THE SCOLIID WASPS OF FLORIDA II. SPECIES WHICH OCCUR IN FLORIDA $^{\rm 1}$

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INTRODUCTION: In Entomology Circular 179 (Grissell, 1977) I presented a general overview of scoliid wasps and a pictorial key to the genera. The present circular provides methods for identifying the 8 species which occur in Florida. To do so first requires examination of the wing venation and comparison with illustrations given in my previous key (Grissell, 1977). After the genus is determined, the reader should refer to the genera listed below and compare abdominal color and pattern to arrive at a species identification. In some cases size may be useful as well, and the range is given for each species.

Scolia

There are 6 Nearctic species, 3 of which occur in Florida. They may be separated by abdominal color and pattern, and the sexes are not noticeably different except in comparative lengths of the antennae.

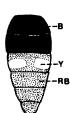
Scolia nobilitata Fabricius



Variation: Length 10-15 mm. Segment 1 rarely with faint yellow spots, and those on segments 2 and 3 are sometimes very faint. Segments 4-7 may be dark mahogany to black.

Distribution: This species is found from the Atlantic coast to Colorado and Arizona.

Scolia dubia Say



Variation: Length 20-25 mm. The yellow spots on segment 3 are sometimes very faint or absent.

Distribution: This species is found throughout most of the United States.

Biology: A few observations on flight and courtship were made in 1918 by Rau and Rau and again in 1932 by Rau.

COLOR LEGEND (all species)

B=black

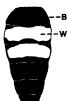
RB=red-brown

0=orange

W=white

OB=orange-brown Y=yellow

Scolia bicincta Fabricius



Variation: Length 15-20 mm. The white bands on segments 2 and 3 are sometimes broken into spots.

Distribution: This species is found throughout the eastern United States.

Trielis

There are 2 Nearctic species in this genus, 1 of which occurs in Florida and the other in the western United States. The Florida species is T. octomaculata (Say) which is divided into 3



forms, subspecies with T. o. hermione (Banks) occurring along the Atlantic coast into Florida.

Variation: Length 10-15 mm. The white spots coalesce at the middle on some segments of some specimens, especially males.

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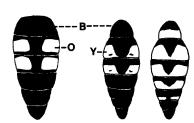
Campsomeris

There are 9 Nearctic species of *Campsomeris*, of which 4 occur in Florida. They may be separated by color pattern, but since the sexes differ both in pattern and shape of abdomen, it is necessary to illustrate each sex. Male specimens usually have the black areas of the abdomen with a faint metallic blue sheen. Females have 6 abdominal segments and males have 7. Some of these wasps are among the largest in Florida.

FEMALE

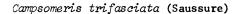
MALE

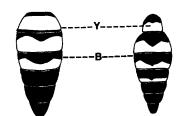
Campsomeris quadrimaculata (Fabricius)



Variation: Length 15-35 mm. Females are easily characterized by the 4 orange spots which are stable, but the males are quite variable. For this reason I have illustrated the extremes of color variation for males, which vary from segments $\,2\,$ and $\,3\,$ with yellow spots, to segments $\,1\,$ through $\,4\,$ with yellow bands.

Distribution: This species ranges throughout most of the south-eastern United States.

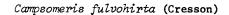


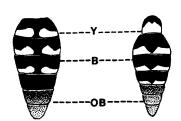


Variation: Length $10-15\ \text{mm}$. Both females and males have stable coloration and pattern.

Distribution: Found in southern Florida and most of the Greater Antilles.

Biology: Bradley (1928) reported that this species laid eggs on larvae of the scarab *Phyllophaga portoricensis* Smyth (presumably in Puerto Rico).



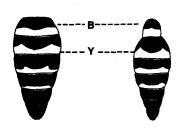


Variation: Length 15-20 mm. This is an uncommon species, and no variation was apparent in the few specimens I have seen.

Distribution: This species is known from southern Florida and Cuba.

Remarks: Males could be confused with those of *C. trifasciata*. They may be separated, however, by the last 3 abdominal segments of *fulvohirta* being orange-brown while those of *trifasciata* are black. Also, *fulvohirta* has the scutellum with 2 yellow spots, while *trifasciata* has a single yellow band.





Variation: Length 15-25 mm. Both sexes have stable color patterns.

Distribution: The species occurs over almost all of the eastern United States, but is divided into 3 forms (subspecies). The form in Florida, *C. p. fossulana*, occurs throughout the lower southeastern United States.

Biology: Flower visitation records were given by Krombein (1952) for the Florida subspecies, and Kurczewski (1963) reported on the biology of a midwestern subspecies.

LITERATURE CITED:

Bradley, J. C. 1928. The species of *Campsomeris* of the *Plumipes* Group, inhabiting the United States, the Greater Antilles, and the Bahama Islands. Proc. Acad. Sci. Phil. 80:313-337.

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