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ENTOMOLOGICAL SOCIETY

OF

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PROCEEDINGS

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Referring to the crepuscular "Skippers" Dr. Neave remarked that in Africa the flight was not a long one, but took place before settling down.

Mr. Green said that in Ceylon allied "Skippers" were day-fliers, but took shelter in culverts from which they could be disturbed.

Referring to the migration-like flight of Calpodes ethlius Mr. G. C. Champion said that the dates given by Mr. Williams fell into the dry season, and that his experience in Central America led him to believe that the insects were seeking water in damp spots in some nearly dry river bed.

Papers.

The following papers were read:-

"On the Types of Oriental Carabidae in the British Museum, and in the Hope Collection in the University Museum at Oxford," by H. E. Andrewes, F.E.S.

"The British Species of Genera Andrena and Nomada," by R. C. L. Perkins, M.A., D.Sc., F.Z.S., F.E.S.

Wednesday, June 4th, 1919.

Comm. J. J. Walker, M.A., R.N., F.L.S., President, in the Chair.

Death of a Fellow.

The sudden death of Mr. W. E. Sharp, a former member of the Council was announced.

Election of Fellows.

Messrs. Christopher Howard Andrewes, 1, North Grove, Highgate, N. 6, and J. Winterscale, Sungei Klah Estate, Sungkai, Perak, were elected Fellows of the Society.

Exhibitions.

A BRED SPECIMEN OF LOBESIA PERMIXTANA.—Mr. SHELDON exhibited a specimen of *L. permixtana*, Hb., bred from the egg, nd reared on oak, its supposed usual food-plant.

PUPATION OF CHATTENDENIA W-ALBUM.—The Rev. G. Wheeler exhibited, on behalf of Mr. Prideaux, some larvae (full grown, and after the colour-change) and pupae of this species, which were found in the open on twigs of Wych-Elm, near Brasted, on June 1. The larvae seem fond of choosing the deserted domicile of some other leaf-spinning larva, such as Cheimatobia brumata or a Tortrix.

SPIDER AND BUTTERFLY PREY.—Mr. WHEELER also exhibited for Mr. PRIDEAUX a specimen of Hesperia alveolus, seen on May 28 near Brasted, on a spike of bugle, with wings outspread, and which refused to move on being approached. It was found to be dead, though still limp, with a spider (also exhibited) with its fangs embedded in the back of the thorax. The spider allowed itself to be boxed, without relinquishing its hold on its victim, and retained this position for several hours. Subsequently a live specimen of Cabera pusaria was offered to the spider, which it treated in the same way as the Skipper. A specimen of Hadena dentina, however, was differently approached, the fangs being inserted beneath the thorax, between the 2nd and 3rd pair of legs.

OVA OF COCCINELLA DISTINCTA.—Mr. DONISTHORPE exhibited eggs of $Coccinella\ distincta$, found at Weybridge on May 30, on oak, fir, and birch over rufa nests; the empty egg-cases of eggs laid on 21. v. 19, which hatched on 25th; young larva hatched on 25th, 1st moult on May 30; also a live $\[\] C.\ distincta$, which was observed at Weybridge laying eggs on an oak-leaf, together with the eggs in question.

The life-history appears to be briefly as follows:—Copulation takes place in May (I observed it on May 14 and 21 this year; the $\mathfrak F$ sits far back on the $\mathfrak P$, and his front tarsi rest on the large black central spots on the elytra of the $\mathfrak P$). The eggs are laid in May; a few were laid in captivity on May 17, but were subsequently eaten by the Lady-Birds themselves. One bunch of some twenty eggs was found on the underside of a pine-needle on May 21, at Weybridge, but as no more could be found it was probably early. On May 30, however, bunches of eggs were found on pine-needles, oak, and birch over rufa nests, and a $\mathfrak P$ was observed laying eggs on the underside of an oak-leaf. When she had finished she walked quickly away.

The eggs are long and of a bright yellow colour, and are laid in rows like a lot of little barrels placed close together. When the young larvae hatch in about five days they feed on the Aphidae on the trees. Judging from my experience last year they become full fed by the beginning of July, pupate on the trees and remain in the pupal state for eight and nine days. The perfect insect then remains on the trees and near the rufa nests for the rest of the year, hibernating on the trees and sparingly in the nests.

Many Fellows, including Dr. Marshall, Prof. Poulton and Messrs. Champion, Corbett, Rowland-Brown, Blair and Crawley, discussed Mr. Donisthorpe's observations.

Puparia unidentified.— Mr. E. E. Green exhibited some puparia found on decayed wood, at the margin of a lake near Shrewsbury, in the month of September. The puparia are of the shape of a limpet-shell, open below, with a sub-acute apex; of a dense structure and pitchy black colour; the outer surface rugose. The material of which they are composed is probably excrementitious. The pupa of the insect occupies the concavity of this cover and is exposed below.

Mr. Green asked whether any Fellows present were acquainted with these puparia, which he thought might be those of a Coleopteron. Mr. Collin suggested that they might be those of a mycetophilous Dipteron, Mr. Green then remarking that he had seen somewhat similar Mycetophiled cases in Ceylon.

EVIDENCE OF MENDELIAN HEREDITY IN PAPILIO DARDANUS, BROWN.—Prof. Poulton said that he had received, on May 27, a letter from Mr. C. F. M. Swynnerton, giving an account of some interesting breeding experiments on *P. dardanus*:—

"Chirinda, S.E. Rhodesia, "April 13, 1919.

"I have a little news for you at last, not about *ethalion* this time but about *dardanus*. Mr. E. E. Platt sent me last year 2 families of *cenea* pupae. The first got here *just* in time, the second just too late (emerged and dead). Each had a slight *hippocoon* taint, shown by 2 or 3 of the 99 in each being *hippocoon*. There were no *dardanus* obtainable here then, though I searched myself and put on my good native collector