LUMINOUS BEETLES OF FLORIDA

To the Editor of The Entomologist:

I have been interested in the habits of various groups of Coleoptera for some time, and thought I would write you regarding a subject which might be of interest to the readers of The Entomologist relative to luminous beetles in Florida. The average layman is quite familiar with the fact that certain species of the beetles are luminous and this knowledge is invariably connected with the group commonly known as “fireflies” or Lampyrids. Whenever a beetle flashes a light at night invariably it is acclaimed a “firefly”. In Florida we have two species of luminous Elaterids scientifically known as Pyrophorus phsoderus Germ. and Pyrophorus atlanticus Hyslop. I have recently collected a large series of Pyrophorus atlanticus Hyslop in this section of Florida. The species was observed flying at dusk of day in fields where species of the so-called “fireflies” were also present. The distinction between the luminous Elaterids and Lampyrids is observed in both the location of the luminous organs and their habit of flash. The Elaterids have their light vesicles situated on the pronotum while those of the Lampyrids or “fireflies” are situated on the ventral of the posterior segments of the abdomen. The flash of the Lampyrids is intermittent while at flight while that produced by the Elaterids is quite constant. It was also observed that the males of Pyrophorus atlanticus Hyslop were present in greater numbers on the wing while those of the opposite sex were scarce in comparison and were for the most part resting on the foliage displaying a light at times quite constant, apparently waiting the coming of the males. The flashes of the Elaterid were only to be observed but a short while at the dusk of day while the Lampyrids continued their activities into the night.

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I am merely writing about this subject thinking that it will be of interest to the readers of The Entomologist. Two other species of luminous Elaterids occur in the United States, one in Arizona and the other in Texas, while Florida possesses two species.

Very truly yours,

G. F. MOZNETTE.

(Miami, Fla., Aug 1920.)

NEW THYSANOPTERA FROM FLORIDA—VII

J. R. WATSON

(Continued from page 13)

60. Haplothrips gracilis n. sp.

Length about 1.4 mm. Color brown with much orange hypodermal pigmentation; head dark brown; fore tibiae and all tarsi yellowish brown.

Measurements: Head, length 0.24 mm., width 0.12; prothorax, length 0.115, width including coxae, 0.20 mm.; pterothorax, width 0.20 mm.; abdomen width, 0.20 mm.; tube length 0.08 mm., width at base 0.045 mm., at apex 0.027 mm.

<table>
<thead>
<tr>
<th>Antennae, segment</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tbody>
<tr>
<td>Length in microns</td>
<td>24</td>
<td>36</td>
<td>37</td>
<td>35</td>
<td>37</td>
<td>37</td>
<td>33</td>
<td>24</td>
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<tr>
<td>Width in microns</td>
<td>28</td>
<td>24</td>
<td>21</td>
<td>24</td>
<td>24</td>
<td>20</td>
<td>18</td>
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Total length 0.25 mm.

Head: Length about ¾ longer than wide, cheeks nearly straight, slightly converging posteriorly, postocular bristles dilated into a small head, rather shorter than the eyes. Eyes small, occupying about one-third the length of the head, rounded, not protruding, not produced on the ventral surface. Posterior ocelli opposite the anterior one-third of the eyes. Antennae nearly twice as long as the head. Segments all short and thick; 2-6 about equal in length; 1 and base and inner border of 2 concolorous with the head; remainder of 2, and 3 yellowish brown; 4 darker; 5-8 dark brown. Mouth Cone rounded at the apex.

Prothorax nearly as long as head and nearly twice as wide as long, a long and short bristle on each posterior angle and a conspicuous one in the middle of each side, all capitate. Pterothorax about as wide as prothorax. Wing membrane with a brown area at the extreme base, plainly narrowed in the middle. Fringing hairs sparse but long, no interlocated ones. Legs rather short, fore tibiae slightly enlarged, tarsi devoid of teeth.

Abdomen long and slender, 4.5 times as long as broad, prominently banded with dark brown and orange, sparsely provided with bristles some of which are capitate and some pointed. Tube about half as long as the head.

Described from a single ♀ taken from ironweed (Vernonia) at Gainesville Aug. 7, 1919.

The species is remarkably close to H. bellus Hood and Williams in most characters but is longer (smaller in most measurements except the abdomen); the eyes are not produced on the ventral side; and the intermediate segments are shorter.