## PSYCHE.

### NEW SPECIES OF THE GENUS ORIBATA .- PLATE III.

BY H. E. EWING, URBANA, ILLINOIS.

THE genus *Oribata* is the richest in numbers of any of the American genera of the Oribatidae or "beetle mites." Four new species are described in the present paper. Type specimens have been deposited in the Illinois State Laboratory of Natural History.

> Oribata badia n. sp. (Figs. 1, 2, 3.)

Chestnut brown; integument granulate.

Cephalothorax three-fifths as long as abdomen; lamellae long and narrow, two thirds as long as the cephalothorax and of almost uniform width; lateral lamellae very small. There is a pair of tectopedia for the first pair of legs. Lamellar hairs about as long as the lamellae, straight, pectinate and directed forwards; anterior lateral hairs three-fifths as long as the lamellar hairs and slightly curved. Pseudostigmatic organ almost as long as femur of leg I, recurved, with pointed, clavate head. The palpi may often be seen from above extending out from under the rostrum.

Abdomen almost as broad as long; ptermorphae attached to the anterior half of the abdomen, truncate and not extending beyond the anterior margin of the same; anterior free margin of pteromorphae straight. Genital covers each almost twice as long as broad, and much broader at the posterior than at the anterior end, and situated approximate to the anterior margin of ventral plate; anal covers much larger than genital covers, almost rectangular in shape and situated approximate to the posterior margin of the ventral plate and more than their length from the genital covers. Abdomen hairless.

Anterior pair of legs about as long as abdomen; tarsus and tibia subequal, genual one-half as long as tibia, femur one and one-half times as long as tibia. All the legs are well clothed with stout, curved bristles. Unguis tridactyle; dactyles unequal.

Length, 0.55 mm.; breadth, 0.38 mm.

Under rubbish. Collected by the writer at Urbana, Illinois. A few specimens.

## Oribata albida n. sp.

### (Figs. 4, 5.)

Very pale yellowish brown; integument finely punctate, especially on the pteromorphae.

Cephalothorax two-thirds as broad as long; lamellae long and narrow, twothirds as long as cephalothorax; without cusps, broadest in the middle; no translamella. Lateral lamellae present; very narrow and about two-thirds as long as lamellae, each bearing a long, stout, curved, pectinate bristle. Lamellar hairs rather short, one-half as long as lamellae, and extending almost to the tip of rostrum Interlamellar hairs situated in approximation to the base of the lamellae and slightly longer than the lamellar hairs. Pseudostigmatic organ strongly recurved with long peduncle and slightly pectinate, clavate head.

Abdomen two-thirds as broad as long; pteromorphae not extending beyond the anterior margin of abdomen; triangular, anterior free edge concave. Genital covers small, about two-thirds as long as anal covers, situated about two and onehalf times their length in front of the latter. Abdomen hairless.

Anterior pair of legs almost as long as abdomen. Unguis tridactyle.

This species resembles *O. clavipectinata* Ewing somewhat, but it is of a much lighter color; the pseudostigmatic organs are very slightly pectinate, instead of being strongly pectinate, and the interlamellar hairs are approximate to the base of the lamellae, instead of being in the normal position.

Length, 0.44 mm.; breadth, 0.28 mm.

Under old boards. Collected by writer at Tuscola, Illinois. Many specimens.

Oribata corpuscula n. sp.

# (Figs. 6, 7.)

Dark brown; integument heavily chitinized, surface smooth.

Cephalothorax very long, being about one-half as long as the abdomen and almost hidden above by the large lamellae, which extend the entire length of the cephalothorax and project slightly beyond the tip of the rostrum. Lamellae about one-third as broad as long, being broadest across the middle; lamellae usually contiguous. The lamellar hairs arise from the corners of the lamellae next the median line and are short, straight, and pectinate. Pseudostigmata cylindrical; pseudostigmatic organ clavate, two-thirds as long as the cephalothorax. Abdomen globose. The line between the abdomen and the cephalothorax is almost straight. Anal covers almost semicircular and situated two-thirds their length from the posterior margin of the abdomen. Genital covers rectangular, about one-half as long as the anal covers, and situated about two and one-half times their length from the anal covers.

