

## NOTES ON NEUROPTOID INSECTS.

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*MANTISPA INTERRUPTA* Say. This species was described by Thomas Say from a single specimen which was taken near Philadelphia. Only a few specimens have been mentioned in literature since. Hagen and Uhler have mentioned variations in the wing markings of different specimens, and both have stated that the specimens that they have studied lack the "quadrate, dark fuscous spot" which Say observed on the "submargin" of the wing, and Uhler says: "I have seen a specimen in which the apical spot of the wing is absent."

In *Trans. Am. Ent. Soc.*, **24**: 23, Banks tabulated our North American species and separated *sayi*, which he described as new, from *interrupta* by the absence of markings on the wings of the former.

In the collection before me are two males and a female which I identify as *interrupta*, and on which this note is based.

One male was taken at Sandusky, Ohio, by Prof. Osborn, the other male at Vinton, Ohio, by myself, June 10, 1900, from the trunk of a small tree, while Mr. Morse took the female at Vinton, June 20, 1901, by beating oak foliage. Thus one male and the female were taken at the same place, though in different years, while the other male exactly agrees with the Vinton male in size, coloration and all other characters that I have observed.

In comparison the general coloration of the body of the female is lighter than in the male; the dark costal margin is present in both sexes alike, and extends to where the costa begins to bend toward the apex of the wing. Otherwise the male wing is entirely transparent, but the female wing has a reddish patch at the apex, and two darker markings outside of the costal border. These latter markings include the cross veins that meet the radius from behind at nearly a right angle. The venation in the male is noticeably darker than in the female; the former measures 19 mm., and the latter 27 mm. to the apex of the wing.

*SIALIS INFUMATA* Newm. and *americana* Ramb. Since *S. americana* appears to be rare generally, I give a short comparison of its characters and habits with those of *S. infumata*, which is an abundant and widely distributed species. The latter is common about the middle of May at Columbus, and during the day is to be found in numbers clinging to the small branches of shrubs and trees in the vicinity of streams, with its wings placed roof-like over its back. The only time I have ever taken *americana* it was found resting on the trunk of a large oak tree that stood near the water of Stewart's Lake, in Portage County, Ohio, June 20, 1900. Nearly a dozen specimens in all were taken.

The two specimens may be separated at a glance by general coloration; *infumata* approaches a black, while *americana* is reddish. Neither of these colors exactly fits the case, but the latter species is much lighter than the former.

*S. americana* has femora red, head with red streaks and spots surrounded by black and about seven veins crossing from costa to subcosta before the latter unites with the radius.

*S. infumata* has head and femora black, and about eleven veins crossing from costa to subcosta before the union of the latter with the radius, and the antennæ are slenderer and shorter than in the above species.

The two are about the same size, although from the material I have before me, *americana* averages slightly larger.

*BITTACUS OCCIDENTIS* Walker. In my paper on "Panorpidae," in Bull. Sci. Lab., Den. Univ., II: 141, I mentioned three instances where this species had been taken at light in the evening. Two more have since come to my notice and the specimens are before me.

Miss Braun, of Cincinnati, took several specimens August 23, 1900, in a shady dooryard in a residence portion of the city. These specimens are supposed to have been attracted to the vicinity by the street light. J. C. Hambleton, of Columbus, took the species at light at West Jefferson, Ohio, in August.

It may be mentioned that these are the first records of the taking of this species in Ohio.

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## DONATIONS TO OHIO STATE UNIVERSITY.

The Botanical department received a fine lot of Fayette county plants for the Ohio Herbarium from E. D. Coberly and J. Paul Long, but these have not heretofore been acknowledged.

Mr. Otto Hacker's large and splendid contribution was partially recorded in the last number of the OHIO NATURALIST.

Mr. Earl Hyde, of Lancaster, has our thanks for fifty-six Fairfield County plants.

Mr. S. E. Horlacher, of Dayton, has just contributed twenty Montgomery County plants to the State Herbarium. The excellency of the specimens calls for special mention, and they are fully appreciated.

Dr. L. M. Norman has sent twenty-one specimens of spermatophytes collected by him in Champaign County, for which we return thanks.

Miss Ruth E. Brockett, Rio Grande, has added to her former valuable donations five herbarium specimens, among which *Gerardia paupercula* (Gr.) Britt. is especially interesting as southwardly extending the reported range of this species.