. Feuille Nat., xxiv., 1894, p. 174.
- Graves (S.)—Copulation of Argynnis paphia, Linn., and Theclaquercus, Linn. Entomologist, 1894, p. 269.
- Shepheard-Walwyn (H. W.)—Pairing of distinct species and genera of Lepidoptera. Entomologist, 1896, p. 166. Copulation between Lepidoptera of Different Genera. Berl. ent. Zeitsch., 1896, S.B., p. 8.
- Jacobson (G)—Ueber anormale Kopulation bei der Insekten.

 Hora Soc. Ross., xxxi., 1898, pp. cxxv-cxxxi.
- Schulz (O.)—Copula between males of Bombyx quercus, Linn. Berl. ent. Zeitsch., xliv., 1899, S.B, p. 27.

EXPLANATION OF PLATE XI.

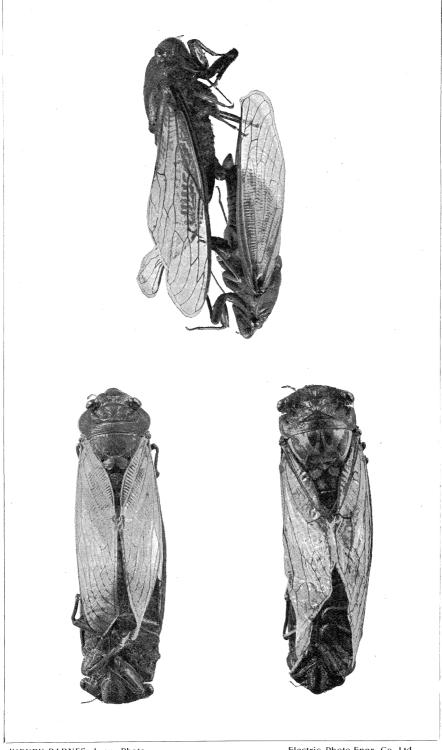
Cyclochila australasiæ, Don., and Thopha saccata, Amyot. Fig. 1. In cop., side view.

CYCLOCHILA AUSTRALASIÆ, Don.

., 2. Male.

THOPHA SACCATA, Amyot.

,, 3. Female.



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