

Article XV.—NOTES ON NORTH AMERICAN SESIIDÆ, WITH DESCRIPTIONS OF NEW SPECIES.

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Since the publication of my paper on Sesiidæ (Bull. Am. Mus. Nat. Hist., Vol. VIII, pp. 111-148) the following notes and descriptions have been made.

Sciapteron dollii, var. **castaneum**, var. nov.

Female.—Head, thorax and abdomen bright chestnut brown, the latter with a narrow yellow ring at the posterior edges of the second and fourth segments above and below. Legs and palpi bright orange chestnut; femora blackish. Antennæ orange chestnut, except for a short distance before the tip above black. Thorax blackish beneath with wings the same as in *dollii*. Expanse, 40 mm.

Male.—Very much like the female, but the thorax is darker and the palpi are mixed with black. Expanse, 30 mm.

One female from Texas. Coll. B. Neumøgen. Two males from Kentucky, No. 15778, Coll. Hy. Edwards, A. M. N. H.

The MS. name *castaneum* was given to this variety by the late Hy. Edwards, and the species was subsequently described as *dollii* by Mr. Neumøgen. It differs from *dollii* by having the head, thorax and abdomen bright chestnut brown, and the tibiæ and tarsi wholly bright orange chestnut, while in *dollii* the tibiæ and palpi are black outside, and the abdomen is blackish.

Sciapteron tricincta (*Harris*).

This species was bred by me from willow infested with larvae of *Cryptorhynchus lapathi* and *Saperda concolor*, found near Van Cortlandt Park, New York City. It is possible that *denotata* may prove to be the same as *S. tricincta* when a good series of specimens can be obtained.

Sciapteron simulans Grote.

A freshly-emerged female of this species was found by me under a red oak on Manhattan Square, New York City. Hitherto it was only known from Rhode Island, Ohio, Illinois and Minnesota. Only the female is known, and it would be interesting to learn what the male looks like.

Sesia sigmoidea, sp. nov.

Female.—Head black; collar black, narrowly yellow in front and on each side behind; palpi yellow with appressed scales. Antennæ black. Thorax black, with a yellow mark posteriorly above, beneath with a large yellow spot on each side at the base of the insertion of the fore wings. Abdomen bronzy black with a yellow ring on the posterior edge of the second, fourth and last segments, the one on the fourth encircling the body, and is broader beneath than above. On each side of the base of the abdomen to the end of the second segment is a short, broad yellow line, which almost touches the ends of the first ring. Legs yellow and black; fore coxæ and all the femora black; tibiæ and tarsi yellow inside and yellow and black outside. Anal tuft black, narrowly yellow on each side of the middle above. Fore wings transparent with the margins black, outer margin very broad. Transverse discal mark orange, narrowly edged with black inside. Hind wings with black margin narrow, fringes concolorous, yellow at the base of wings. Fore wings beneath washed with yellow, and scaled with orange between the veins on outer margin. Discal mark like above. Hind wings beneath same as above. Expanse, 18 mm.

Habitat: Walpole, Mass. One female, No. 15948, Coll. Hy. Edwards, A. M. N. H.

This is the species which was considered by the late Hy. Edwards to be identical with the European *Sesia asiliformis* Rott., and was recorded as such in *Papilio*, Vol. II, p. 56. It, however, is sufficiently distinct to warrant separation from the European species. In *asiliformis* the wings are more elongate, with the outer margin more oblique. The yellow markings are very much more vivid than in *sigmoidea*, and this color predominates in the anal tuft. The orange on the discal mark is in shape of a transverse bar, while in *sigmoidea* it is merely a round spot. Between the veins on the outer part of the wings *asiliformis* is scaled with bright orange, and on the underside is almost wholly brilliant orange. Hind wings beneath also margined with orange. The outer transparent area of the fore wings in *asiliformis* is also larger than in *sigmoidea*.

Sesia ithacæ, sp. nov.

Female.—Head black; collar narrowly yellow; palpi black above and at the tip, yellow beneath. Thorax above wholly black as is also the abdomen and anal tuft. Legs black, joints with yellow rings; fore coxæ pale yellow. Antennæ black with a white patch before the tip. Fore wings with the costa, inner margin and outer part broadly black. Discal mark broad black. Basal transparent space small, elongate triangular; outer area very small, irregularly rounded. Hind wings narrowly bordered with black. Underside: Fore wings washed with yellow basally, and streaked with yellow between the veins at the outer part; transverse mark black. Hind wings same as above. Expanse, 18 mm.

