A NEW MINT BORER OF TORTRICIDAE FROM JAPAN,
WITH DESCRIPTION OF A NEW GENUS*

(LEPIDOPTERA : TORTRICIDAE)

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In the present paper will be described a new species of Tortricidae which bores into
the rhizome of mint. Moreover a new genus will be proposed for the species.

On this occasion the writer wishes to express his hearty thanks to Prof. C. Watanabe
for his continuous encouragement and guidance. Thanks are also due to Prof. S. Kuwa­
yama, Mr. H. Kimura, Mr. H. Tezuka, and Mr. Y. Mano for their kindness in giving the
opportunity to examine the material preserved in the collection of the Hokkaido National
Agricultural Experiment Station, Sapporo.

*Note8 on Japanese Tortricidae III.

[Insecta Matsumurana, Vol. 26, No. 2, December, 1963]

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abdominal segment; tegumen rounded and extremely bulging; uncus constricted at base, with strong spines ventrally in two rows; socii strongly chitinized, triangular, producing behind, and fused with tegumen at base; gnathos absent; valva broad, concave at base of cucullus, which is furnished with very long hairs; caudal process of sacculus curving inwards, harp strong, setting with stout spines on its apex; aedeagus acutely pointed, with

Fig. 1. Adult of Alloendothelia menthivora, sp. nov.
A: Fore wing (♀), B: Wing-neuration (♀), C: Dorsal fold of hind wing (♀), D: Head in lateral view, E: Aedeagus, F: ♂ Genitalia in caudal view, G: Ibid. in lateral view (hairs detached), H: ♀ Genitalia in ventral view, I: Signum.
three cornuti setting on a chitinized plate.

Female genitalia: lamella postvaginalis present; lamella antevaginalis circular; ostium bursae broad, with cephalic margin concave at middle; antrum wide and long, very heavily chitinized; ductus bursae rather short, membranous; bursa copulatrix covered with numerous small depressions; signum pocket-like.

Holotype (♂): 30 VII, 1940; Paratypes: 4♀, 1♂, 20 VII–17 VIII, 1940 (Nokkeushi, Hokkaido) bred by S. Ishida; 1♀, 1♂, 4 X, 1962 (Kunneppu, Hokkaido) (from larvae preserved in a refrigerator until September) bred by H. Tezuka.

Mature larva: 14–16 mm. in length. Head orange-brown, with irregular darker markings; caudo-lateral patch and eye-spot blackish; P1, Pb and P2 not placed on a straight line; O1 situated between the second and the third ocelli. Mandible blackish-brown, with five teeth; retinaculum not developed. Cervical shield yellowish-brown, irregularly lined with dark brown along caudal margin; SD2 apparently nearer to D1 than to XD2. Thoracic legs very pale brown. Body creamy white; anal shield yellowish-brown; anal falk absent; two D2 on one pinaculum on ninth abdominal segment; SV bi- or trisetose on the first, tri- or tetrasetose on the second, trisetose on the eighth, and bisetose on the ninth abdominal segment; SD1 and SD2 on one pinaculum, the latter very minute. Abdominal legs with chrochets biordinal. Spines of body skin thorn-like.

Specimens examined: 5 mature larvae, 10 VI, 1963 (Kunneppu, Hokkaido) H. Mano leg.

Notes:—The adult of the present species is somewhat similar to that of *Endothenia antiquana* Hübner, from which it is easily distinguishable in the vein Cu₂ of fore wing originating from 3/4 of cell. According to the observation of the late Shuichi Ishida, the biology of the species is briefly stated below:—

The winter is passed in the larval form within the rhizome of mint. In the following spring the larvae remove from the rhizome and make cocoons for pupation under the ground in depth of about 1 cm. The moths begin emergencing in early July and continue coming out until mid-August. The eggs are deposited one by one on the leaf of the host plant, and hatch in about one week. The larvae bore into the stem and finally reach the rhizome. The species seems to be univoltine.

Holotype and one paratype are deposited in the collection of the Entomological Institute, Hokkaido University, and the other paratypes in the collection of the Hokkaido National Agricultural Experiment Station.

*Alloendothenia*, gen. nov.

Genotype: *Alloendothenia menthivora*, sp. nov.

On account of the wing-venation the present genus is superficially similar to some genera of the Phaloniidae, but it is apparently placed in the Olethreutinae of the Tortricidae by the presence of the cubital pecten of the hind wing and by the structure of the genitalia. This genus may be closely related to the genus *Endothenia* Stephens, from which it is distinct by the following aspects:—

(1) Vein Cu₂ of fore wing originating from 3/4 of cell.
Fig. 2. Larva of *Alloendothenia menthivora*, sp. nov.


(2) Veins Rs and M of hind wing closely approximated, but not stalked.
(3) Male genitalia with broader valva and with cornuti setting on a chitinized plate.
(4) Female genitalia with much broader and longer antrum.