

Prof. Riley asked whether the larva has a perceptible odor?

Mr. Schwarz said it had not.

Mr. Schwarz read the following paper :

TERMITOPHILOUS COLEOPTERA FOUND IN NORTH AMERICA.

By E. A. SCHWARZ.

Dr. Horn has quite recently (Trans. Amer. Ent. Soc., vol. xv, 1888) described and figured the very interesting larva of *Glyptus*, a genus of *Cara-bidæ*, which occurs in tropical Africa in the nests of white ants, and this reminded me that I had long since promised to put on record a list of such of our North American Coleoptera as are known to live exclusively among termites. The paleotropical region seems to abound in such Coleoptera; in South America some extraordinary forms have been discovered among termites, and two of these genera, *Corotoca* and *Spirachtha*, have been described and figured by the late Prof. Schiœdte. In North America only a few termitophilous species have hitherto been observed, but I feel quite confident that future investigations, especially in the southwestern portion of the country, will greatly swell their number. Our field coleopterists pay too little attention to the subject, and then it must be remembered that termitophilous Coleoptera, with the only exception of the genus *Philoterme*s, are much more difficult to find than myrmecophilous species. As is the case with this latter class of Coleoptera, we are quite ignorant regarding the earlier stages of termitophilous species, nor do we know anything of their relations to their hosts.

The list of species, so far as I am able to make it out from the few observations on record and from the experience of my friends and myself, is as follows :

1. *Myrmecochara pictipennis*. According to Dr. G. Kraatz (Linnæa Entomologica, vol. ii, p. 41) this has been found by Prof. Schaum in the nests of termites in Louisiana. I found this little-known species at various points in the Southern States, but always among ants (*Solenopsis geminata*), and a second undescribed species, in all probability referable to the same genus, occurs near Washington, D. C., also among ants (*Pheidole debilis*). Thus I catalogue this species with some doubt among the termitophilous Coleoptera.

2. *Philoterme pilosus*, found in Mass., Pa., D. C. and Tenn.

3. *Ph. pennsylvanicus*, found in Mass., Pa., D. C. and Florida (Crescent City).

4. *Ph. Fuchsii*, found in Tenn. and Fla. (Crescent City).

5. *Microcyptus testaceus*, found in Ga. (Athens) and Fla. (New Smyrna and Crescent City).

6. *Trichopsenius depressus*, found in Texas (Columbus), La., and Fla. (Crescent City). I was quite surprised to learn from Mr. Fred. Blanchard that he found it also near Lowell, Mass.

7. *Xenistusa cavernosa*.

8. *Xenistusa fossata*.

9. " *pressa*.

The three last-named species have hitherto been found only at Columbus, Tex. They occurred in a prostrate, but not decayed, trunk of *Celtis texana*, which was honeycombed by a large colony of *Termes*. Specimens were quite abundant in the galleries of the white ants, but since the wood was very hard they had to be cut out with an axe and on account of this awkward mode of investigation only a few could be secured. When alive, and when examined shortly after being killed, they seemed to represent three species; they were sent so to Dr. Leconte and accordingly described by him as three different species. However, from the descriptions and the dried specimens in our collections, it is difficult to distinguish the species, and quite impossible to conceive a correct idea of the peculiar appearance of these insects when alive. With their cylindrical body, their greatly extended abdomen, and their peculiar mode of locomotion, they resemble much more the wingless white ants than we would suspect from the dried specimens. They are by far the most remarkable termitophilous Coleoptera hitherto discovered in North America. If they should be found again they ought to be put in weak alcohol so as to preserve their original shape and to enable a more careful description of their structural characters, and more especially the secondary sexual characters on the last ventral segment.

Next to this genus in resemblance to their hosts are the species of *Philotermes*. This is the only genus which, in my experience, wanders about with the White ants in their subterranean foraging expeditions, and which may be found among them in early spring under stones, old bark, etc. But the specimens are more abundant in the nests of the white ants, and the other genera are only found within the true nests of their hosts, or very rarely in their immediate vicinity. The genera *Myrmecochara*, *Microcyptus*, and *Trichopsenius* have little or no resemblance to *Termes*, but they all have that peculiar appearance at once suggestive of an inquilinous or parasitic mode of life such as we are accustomed to see in most myrmecophilous and parasitic Coleoptera. The general similarity in appearance and superficial structural characters between *Microcyptus* and *Limulodes*, a myrmecophilous genus of the family *Trichopterygidae*, have already been pointed out by Dr. Horn (Trans. Am. Ent. Soc., vi, 1877, p. 87), and no one can deny a certain superficial resemblance, though not in any structural details, between *Trichopsenius* and the beaver parasite, *Platyphylus castoris*.

All species in the above list were found among *Termes flavipes*, and it will be noticed that, except in the Southern States, they have hitherto been observed only east of the Alleghanies.

Specimens of the species mentioned were shown by Mr. Schwarz.

Some discussion on the place of these insects in the economy of *Termes* took place between Mr. Schwarz and Prof. Riley.



Sherman, John D. 1889. "Notes on Coleoptera of Peekskill, N. Y. for 1887."
Proceedings of the Entomological Society of Washington 1, 162–163.

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