Legs stout, subequal in length. The front pair project about one-half their length in front of the tip of the rostrum, while the hind pair do not project beyond the posterior margin of the abdomen.

Length, 0.46 mm.; breadth, 0.30 mm.

In moss. Collected by the writer at Arcola, Ill. Four specimens.

#### Oribata maxima n. sp.

## (Figs. 8, 9, 10.)

Rather dark brown; surface of integument smooth.

Cephalothorax about one-half as long as abdomen; lamellae a little over onehalf as long as cephalothorax, narrow, without cusps, and of about equal width throughout their length; translamella similar to lamella but only about one-half as broad and two-thirds as long as lamella. Lateral lamella a mere ridge. A small pair of tectopedia present. Lamellar hairs long, straight, and pectinate, a little longer than the lamellae from which they extend; interlamellar hairs situated in front of pseudostigmata and near the base of the lamellae. They are equal to the lamellar hairs; anterior lateral hairs two-thirds as long as lamellar hairs, slightly curved and very slightly pectinate, instead of being strongly pectinate, as is usually the case. Pseudostigma short, funnel-shaped, and projecting slightly from the surface of the dorso-vertex; pseudostigmatic organ clavate, recurved and about onehalf as long as the lamella.

Abdomen globose; pteromorphae small, triangular, about one-fourth as long as abdomen, truncate in front and not extending beyond the anterior margin of abdomen. Genital covers slightly broader anteriorly than posteriorly, situated one and one-half times their length in front of the larger anal covers. Abdomen hairless.

Anterior pair of legs about as long as abdomen; tibia and tarsus subequal; genual less than one-half as long as tibia; femur three times as long as genual. Femora of legs III and IV somewhat enlarged. Unguis tridactyle, dactyles equal.

Length, 0.80 mm.; breadth, 0.58 mm.

Under bark and in moss. Collected by J. D. Hood, Urbana, Illinois. Several specimens.

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## EXPLANATION OF PLATE.

Fig. Oribata badia n. sp.  $\times$  60. 1. pseudostigma and pseudostigmatic organ,  $\times$  342. " 66 Fig. 2. 66 6.6 lamellar hair,  $\times$  342. Fig. 3. Fig. 66 albida n. sp., pseudostigma and pseudostigmatic organ, 4.  $\times$  550. Fig. Oribata albida lamellar hair,  $\times$  550. 5. corpuscula n. sp., pseudostigmatic organ,  $\times$  342. Fig. 6. right pteromorpha,  $\times$  342. " Fig. 7. 66 maxima n. sp., pseudostigma and pseudostigmatic organ, Fig. 8.  $\times$  342. Oribata maxima lamella and lamellar hair,  $\times$  97. Fig. 9. 66 66 Fig. 10. right pteromorpha and adjacent parts,  $\times$  67.

## A LIST OF THE NORTH AMERICAN PSEUDOSCORPIONIDA.

BY KARL R. COOLIDGE, PALO ALTO, CALIFORNIA.

THE *Pseudoscorpions*, like other *arachnida*, have been sadly neglected by American entomologists. This can be attributed, in a great measure, to the dearth of systematic literature. The first paper of any importance to appear was Dr. Hagen's "Synopsis Pseudoscorpionidum, synonymica," published by the Boston Society of Natural History (Proc. vol. xiii, pp. 263–272, 1870). Later, Banks published several papers, including "Notes on North American Chernetidae"<sup>1</sup> and "Notes on the Pseudoscorpionida,"<sup>2</sup> the latter superseding. Since then a number of new species have been described and many more will be added when our southern and western faunas are more carefully studied. A number of European papers have also appeared, but these are searcely accessible to the average student. The habits of the *Pseudoscorpions* should prove a very interesting field for investigation. Berger (Ohio Nat. vi, 489, 1900) has recorded quite fully the life history of *Atemnus elongatus* Banks. I hope in the near future to be able to give a full bibliography of this interesting group.

<sup>&</sup>lt;sup>1</sup> Can. Ent. XXIII, p. 160, 1891.

<sup>&</sup>lt;sup>2</sup> Journ. New York Ent. Soc. V, 3, p. 1, 1895.



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