

The Description of a new Species of Euchalcidia
(Hymenoptera, Chalcidinae). By A. D. HANNA, B.Sc.,
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Mr. C. POTTER and Mr. A. Smith, of the Department
of Entomology, Imperial College of Science and Tech-
nology, recently obtained from the London Docks samples

of *Senna* (*Cassia* sp.) infested by a Bruchid beetle, *Caryoborus pallidus* Oliv. Amongst the beetles was a Hymenopterous parasite, which I have found to attack the early pupa and late larval stages of the beetle. This parasite was submitted to Dr. Hugh Scott of the British Museum and Dr. C. Ferrière of the Imperial Institute of Entomology. They were able to place it in the genus *Euchalcidia*, but could not identify it specifically. Through their kindness specimens were submitted to Dr. L. Masi, who writes that it is not a species of *Euchalcidia* with which he is acquainted, but is, perhaps, close to *E. nebulosa* Fonsc. Dr. Scott then wrote to Mons. Berland, of the Paris Museum, who kindly sent a male and a female of *E. nebulosa*. Fonscolombe's collection appears to be lost, and these specimens had been determined by Grillant of Lyons, and were found in the de Gaulle collection. The female *E. nebulosa* Fonsc. is definitely different from the new species here described. The male of *nebulosa* does not differ, but there is no evidence that it really corresponds to the female. The best course appears to be to treat the Bruchid parasite as a new species until more is known about *E. nebulosa* Fonsc.

I am indebted to Professor J. W. Munro and Mr. O. W. Richards for advice upon many points. My thanks are due to Dr. Hugh Scott and Dr. Ferrière for help given in preparing the following description.

Euchalcidia caryobori, sp. n.

Female.—Shining black with a faint metallic lustre; scape, second antennal segment, the whole of the four front legs (except the coxæ), the outer surface of the hind tibiæ, the hind tarsi and the tegulæ, pale reddish brown. Wings hyaline.

Length 3.3 mm., expanse 6 mm.

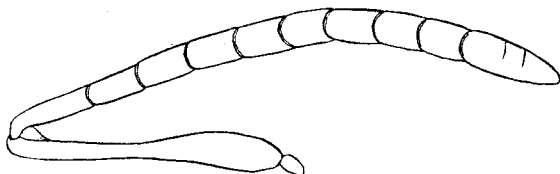
Head a little broader than the thorax, in lateral view flattened and about twice as deep across the eyes as it is at the insertion of the antennæ. Antennal fovea faintly cross-striate, eyes bare; head with large punctures except between the ocelli and in the antennal fovea; eyes subcircular, separated by a distance equal to their distance from the mandibles.

Antennæ (fig. 1) with scape a little thickened in the

proximal half, second segment four times as long as broad, third about twice as long as broad, about the same length as the fourth, the fourth twice as long as broad, fifth to tenth nearly equal, club with traces of division into three segments, about three times as long as broad in the middle.

Thorax, seen from above, twice as long as broad, with sparse, large, flat-bottomed punctures, from which arise short white hairs. Punctures denser along posterior margin of scutellum. Pronotum about twice as broad as long, shoulders anteriorly with a slight raised keel. Mesonotum shining with microscopic cross-striation on the anterior half, not quite twice as broad as long; scutellum entirely shining, about as long as distance

Fig. 1.

Antenna of *Euchalcidia caryobori*, ♀.

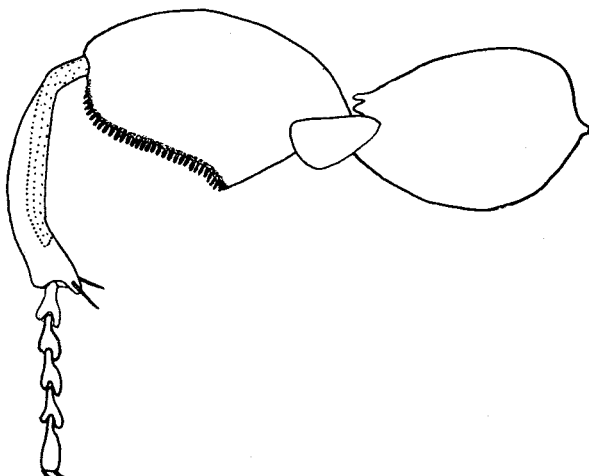
between the tegulae. Mesopleuron dull, with irregular horizontal striae. Propodeum with a central fovea two and a half times as long as broad, defined by a keel, the surface of the fovea is weakly cross-striate, otherwise coarsely clathrate; seen laterally the edge of the dorsal surface is sharp and forms a slight projection above the hind coxa.

