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

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Sub-family—CHALCIDINÆ.

SMICRA Spinola.

Since the publication of my other papers on the Florida Chalcididæ I have taken here and identified of this genus *Smicra rufofemorata* and *S. delira*, described by Mr. E. T. Cresson from specimens received from Texas; also *S. delumbis*, 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 ocelli brown; antennæ brown-black with the exception of scape, which is lemon yellow beneath. A broad medio-longitudinal stripe on thorax extending from collar back to near the apex of scutellum, where it becomes somewhat narrower; mesoscutum at sides narrowly margined with brown; collar laterally, and pleuræ at base edged with brown. The posterior coxæ have a broad brown stripe along the upper edge. Abdomen yellow, acuminate and slightly compressed; the upper surface is slightly dusky with the extreme tip or apex black; the petiole is short. Femoral teeth nineteen, 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 .10 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 clothed outwardly with a close, fine, silky pubescence. The petiole is slightly longer than half the length of the posterior coxæ, and the upper surface of abdomen is slightly fulvous; wings hyaline.

Described from one ♂ specimen captured at large.

3. ***Smicra longipetiola*** n. sp.

♂.—Length .14 inch. Honey yellow, coarsely punctate. Eyes and ocelli dark brown. Antennæ long, reaching to tip of scutellum, fulvous, with pale yellow scape. The mesoscutum along the edge at base and a wide medio-longitudinal band extending from collar to scutellum brown; parapsides along the grooves and

scapulae at base brown. The disc of scutellum is brown, and there is a brown spot on either side of the metascutum. The petiole is very long, longer than the posterior coxae, or twice as long as the abdomen. The abdomen is brown, excepting at base and apex. The posterior femora are very large, larger than the abdomen, and with a large brown blotch 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. Cresson described *Chalcis coloradensis* 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:

4. **Chalcis flavipes** n. sp.

♂.—Length .14 inch. Black, coarsely, 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 eyes; the pubescence on back of head is long, white and dense. Antennae is short, brown and densely pubescent; thorax immaculate, coarsely punctate, with the parapsidal grooves obliterated; the scutellum is broad, convex, coarsely punctate, and the scapulae are not separated from it by grooves; the metathorax is perfect, coarsely, deeply reticulate and bidentate at tip; the abdomen is small, black, pointed, ovate, with a very short petiole, covered with whitish pubescence and bifoveolate at base. Wings fusco-hyaline; tegulae yellow. Legs four, anterior pair lemon yellow, posterior pair black, with a large bright lemon yellow spot on femora above and along the edge beneath; femoral teeth numerous, small (about twenty-two); tibiae 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—EUCCHARINÆ.

THORACANTHA Latreille.

5. **Thoracantha floridana** Ashmead.

In "Entomologica Americana" for August, page 95, I gave a short account of the discovery of this interesting Chalcid, 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 *Ilex glabra*. 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.

♂.—Length .17–.20 inch. Black, with a slight aeneous tinge in certain lights. Head small, triangular, rugoso-punctate and generally held horizontally beneath the enormously developed thorax. Eyes moderate, oblong oval; mandibles large, curved and 4-dentate. Antennæ shining black, 12-jointed, 9-branched, scape moderately long, cylindrical, 2d large, globular, 3d to 11th short, slightly widened and truncate at tip, each emitting a long, sparsely pubescent, subclavate branch; 12-joint very long, about same size as the antennal branches, and making the antennæ apparently 10-branched; thorax high, enormously developed and transversely rugose on prothorax, mesothorax longitudinally rugose, sparsely covered with short pubescence; parapsides 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 fuscoglyaline, 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 testaceous, pubescent; coxæ well developed, black, upper part of femora and upper side of tibiæ brown, two apical spurs on posterior tibiæ with one small spine on middle pair.

♀.—Length .10–.22 inch. Blue-black with aeneous tinge. The antennæ are filiform and not branched; the peduncle is much shorter than in the male and the abdomen is much larger, globose, semi-globose 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 .10 inch in length, but all the rest averaged from .20–.22 inch.

Sub-family—EURYTOMINÆ.

EURYTOMA Rossi.

6. *Eurytoma obtusilobæ* n. sp.

♀.—Length .17–.20 inch. Black, coarsely, deeply punctate and covered with long white pubescence; punctures on face coarsely, deeply reticulate. Antennæ 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. prunicola*, Walsh; black, polished, but with the segments beneath up to dorsal surface, finely punctured; wings hyaline.

♂.—Length .14–.16 inch. Antennæ 8-jointed, scape rufous, with a black blotch at apex above, pedicel rufous, with a black spot above, flagellum black, 1st joint longest and quite broad, peduncled at apex, other joints subequal, peduncled and furnished with two whorls of long white hairs, club as long as scape, apparently 2-jointed.

The species is quite near *Eurytoma prunicola*, 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 obtusiloba*.