Studies on North American CHALCIDIDAE, with descriptions of new species from Florida.

BY WILLIAM B. ASHMEAD.

Jacksonville, Florida.

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Sub-family—CHALCIDIDAE.

SMICRA Spinola.

Since the publication of my other papers on the Florida Chalcididae I have taken here and identified of this genus *Smicra vittata* and *S. delara*, described by Mr. F. T. Cresson from specimens received from Texas; also *S. delarida*, Cresson, heretofore taken only in Massachusetts and Delaware.

The following species are apparently as yet undescribed:

1. *Smicra vittata* n. sp.
   - *♀*.—Length .25-.27 inch. Lemon yellow. Eyes and scutellum brown; antennae brown-black with the exception of scape, which is lemon yellow beneath. A broad, medium-longitudinal stripe on thorax extending from collar back near the apex of scutellum, where it becomes somewhat narrowed; mesonotum at sides narrowly margined with brown; collar laterally, and pleurae basally edged with brown. The posterior coxae have a broad brown stripe along the upper edge. Abdomen yellow, unscuminate and slightly compressed; the upper surface is slightly dusky with the extreme tip or apex black; the petiole is short. Femoral teeth nine, minute and black; wings dusky hyaline.

   An easily recognized species, approaching nearest to *S. mirabilis*, Cresson. Described from two *♀* specimens captured at large.

2. *Smicra hirtifemora* n. sp.
   - *♂*.—Length .16 inch. Honey yellow. Eyes, flagellum and a median stripe on thorax extending from collar to scutellum brown. Femoral teeth fifteen, small and black; the posterior femora are edged outwardly with a close, fine, silky, brown margin. The petiole is slightly longer than half the length of the posterior coxae, and the upper surface of abdomen is slightly fulvous; wings hyaline.

   Described from one *♂* specimen captured at large.

3. *Smicra longipetiolata* n. sp.
   - *♀*.—Length .14 inch. Honey yellow, coarsely punctate. Eyes and scutellum brown. Antennae long, reaching to tip of scutellum, fulvous, with pale yellow scopulae. The metalongitudinal band extending from collar to scutellum brown; parapsides along the grooves and scapulars at base on either side, coarsely punctate, fulvous, and with a minute and distinctly defined spot on femora (about twenty).

   Described as greatly differing from

4. *Chalcis*

   - *♀*.—Length .10 inch. Shining black, brown head, no spot near vertex to posterior. Antennae have a broad brown stripe along the upper edge. Abdomen yellow, unscuminate and slightly compressed; the upper surface is slightly dusky with the extreme tip or apex black; the petiole is short. Femoral teeth nine, minute and black; wings dusky hyaline.

   Described as greatly differing from

Thoraces

In an account of the collection discovered on

The description of the following twenty-two species differs in many sexuals.
ENTOMOLOGICAL SECTION.

Neopulce at base brown. The disc of scutellum is brown, and there is a brown spot on each side of the metasoma. The petiole is very long, longer than the posterior corns, or twice as long as the abdomen. The abdomen is brown, excepting at base and apex. The posterior corns are very large, larger than the abdomen, and with a large brown spot on the whole upper surface; the teeth are twelve, minute and black; wings hyaline, veins pale brown.

Described from one  specimen captured at large.

CHALCIS Fabricius.

Mr. E. T. O. Crosson described Chalcis coloradoensis from Colorado, and I have recently taken a specimen in Florida. Colorado is probably its extreme northern faunal limit, and it will undoubtedly prove to be a parasite on a common diurnal lepidopteron.

The following species is new, and in many of its structural characters differs widely from any known species. It will probably form the type of a new genus:

1. Chalcis flavipes n. sp.

5.——Length .44 inch. Black, caruncled, deeply punctate and pubescent; ocelli shining black; eyes grayish before, brown behind. There is a broad lemon yellow band on face close to eyes and between antennae and eyes, extending from near vertex to labrum, the latter yellow; there is also another narrow lemon yellow stripe back of eye; the pubescence on back of head is long, white and dense. Antennae is short, brown and densely pubescent; thorax immaculate, coarsely punctate, with the parapodial grooves obliterated; the scutellum is broad, convex, coarsely punctate, and the scutum are not separated from it by grooves; the metasoma is covered, coarsely, deeply reticulate and baciculate at tip; the abdomen is small, black, pointed, ovate, with a very short pedicle, covered with whitish pubescence and baciculate at base. Wings fuscous-hyaline; tegula yellow. Legs four, anterior pair brown, yellow, posterior pair black, with a large bright lemon yellow spot on fenson above and along the edge beneath; femoral teeth numerous, small (from twenty-two to) thirty very greatly curved, with a yellow spot at tip.

