MEETINGS OF THE SOCIETY

May 19, 1927.

The monthly meeting of The Florida Entomological Society was held in Science Hall at 4:00 P. M. Messrs. Montgomery, Merrill, Hubbell, Rogers, Gray, Berger, Tissot, and a number of visitors being present.

Mr. G. B. Merrill gave a graphic account of his studies made in Porto Rico, illustrated by a number of photographs showing points of interest in the Island along agricultural lines. Mr. G. F. Moisette who has long been a member of the Society, gave a detailed account of the Mosquito Campaign carried out at Miami. Many interesting points covered in his paper were discussed at length after its presentation.

June 9, 1927.

The regular monthly meeting of the Society was held in Science Hall at 4:00 P. M. Members—Berger, Brown, Calhoun, Goodwin, Grossman, Montgomery, Newell, Rogers, Stone and Tissot and visitorsCamp, Kern, Knight, Loucks, Seal, Van Cleef and Walker were present.

Dr. Newell presented a paper on The National Plant Board and its activities, tracing the need and organization of such a board. This was the fundamental principles and subsequent activities of the Board.

THE THYSANOPTERON FAUNA OF THE INDIAN PIPE

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The Indian Pipe (Monotropa uniflora L.) is unusual in its ecological habitat and season of flowering. It grows on the forest floor in deep shade where large flowers which might attract thrips are scarce and it blooms late in the season.
For these reasons it occurred to the writer that an investigation of its thysanopterous visitors might be of interest. An opportunity was offered during the autumn of 1926 when the plant was unusually abundant in north central Florida. Collections were made from November 8 to December 19 from the, often quite diverse, situations in which the plant was found growing which included woods of pure pine and pure Live oak and various degrees of mixture of these and other species; and varying from a low hammock close to the swamp edge to rather high and dry sandy pine ridges. The plant was, however, never found in “flatwoods”. In this work the writer had the enthusiastic cooperation of Mr. A. N. Tissot who did much of the collecting.

The thrips were invariably found inside the blossoms, never on the leaves and stems. Since the leaves are so thin that printing may be read thru them it is not strange that they were unattractive to thrips. Most of the insects were found to be feeding on the anthers of the stamens, but some were sucking the filaments or the pistil.

The infestation was not heavy, seldom over 10% of the flowers dissected contained thrips. Often there was but a single individual to a blossom but there was apt to be two or more in each blossom found infested. As the season advanced and the absolute number of blossoms decreased the percentage found infested rose.

Six species were taken—two of which are apparently undescribed and have not been taken from any other host. One of these which we are here describing under the name of *Thrips flavicauda*, was the most common species taken. In addition to the two new species the following were taken:

*Haplothrips dozieri* Wats. This was the second most abundant species taken. It is common to a large number of hosts. It is closely related to *H. gowdeyi* (Franklin), a West Indian species but may be distinguished by the shape of the head which is usually constricted posteriorly (in gowdeyi the head is usually broader posteriorly, at least not constricted) and by the number of interlocated bristles, 5 to 9 but usually 7 or 8 (5 or 6 in gowdeyi).

*Frankliniella tritici bispinosa* (Morgan).

Common but not nearly as abundant as in most blossoms.

*Leptothrips maid* (Fitch). A single specimen of this common predator was taken.
Trichothrips anomocerus Hood. A single specimen. This species is an addition to the Florida list.

Anaphothrips (Proscirtoothrips) monotropae, n. sp.

Color by transmitted light—thorax an almost uniform pale yellowish brown (color of dull brass); abdomen, head, and antennal segments 1 and 5 lighter; eyes black. By reflected light almost white, but thorax and margins of abdomen heavily tinged with wax yellow (Ridgeway's Color Standards); eyes dark red; ocellar crescents carmine.

Head nearly 1.5 times broader than length of exposed portion. Head considerably retracted into prothorax. Occiput indistinctly reticulate, most plainly marked behind the eyes. Vertex rounded but little in front. Cheeks considerably arched, with a single small colorless bristle about the middle. A pair of short but thick and heavy brown bristles on the face (ventral surface) just below the insertion of the antennae. Eyes prominent, bulging, occupying more than half of the exposed part of the side of the head, pilose, lateral facets large, only about six outlined along the margin in dorsal view of head. Ocelli sub-approximate, situated rather far back on the head, the anterior about opposite the middle of the eyes, the posterior ones well separated from the margins of the eyes and about the size of the lateral facets of the eyes, the anterior much smaller; pale yellow, bordered by bright carmine crescents.

Antennae twice as long as the head. Segment 1 almost colorless; 2 concolorous with the head; 3, 4 and 5 grayish, progressively paler. 6 almost colorless; 6-9 darker, brownish gray; 2 and 6 with broad pedicels, 3-5 with narrower ones; 2 barrel-shaped, 3 oval, 4 and 5 obovate, 5 with almost straight but sharply converging sides in proximal 4, 6 and 7 together elliptical. Bristles and sense cones pale and inconspicuous. Simple sense cones on segments 3 and 5, and a bifurcate one on 4.

Mouth cone long, reaching nearly across the prosternum.

Prothorax subrectangular, a little wider and considerably longer than the head; at each posterior angle there is a thick heavy dark brown bristle, the only conspicuous ones on the prothorax. These bristles vary much in length, from 25 to 38 microns in different individuals. At each anterior angle are two short colorless bristles and about twenty pairs scattered over the dorsal surface, and 4 pairs along the posterior margin.

Mesothorax almost semicircular in outline, widest at posterior margin, anterior angles well rounded. Metathorax narrower, sides straight and nearly parallel. Legs slender and weak, concolorous with abdomen.

Wings—rather short, membrane grayish, 18 to 20 rather conspicuous brown bristles on the anterior vein, spaced more closely in proximal part. They are, roughly, in about eight groups of 4 (or 5), 4, 4 (more widely spaced), (1), 1, 2, 1, 1, (1) bristles each. The posterior vein bears from 11 to 13 bristles. Irregularly placed, the first opposite the 6th or 7th on the anterior vein.

Abdomen cylindrical, of about uniform width to about segment 6, thence rounded to the tip. Last segment split open, extreme tip orange yellow. Rather weak spines on each posterior angle from the fourth segment on, and a similar appressed one about the middle of the lateral margin of each segment. Those on last two segments abruptly longer but only of moderate length.
Measurements: Total body length 0.9 mm.; (0.75 to 1.05 mm.). Head, length (exposed portion) 0.09 mm.; width 0.14 mm.; prothorax, length 0.118 mm., width 0.16 mm.; mesothorax, greatest width 0.23 mm.; abdomen, greatest width 0.24 mm. Antennae, total length 0.205 mm. Segments: 22, 35, 40, 42, 36, 34, 10, 10, and 13 microns long.

Male. Similar to female in color but considerably smaller.
Measurements: Total body length 0.6 mm. Head, length (exposed portion) 0.06 mm.; width 0.12 mm.; prothorax, length 0.09 mm.; width 0.14 mm.; mesothorax, greatest width 0.18 mm.; abdomen, greatest width 0.15 mm. Antennae, total length 0.20 mm. Segments: 21, 39, 37, 35, 33, 27, 10, 8 and 10 microns.

Described from ten females and four males.

Resembles A. longipennis Crawford in size and color, and in the head wider than long. But the head is even wider, not markedly rounded in front, the mouth cone longer, wings shorter with more numerous and conspicuous spines and the bristles on the posterior angles of the prothorax are shorter but heavier and brown.

To the unaided eye this insect resembles Frankliniella tritici hispinosa Morgan with which it is found, but can be told by its smaller size and lighter color.

(To be continued)

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