Male.—Black and yellow like the female, but the basal transparent space is longer and broader, and extending beneath the median vein, the inner margin as a consequence is narrowly bordered with black. The outer transparent area also larger and subquadrate. Anal tuft flat, fan-like, black. Expanse, 15 mm.

Habitat: Ithaca, New York. One male and one female, No. 16755, Coll. Hy. Edwards, A. M. N. H.

Sesia rubrofascia (*Hy. Edw.*).

Head and thorax above and below deep steel blue black; before each eye is a short, pure white line. Palpi black above, bright orange red beneath; abdomen deep steel blue black, with the fourth and fifth segments bright scarlet red above and below; sixth segment scarlet red beneath. Anal tuft blue black with a few white hairs on each side above. Legs blue black; hind tibiæ whitish inside, and with a white ring at the middle; all the tarsi orange inside, blue black outside. Antennæ blue black, with the tip, for one-third the length, yellowish on one side. Fore wings transparent, costal and inner margins narrowly violet black; discal bar straight, black; outer margin broad and heavily marked with scarlet between the black veins; fringes brown black. Hind wings transparent, fringes brown black. Underside of wings same as above, except the fore wings which are scaled with golden yellow along the costa, and the costa of hind wings marked with orange. Expanse, 17-21 mm.

Two females, Coll. A. M. N. H.

The above description was taken from two perfect female specimens bred by Mr. J. Doll and myself from willow infested with larvæ of *Cryptorhynchus lapathi* and *Saperda concolor*, found in Van Cortlandt Park, New York City, in June. Hitherto the species was only known from Georgia and Illinois, and I have also seen a specimen from Manitoba, Canada.

We did not succeed in raising the male, but the specimen described by Hy. Edwards lacks the red on the fore wings, and the orange on the palpi.

Pyrrhotænia præstans (*Hy. Edw.*).

Female.—Head brassy black, with the vertex and palpi orange. Collar blackish, edged in front with orange. Thorax blackish, patagia tipped with orange. Fore coxæ orange. All the femora blackish; tarsi orange with a blackish ring at the end of each; tibiæ orange. Fore wings brassy green with an orange red streak along the inner margin, from the base to nearly the hind angle. The basal and outer transparent spaces filled with orange, as are also the spaces between the veins of the outer part of the wing. Fringes brownish. Hind wings transparent with an outer border, and the inner margin orange. Fringes blackish. Veins and discal mark black. Underside: Fore wings wholly orange, except the discal mark, veins of outer part and fringes same as above. Hind wings bordered with orange. Veins scaled with orange. Fringes like above. Expanse, 23 mm.

Habitat: Easton, Washington.

The above description was taken from a specimen, which is without much doubt the female of *P. præstans*, of which the type male was hitherto only known to exist. The specimen is from the collection of the U. S. National Museum, and was sent to me for examination by Dr. L. O. Howard. It is somewhat worn, but it shows the traces of the orange red bands on the abdomen as in the male. It differs from the male by having the transparent spaces on the fore wings filled with orange, and by narrow orange border of the hind wings.

Zenodoxus mexicanus, sp. nov.

Head fuscous with some white scales; palpi white, with a few fuscous scales at the tip. Stalk of antennæ rufous, pectinatus black. Thorax fuscous, tip of patagia with white hairs. Legs white with fuscous rings. Abdomen above brown-black with a white band composed of scales at the posterior edge of each segment. Anal tuft blackish brown with a few white hairs. Underside of abdomen wholly blackish brown. Thorax beneath brown-black with white scales. Fore wings blackish brown, streaked with white between the veins at the outer part, before the margin, thus forming a rounded whitish patch, crossed by the veins. Hind wings uniform blackish brown. Underside: Fore wings similar to the above, but with a narrow white streak along the inner margin and costa. Hind wings with scattered white scales. Expanse, 13 mm.

Habitat: New Mexico. One male, No. 16756, Coll. A. M. N. H. Received from Prof. J. B. Smith.

Allied to *Z. heuchera*, but differs from it by having white bands on the abdomen, instead of yellow bands, and by the white patch on the fore wings.