

## Atopocixius, a New Genus of Uncertain Position in the Fulgoroidea (Hom.).

BY F. MUIR.

### ATOPOCIXIUS Gen. Nov.

Length of vertex in middle slightly greater than width between basal angles, base slightly concavely emarginate, apex about half the width of base, no transverse carina dividing frons from vertex, a median longitudinal carina continuing on to the frons. Length of frons twice the width, narrow at base, gradually increasing in width till near apex, then slightly narrowing, lateral carinae distinct, margins arcuate on apical two-thirds, median carina distinct till near apex where it fades out. No median ocellus. Clypeus tricarinate. Antennae small, second segment globose. Pronotum fairly long, hind margin slightly arcuately emarginate, tricarinate; mesonotum wider than long, tricarinate, not reaching hind margin. Hind tibiae unarmed. Abdomen considerably flattened horizontally.

The Sc and R forming part of the nodal line, Sc + R and M forking near base, making only a very short common stalk of Sc + R + M, the M and Cu forks on nodal line, claval fork about middle of clavus, entering hind margin before apex. When at rest the tegmina widely tectiform, apices not meeting together, the apical portion of hind margins not overlapping. The costal margin fairly thick.

The male genitalia are figured. The pygofer laterally compressed, ventrally not very long. Anal segment large but not very long, apex produced into two stout, curved, asymmetrical spines, the right longer than the left. The periandrium is large, the ventral surface chitinized, a pair of slender processes projecting from the apex, the sides membranous with a large, flat spine, acute at the apex, supporting each side; open dorsally and apically. Within the periandrium lies the penis, which is not quite understood at present; ventrally it forms a more or less chitinized surface with a strong chitinized dorsal spine. The base of the periandrium is connected with a pair of flat, curved sclerites on the surface of the membrane connecting the aedeagus with the anal segment. At the base of the penis there is a round, chitinous body which appears to be the bridge, from which projects a rod-like hollow apodeme. The ejaculatory duct appears to proceed from the bridge. There being no basal plate, there is no apodeme from it to the bridge. The genital styles are consolidated into a single body with a pair of apodemes.

The abdominal sternites are greatly dechitinized, the sixth being reduced to two small sclerites, and the seventh and eighth entirely membranous.

In the female the genital styles (ovipositor) are small, flattened, and their bases wide apart; internally there is a large chamber, the basal half

chitinous or semichitinous, into which the spermatheca opens, the apical half membranous with its wall bearing a row of stiff hairs. The anterior styles are small, narrow and truncate at apex; the posterior styles are joined together at their base and form a bilobed process, the outer lobe acute, the inner broad and flat.

During copulation the distal portion of the periandrium and the two long ventro-distal processes enter this chamber; the curved spines on the anal segment of the male fasten behind the base of the eighth sternite and the curved apex of the genital styles behind the ninth tergite of the female.

Type: *A. ornatus*.

If we disregard the genitalia this genus belongs to the Cixiidae near to *Haplaxius* Fowler, from which it differs in the shape of the frons. Both the male and female genitalia show such strong differences from the cixiid type that it is impossible to place it into the Cixiidae. The genitalia come nearer to those of *Kinnara* or *Achilixia* and other of the Meenopline groups. I place it provisionally within the Cixiidae until such time as the genitalia of *Haplaxius* and allies are known. To ignore such profound differences as we find in these organs is impossible, both for systematists and phylogenists.

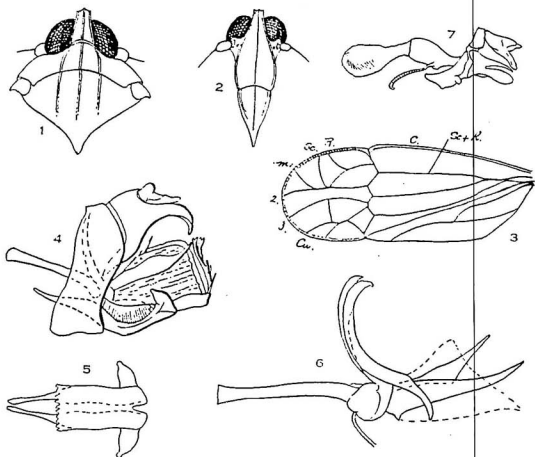
***Atopocixius ornatus* sp. n.** Figures 1-7.

Male; length 1.6; tegmen, 1.9 mm.

Dark brown or black; apex of elypeus and labium except the apex, genae below antennae and in front of eyes, lateral carinae of frons and vertex and the median longitudinal carina of vertex, carinae and hind margin of pronotum expanding behind eyes, apex of mesonotum and the tegulae yellow or light brown, femora, tibiae and tarsi much lighter, pleura of abdomen yellow. Tegmina hyaline, dark brown with light, hyaline marks, one over apex of costal and radial cells, five smaller light areas from apex of costa around to Cu in apex between the apical veins, a darker, round brown mark over apical Cu vein and cell. The base of first claval, the greater portion of second claval veins and the greater portion of commissure yellow, other veins dark. Wings slightly fuscous, veins dark.

Female similar to male.

Described from six males and five females from Correfeur near Port au Prince, Haiti (*G. N. Wolcott*, No. 92-95), on *Lucuma domingensis*.



*Atopocirius ornatus* Muir

1. Dorsal view head and thorax.
2. Frontal view head.
3. Left tegmen.
4. Lateral view male genitalia.
5. Ventral view genital styles.
6. Lateral view penis.
7. Lateral view female genitalia.