

which Mayr has given the manuscript name of *Eurytoma Schreimeri*. It infests the seeds of the plum in Astrakan, Russia, and causes considerable damage to the crop, the infested fruit dropping while still quite small.

EXPLANATION OF PLATES 2 AND 3.

- | | | | | | |
|---------------|------|--------------------|----------------|---|---------------------------|
| Plate 2, fig. | 1.— | <i>Prodecatoma</i> | phytophaga, | ♀ | wing. |
| “ “ | 2.— | “ | “ | “ | stigmal area of ♀ wing. |
| “ “ | 3.— | “ | “ | “ | ♀ abdomen from side. |
| “ “ | 4.— | “ | “ | “ | ♂ abdomen from side. |
| “ “ | 5.— | “ | “ | “ | ♀ antenna, hairs omitted. |
| “ “ | 6.— | “ | “ | “ | ♂ antenna. |
| Plate 3, “ | 7.— | <i>Eurytoma</i> | <i>rhois</i> , | ♀ | head from above. |
| “ “ | 8.— | “ | “ | “ | ♀ antenna, hairs omitted. |
| “ “ | 9.— | “ | “ | “ | ♀ wing. |
| “ “ | 10.— | “ | “ | “ | stigmal area of ♀ wing. |
| “ “ | 11.— | “ | “ | “ | ♀ abdomen from side. |
| “ “ | 12.— | “ | “ | “ | ♂ antenna. |

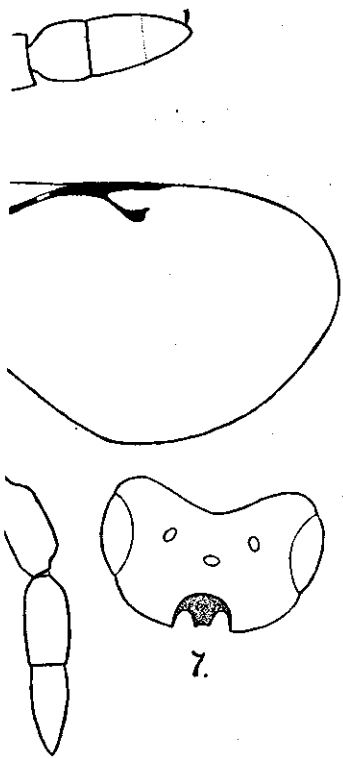
THE JAPANESE COCCIDÆ.

BY T. D. A. COCKERELL, BOULDER, COLORADO.

In the Bulletin of the Imperial Central Agricultural Experiment Station of Japan, Vol. 1, No. 2 (1907), Mr. S. I. Kuwana has published a new list of the Coccidæ of Japan, with numerous new species. I am indebted to Dr. L. O. Howard for the loan of the work, which is probably little known in this country. A very beautiful *Icerya*, illustrated by coloured figures, is introduced as *I. okada*. It is, however, exactly like *I. seychellarum* (Westwood), and I do not see any reason for separating it from that species, except that according to the figure the femur is much stouter. *Cerococcus murata* is a most interesting species, but I think it should be known as *Solenophora murata* (Kuw.). *Pseudococcus taka* (*Dactylopius taka*, Kuw.) is a new species on bamboo; the figure of the antennæ shows nine joints, although the description indicates only eight. From the figures, and the general appearance, one might suspect the insect to be a *Phenacoccus*. *Ripersia oryza*, Kuw., found at roots of rice, has large subcylindrical caudal lobes, and cannot be regarded as a true *Ripersia*; no doubt the discovery of the larva and male will throw light on its affinities. *Aclerda* (?) *biwakoensis*, Kuw., on *Phragmites*, should be compared with *A. japonica*, Newstead; it might be the same, but for apparent differences at the caudal end. *Pulvinaria Kuwacola*, on

February, 1909

* description of *Matsucoccus* as genus



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mulberry leaves, is a curious species with a very short ovisac. *Lecanium kunoensis*, Kuw., is very much like *L. cerasorum*, Ckll., and may possibly be the same. *Eulecanium glandi* (*Lecanium glandi*, Kuw.) is an immense species, 15 mm. long, found on apple, pear, etc. *Xylococcus matsumurae* is given as a new species, but it was originally introduced to our notice in *Insect World*, March, 1905. It is not a *Xylococcus*, but forms a remarkable new genus. The table of genera allied to *Xylococcus*, as given in *CANAD. ENTOM.*, Oct., 1899, p. 275, may be enlarged as follows:

Antennæ of adult female 8-jointed; first joint extremely large; second short, very much broader than long; joints broader apically than basally; last joint oblong, longer than any except the first; body elongated, $3\frac{2}{3}$ times as long as broad, blunt posteriorly; legs well developed, the anterior femora noticeably stout; tibiæ much longer than tarsi; no mouth. (Russia). *Steingelia*, Nassonow (type *S. gorodetskia*, Nassonow).*

Antennæ of adult female 9-jointed.
With an anal tube producing a long rod or thread of wax; last joint of antenna of larva moderate, with long bristles (Europe, U. S.). *Xylococcus*, Loew.

With no anal tube; last joint of antenna of larva exceedingly large, with short bristles (Japan, Ceylon). *Kuwania*, Ckll.

Antennæ of adult female with 10 or 11 joints.

Female with a marsupium, in which the eggs are laid (Australia). *Callipappus*, Guérin.

Female without a marsupium; broad posteriorly, not elongated, antennæ 10-jointed, close together; larva with antennæ 7-jointed, and very peculiar crab-like legs, the femur large; male without whorls of long hairs on the antennal joints; caudal brush long, arising from the apical segment; rudimentary hind wing with very large hooks (Japan).

Matsucoccus, Ckll. (type *Matsucoccus matsumurae*, Kuwana).

Matsu is the pine-tree, on which the new genus was found. It is evidently related to *Callipappus*, but much less specialized, probably representing the general stock from which *Callipappus* arose.

In his list, Mr. Kuwana enumerates only two species of *Asterolecanium*; but he himself has sent me two others; one new, the other (collected by Mr. Kuroyuwa in the Lu Chu Islands) is *A. bambusa*, Boisd.

*I received this insect some years ago from Professor Nassonow, and understood that he was about to publish it, which he has done in *Ann. Mus. Zool. Acad. Imp. Sci., St. Petersburg*, xiii, p. 345. The specimen is now at the Bureau of Entomology, U. S. Dept. of Agriculture.

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