

The third and last paper was by Mr. August Busck which follows.

TWO MICROLEPIDOPTERA INJURIOUS TO CHESTNUT.

BY AUGUST BUSCK.

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Sesia castaneæ, new species.

Labial palpi yellow on the underside; above black, sprinkled with yellow scales; apical half of third joint all black. Antennae black with the tips bronzy fuscous. Face bluish black with the face before the eyes broadly white. Head black. Thorax metallic bluish black with two narrow lateral stripes yellow; in the female also with posterior edge narrowly yellow. Forewings alike in the two sexes, transparent, with bluish black scaling on the veins, slightly mixed with golden yellow scales; cilia purplish black. Hindwings transparent with narrow black veins and with yellow costal edge, which shows through the membrane of the forewing when in natural position; cilia purplish black. Abdomen deep bluish black with posterior half of fourth joint yellow on the underside; in the female the extreme edges of third and fourth joints are also narrowly yellow on the dorsal side; the base of the abdomen laterally yellow; the inner side of the male claspers dark ochreous. Legs bluish black with narrow yellow annulations at the end of the joints; the tarsi of the females dusted with yellow.

Habitat: Lynchburg, Virginia, and Snow Shoe, Pennsylvania, F. C. Craighead, coll.

Foodplant: Chestnut.

Type: U. S. Nat. Mus. No. 15505.

Bred from the trunks of chestnut by Mr. F. C. Craighead. The fullgrown larva is about half an inch long, yellowish white with light brown head and with yellowish thoracic shield and thoracic legs; setae short and pale; hooks on abdominal feet in two rows with from ten to twelve hooks in the posterior and from twelve to sixteen in the anterior row.

The adults emerged April 12, and May 21, 1912.

The species is nearest in size and coloration to *S. pictipes*, Grote and Robinson, and has been mistaken for this species, which according to the earliest records is injurious to plum, cherry and peach; Grote himself identified (Bull. U. S. Geol. Surv., VI, p. 287, 1881) the species bred by Bailey and Kellicott, from plum and cherry (Can. Ent., XIII, p. 7, 1881) as his *S. pictipes*.

Beutenmuller records it also from chestnut, but this record was undoubtedly caused by a misidentification of the present species. The chestnut species may be distinguished from *S. pictipes* by the

larger white, not yellow, cheeks, by the black, not yellow, collar and by the absence of yellow on the second joint of the abdomen.

Ectoedemia castaneæ, new species.

Palpi and lower face ochreous. Upper face and head black. Antennae blackish brown with narrow yellow annulations and with large milk-white eyecaps contrasting strongly with the dark tufted head. Thorax blackish brown sprinkled with ochreous scales, especially posteriorly; posterior tip ochreous. Forewings blackish brown liberally sprinkled with bluish white scales. Cilia fuscous. Hindwing dark fuscous, blackish along the costa with lighter ochreous fuscous cilia; in the males with a strong yellowish costal hair tuft. Abdomen dark fuscous with ochreous anal tuft and ochreous underside. Legs light silvery ochreous. Alar expanse: 7.5-8 mm.

Habitat: Vietch, Virginia.

Type: U. S. Nat. Mus. No. 16333.

The life history of this species has recently been ascertained by Dr. A. D. Hopkins and Mr. T. E. Snyder, who have bred it from small galls on young twigs of chestnut, reminding one in form and size of the egg masses of the forest tent-caterpillar.

The larva resembles that of *Nepticula*; the head is small, normal, retractive into the first thoracic segment which lacks all trace of feet; the other thoracic feet and all the abdominal feet are represented by rudimentary processes; such are found on joints 3 and 4, 6, 7, 8, 9, 10, and on joint 13 while they are faintly indicated on joint 5; thus joints 11 and 12 are the only ones beside 2 which have no trace of feet. In *Nepticula* the formula is ". . . 2 . 6 . . .".

The species is close to *E. obrutella* Zeller, which species must be included in the present genus, but differs in the darker thorax and forewings. *Obrutella* was described in the genus *Trifurcula*¹ but shows some important difference in pterogostic characters from the type of this genus, *T. pallidella*, of Europe (fig. 1b).

The life history of *Trifurcula* is not known.

The leaf mining genus *Nepticula*² (fig. 1c), typically shows a reduction of the venation by the absence of vein 8 and of the cubital veins; in some of the larger blotch-making species of the genus however, these veins are present or at least indicated and the venation is practically that of the gall-making *Ectoedemia*.

¹ Verh. Zoo-bot. Gesell. Wien, XXIII, p. 316, 1873.

² I use the geonym *Nepticula* advisedly, instead of *Stigmella* Schrank, as adopted by Lord Walsingham and Mr. Durrant. The earlier name, *Stigmella*, is a *nomen nudum*, whether by accident, as held by Lord Walsingham or not, and is for that reason in my opinion not available as a substitute for *Nepticula* Zeller.

These three genera, *Ectoedemia* (fig. a), *Trifurcula* (fig. 1b), *Nepticula* (fig. 1c), together with *Scoliaula* Meyr. (fig. 1d), form a well separated group among the *Tineæ aculeatæ*. All the species are among the smallest of the Lepidoptera, averaging from 4 to 9 mm. in alar expanse. All have a many spined frenulum in both sexes.

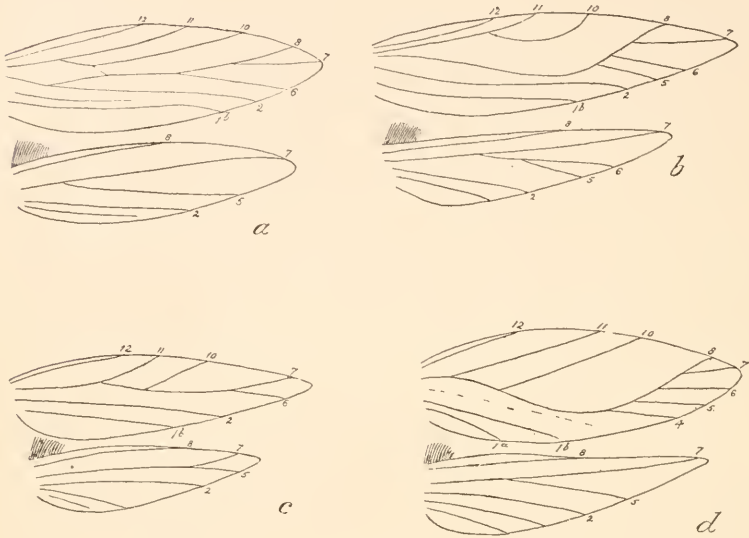


Fig. 1. a, *Ectoedemia populella* Busck; b, *Trifurcula pallidella* Zeller; c, *Nepticula microtheriella* Stainton; d, *Scoliaula quadrimaculella* Boh.

Under notes and exhibition of specimens Mr. Schwarz read by title the following note by Mr. Chas. R. Ely, of Frederick, Md.:

THE FOOD PLANT OF *CLEONUS CALANDROIDES* RAND.

BY CHAS. R. ELY, *Frederick, Md.*

About the 10th of August, 1912, my daughter while playing on the sea beach, near East River, found the larvæ of a weevil living in the roots of *Cakile endetula* Bigel. Because of her interest in the insect we collected, on August 14, a large number of the various stages, from larva to adult. Specimens which later emerged from the pupæ were identified by Mr. E. A. Schwarz as *Cleonus calandroides* Rand.