Described from one specimen captured at large. This species is markedly different from any species known to me, and is very easily recognized.

Sub-family—EUCHARINAE.

THORACANTHA Latreille.

3. Thoracantha floridana Ashmead.

In "Entomologia Americana" for August, page 95, I gave a short account of the discovery of this interesting Chalcis, the first of the genus discovered on the North American Continent.

The description was made from one male specimen taken while feeding on the flowers of the gall berry Helix glomer. Since then I have taken twenty-two specimens: four males and eighteen females, and the female differs in many respects from the male. I give here descriptions of both sexes.
MONTHLY PROCEEDINGS.

§. — Length .17–.20 inch. Black, with a slight amous tinge in certain lights. Head small, triangular, rugose-punctate and generally held horizontally beneath the enormously developed thorax. Eyes moderate, oblong oval; mandibles large, curved and 4-dentate. Antennae shining black, 12-jointed, 9-branched, scape moderately long, cylindrical, 5d large, globular, 3d to 11th short, slightly widened and truncate at tip, each emitting a long, sparsely pubescent, subulate branch; 12-joint very long, about same size as the antennal branchers, and making the antennae apparently 10-branched; thorax high, enormously developed and transversely rugose on prothorax, mesothorax longitudinally rugose, sparsely covered with short pubescence; parasides wide apart, distinct; scutellum abnormally developed, projecting posteriorly over the abdomen in the form of two long slightly curved horns, which are longitudinally grooved. The wings are film-like, and when at rest lie flat under the horns, the marginal vein is long, thick and brownish black, stigma a large brown-black spot with the post-marginal vein very long. Abdomen pedunculated, peduncle longer than abdomen, finely sculptured, cylindrical, slightly bent beyond the middle and thickest at base; the abdomen is very small, triangular and greatly compressed. Legs transparent, pubescent; coxae well developed, black, upper part of femora and upper side of tibiae brown, two apical spurs on posterior tibiae with one small spine on middle pair.

§. — Length .19-.22 inch. Blue-black with amous tinge. The antennae are filiform and not branched; the peduncle is much shorter than in the male and the abdomen is much longer, glossed, semi-glossed or compressed, depending upon the quantity of fluid it contains, and varies in color from a dirty yellow to a yellow-brown, with the basal portion dusky.

One specimen was but .16 inch in length, but all the rest averaged from .20–.22 inch.

Sub-family—Eurytominae.

Eurytoma  Rossi.

6. Eurytoma obtusifrons n. sp.

§. — Length .17–.20 inch. Black, scarcely, deeply punctate and covered with long white pubescence; punctures on face coarsely, deeply reticulate. Antennae 9-jointed, scape rufous, flagellum black, or brown-black, with the two apical joints rufous. Legs yellowish, tarsi pale. Abdomen much less pointed at apex than in E. pruniola, Walsh: black, polished, but with the segments beneath up to dorsal surface finely punctured; wings hyaline.

§. — Length .14–.16 inch. Antennae 9-jointed, scape rufous, with a black bristle at apex above, pedicle rufous, with a black spot above, flagellum black, 1st joint longest and quite broad, pedunculated at apex, other joints subequal, peduncled and furnished with two whirls of long white hairs, club as long as scape, apparently 2-jointed.

The species is quite near Eurytoma pruniola, Walsh, but is readily distinguished from it by the less pointed abdomen in the female and by the wide flagellar joints in the male.

Described from four specimens bred from an undetermined cynips gall on Quercus obtusifolia.

7. Deenea.

§. — Length .15–.20 inch. The up with a long pubescence.

§. — Length .15–.20 inch. But the sutural venter and the region of head and palpi of head and palpi.

Described by gall.

8. Callimla.

§. — Length .15–.20 inch. The up with a long pubescence.

The two species being a pale species.

Descried.


§. — Length .15–.20 inch. The up with a long pubescence.

Descried.


§. — Length .15–.20 inch. The up with a long pubescence.

Descried.

11. Callima.

§. — Length .15–.20 inch. The up with a long pubescence.

Descried.