Wings with marginal four times as long as thick, stigma sessile, set very obliquely, costal cell about seven times as long as the marginal nerve. Postmarginal vein not developed. Subcosta with many short setae.

Legs with hind coxae very large (fig. 2), the dorsal half of the outer surface smooth and shining, sharply divided from the dull setiferous lower half. Hind femora

smooth with small and sparse setiferous punctures, about one and two-thirds times as long as broad, dorsal margin strongly curved, ventral margin straight for the proximal half, more distally bearing two series of fine teeth. The more proximal series consists of about twenty-nine teeth, the more distal of nine rather thicker teeth. Near the articulation of the tibia the teeth become very short and blunt. At the end of the proximal straight section

Fig. 2.

Hind leg of *Euchalcidia caryobori*. \times about 60.

and at the end of the first series of teeth, the femur is distinctly produced in the first place angularly. Hind tibiae a little shorter than their femora, curved, with a keel on their antero-dorsal edge; distally with two short spurs. Tarsi moderately slender, about as long as the tibia.

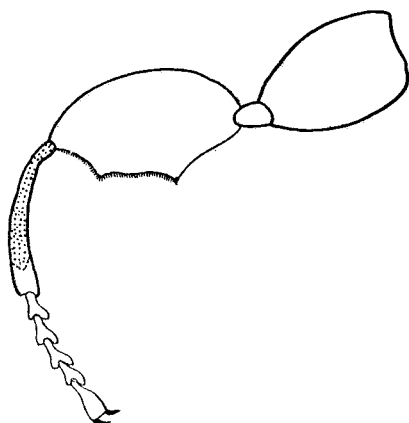
Abdomen about as long as the thorax, first segment forming a short petiole; second to sixth tergites moderately shining with fine setiferous punctures laterally, seventh dull, more densely punctate. Cerci represented by circular, membranous, setiferous patches, seven visible

sternites present, sternites smooth and shining with a narrow central line of setæ, seventh with a notch in the centre of the posterior margin.

Male.—A little smaller than the female, length 2.8 mm., expanse 4.9 mm. Shining black with a faint metallic lustre, the tarsi of the fore, middle, and hind legs pale reddish brown, tegulæ and antennæ black.

Antennæ with scape much thicker at the proximal end, second segment globulose with a very short stalk articulated to the scape, nearly one and a half times as

Fig. 3.



Hind leg of a female *Eucharaldia nebulosa*.

long as broad, the third very short, four times as broad as long, about ten times shorter than the fourth. The fourth broader at the proximal end, twice as long as broad, fifth to tenth subequal, each a little shorter than the fourth. Club three times as long as broad, in the middle completely divided into two segments.

Abdomen more globose; eight visible sternites with broader central line of setæ, posterior margin of seventh sternite not notched.

Type: female, London Docks, bred from *Caryoborus pallidus* Oliv., attacking Sudanese Senna, April 1932. Allotype: male, with the same data deposited in the

Natural History Museum with a series of twenty paratypes (twelve females and eight males).

The female of *E. nebulosa* Fonsc. differs as follows:— Size a little larger, length 4 mm., antennæ entirely black; legs dark except a narrow apex to the mid-femora, the dorsal surface of the mid-tibia (fig. 3), the mid-tarsi, and a narrow apex to the hind tibiæ and the hind tarsi, tegulæ black.

Head a little longer, with eyes longer and more narrowed below.

Antennæ a little longer and thinner, second segment five to six times longer than broad, third three times longer than broad, fourth twice as long as broad, fifth to tenth a little shorter, club five times as long as thick at base.

Dorsal surface of thorax a little more closely punctured, a stronger central keel on fovea of propodeum. Hind femora with teeth much smaller, process of femora proximal to first series of teeth stronger.