EGG PARASITES OF *SEXAVA* SPP. IN THE TERRITORY OF NEW GUINEA.

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During the investigations into the "Coco-nut Tree Hopper" (*Sexava* spp.) several *Hymenopterous* parasites have been bred from the eggs of this *Orthopteron*, and the following notes constitute a record of their occurrence to date, with a brief statement of their relative importance, &c.

The richest field for *Sexava* egg parasites, to date, is the island of New Hanover, about 30 miles W.N.W. of Kavieng (situated on the northern end of New Ireland). Six species in all were bred out in the field laboratory, two of which vied for seniority of importance, while a third was but very little less common in occurrence. In order of importance they are as follows:—

1. *Doirania leefmansi* (*Trichogrammatidae*),
   Leefmansia bicolor var. (*Encyrtidae*).
2. A species of *Mymaridae* (not yet identified).
3. *Prosapegus attrellus* (*Scelionidae*).
   Scelio sp. (*Scelionidae*).
4. *Ootetrastichus dubius Waterst.* (*Eulophidae*).

In the Manus district four species have been bred from *Sexava* eggs, but none of them of apparent economic importance—

1. *Prosapegus attrellus* (*Scelionidae*).
2. *Scelio* sp. (*Scelionidae*).
3. *Ootetrastichus dubius* (*Eulophidae*).
4. A species of *Mymaridae* (as yet unidentified).

The last-mentioned is not the same species as that from New Hanover.

From *Sexava* eggs collected on the west coast of New Ireland, two species of *Hymenopterous* parasites have been bred—

1. *Scelio* sp. (*Scelionidae*).
2. A species of *Mymaridae* (not yet identified).

Neither emerged in any numbers.

With the exception of the two species of *Scelionidae*, these are all minute wasps, some being almost microscopic in size.

The only indigenous parasites that are apparently of economic importance are *Doirania leefmansi*, *Leefmansia bicolor* var. and the New Hanover species of *Mymaridae*. Although the other "wasps" mentioned play a part, they are numerically few, as judged by the numbers emerging from many thousands of *Sexava* eggs under observation in the field laboratory.

From the point of view of distribution from New Hanover to other parts of the Territory, although *Leefmansia bicolor* var. breeds freely in captivity, *Doirania leefmansi* has been very difficult to handle in the laboratory, and never developed strong colonies, while it was not found possible to breed the *Mymarid* through a single life cycle under similar conditions.

Collections of *Sexava* eggs made in the field, and transported direct with as little delay as possible, appear to offer the only satisfactory means of introduction of two or more of these parasites to other districts.

An interesting feature, entomologically, of the New Hanover species of *Mymarid* is that the male is apterous (wingless) and never moves far from the emergence hole in the host egg, and has apparently a very short life.

In the island of Amboina, Netherlands East Indies, two of the New Hanover species were bred from *Sexava* eggs, while a third is only a variety; these are—

1. *Leefmansi bicolor.*
2. *Doirania leefmansi.*
3. *Ootetrastichus dubius.*