# A CHALCIDOID EGG-PARASITE OF AN AUSTRALIAN BUPRESTID.

## By Ch. FERRIÈRE, D.Sc., F.R.E.S.

## Museum of Natural History, Geneva.

In the course of a study of the biology of the Buprestid, *Prospheres aurantiopictus*, Cast., in Australia, Mr. A. R. Brimblecombe has obtained from the eggs an interesting small Chalcid belonging to the family ENCYRTIDAE.

Several Encyrtid parasites of insect eggs are already known. In Australia Ovidencyrtus pallidipes, Girault, parasitises Reduviid eggs, Tetracnemella megymeni, Dodd, and T. hyalinipennis, Dodd, Pentatomid eggs, and Cheiloneurus viridiscutum, Girault, has been bred from those of cockroaches. In Hawaiithegenera Ectopiognatha, Perkins, and Fulgoridicida, Perkins, are found parasitising the eggs of Homoptera. In addition Leefmansia bicolor, Waterston, has been bred from the eggs of the Orthopteron, Sexava sp., in Amboina and Leurocerus ovivorus, Crawford, from the moth, Amathusia phidippus, L., in Java. But most of the Encyrtid egg parasites belong to the genus Ooencyrtus, Ashmead, and it is among them that is placed the only other species known to breed in the eggs of a Coleopteron, Ooencyrtus batocerae, Ferrière, from Malaya. Another species, Tyndarichus rudnevi, Nowicky, is said to have been obtained from the eggs of Cerambyx cerdo, L., in Russia, but as the species of Tyndarichus are generally considered to be hyperparasites, the real parasite of this European Longicorn is still uncertain.

Girault has described six species of *Ocencyrtus* from Australia, in all but one case, from a single female caught in the forest. The only species obtained by breeding, *O. metallicus*, Gir., comes from the egg-masses of *Tara tephrosis*. The parasite of *Prospheres* differs distinctly from all these Australian species and, as it is the only known parasite of Buprestid eggs, it is described here as a new species.

#### Ocencyrtus prospheris, sp. nov.

95 Black, slightly cupreous on thorax and abdomen and dark green on the face. Antennae entirely black. Legs dark, knees, tibiae at apex and tarsi yellowish.

Q Head transverse, the face inflexed. Antennae inserted a little below the middle of the face; scape short, oval, pedicellus slightly longer than broad, funicle joints shorter than the pedicellus, subquadrate, the last two a little broader than long;

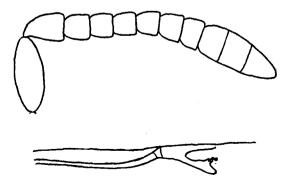


Fig. 1. Ocencyrtus prospheris, sp. nov. Antenna and wing nervature.

club not broader than the funicle, about as long as the four preceding joints together. Thorax short, oval, almost flattened above on dried specimens; mesonotum and scutellum finely reticulate-striated, dull; pronotum much transverse, almost as broad as the mesonotum, which is itself more than twice as broad as long; scutellum rounded behind; axillae narrow, their inner angles shortly but distinctly separated; propodeum shining, very short, with a median carina. Wings hyaline, reaching beyond the tip of the abdomen; marginal vein situated at about the middle of the anterior margin, a little longer than broad, about as long as the postmarginal and the stigmal veins. Before the oblique hairless line the ciliae are a little larger and less dense than on the rest of the wing; marginal ciliae very short. The spur of the middle tibiae is as long as the metatarsi. Hind femora and tibiae slightly flattened. Abdomen short, narrower than the thorax, about twice as long as broad. Ovipositor shortly protruding.

Similar but smaller, the antennae longer, with the funicle joints covered with short ciliae, the first joint longer than the pedicel and narrower, the following joints progressively shorter and broader, the last subquadrate; club a little longer than the two preceding joints together. Abdomen shorter than the thorax.

Length :  $\bigcirc 0.9-1$  mm. ;  $\Huge{(3)} 0.7-0.8$  mm.

Australia : Queensland, Imbil, xii.1943,  $5 \bigcirc 2 \checkmark (A. R. Brimblecombe)$ .

Type in the British Museum.

In Girault's key of the genera of ENCYRTIDAE (Mem. Queensland Mus., 4, 1915, p. 120: tribe Encyrtini), this species would run to the genus *Schedius*, Howard, as the axillae are distinctly separated. But it has already been shown that the axillae may be more or less connate or separated in near related species and that this character is insufficient to distinguish two different genera. Therefore *Schedius*, How., is considered a synonym of *Ooencyrtus*, Ashm. (Ferrière, Bull. ent. Res., 22, 1931, p. 282).

This new species may be distinguished from all other Australian species described by Girault under *Ooencyrtus* or *Schedius* with the aid of the following key :---

#### Ovencyrtus spp. from Australia.

1. Forewings with a dusky cloud below the marginal vein2
Forewings hyaline4
2. Head and thorax metallic purple with greenish tinges. Antennae yellowish white with the last funicle joint blackishmetallicus, Gir.
Head orange-yellow or golden
3. Thorax dark metallic blue, abdomen coppery with the sides and venter orange-yellow. Antennae whitish, pedicel and 6th funicle joint black. Funicle joints all wider than long, except first quadrate; club about three- quarters the length of the funiclebicolor, Gir.
—. Thorax and abdomen grass green. Antennae dusky, scape pale yellow. Funicle joints wider than long, except the 6th larger; club as long as the funicleauricaput, Gir.
4. Legs white, except coxae and sometimes a ring on hind tibiae
←. At least hind legs mostly black

630

- 5. Hind tibiae with a broad dark ring extending from near the knees to the middle. Funicle joints wider than long, 5th and 6th larger, the 6th nearly twice as broad as long.....uncinctipes, Gir.
- -. Hind tibiae entirely white. Funicle joints 1 to 3 quadrate.....

- 6. Middle legs and front tibiae yellowish, hind legs dark, except apex of tibiae. Funicle joints 1 to 4 about twice wider than long, 5 and 6 nearly twice longer; club longer than the funicle......magnithorax, Gir.
- ---. Legs black, only knees and apex of tibiae yellowish. Funicle joints 1 to 4 subquadrate, 5 and 6 a little broader; club shorter than the funicle......prospheris, **sp. nov**.

magnioculos, Gir.