

## Biology and Variation of *Eidophasia messingiella* F.R. (Lep., Plutellidae)

by  
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In the years 1947 and 1948 I elevated about one hundred imagines of this pretty and rarely observed moth. The larvae are yellow-green; dorsal and subdorsal lines darker; spots on dorsum lighter with a black brush-hair; head and plate of 2 grey, dotted black by brush-hairs. After the last instar the subdorsal lines are almost invisible; the dorsal line remains conspicuous, darker than the colour of the body.

I found the larvae from the 5th of April till the 4th of May between the undeveloped topleaves of *Lepidium draba* L. along the road which borders the Rhine from Rhenen till Grebbe. When the leaves have developed and other undeveloped leaves have appeared, the larvae remove to these, leaving the first leaves with a hole which they ate in them. Therefore it is rather easy to ascertain the presence of the larvae. They were very local, for I found them only in an area of some square meters at the foot of the hill, while on plants higher on I never saw any larva. The elevation is very easy. I put them in a glass pot which I shut with a piece of glass so that the food remained fresh for a long time. The cocoons of open network were attached to the glass or to leaves and stems. The moths emerged from the 11th till the 31st of May. I never succeeded in finding larvae or imagines in July and August so they seem to be only single brooded.

HODGKINSON (1871, Ent. M. Mag. 8 : 71), ZELLER (1880, op. cit. 17 : 45) and BÜTNER (SORHAGEN, Kleinschm. der Mark Brandenb. : 165) found the larvae on *Cardamine amara* L., a rather rare plant in this country. In consequence of this all authors hereafter mentioned *Car. amara* as the only foodplant of *messingiella*. I think it probable, however, that it feeds on several Cruciferae as do its congeners *Plutella porrectella* L. and *maculipennis* Curt.

As the photograph shows, the markings on the fore wings of the moth vary exceedingly. Even FISCHER v. RÖSLERSTAMM already mentioned two variations. The translation of his description of *messingiella* (1838, Abb. Schmett.kunde : 193) runs as follows :

"Fore wings dark grey brown (♂) or dark red brown (♀). Almost in the middle of the wing an oblique whitish-yellow fascia, narrower at costa. A little dot at costa between fascia and apex."

The type form was figured on pl. 68, fig. 3a; fig. 3b is var. b, fig. 3c is var. c.

To these 2 forms 2 others can be added and as all these variations want a name, I propose the following names :

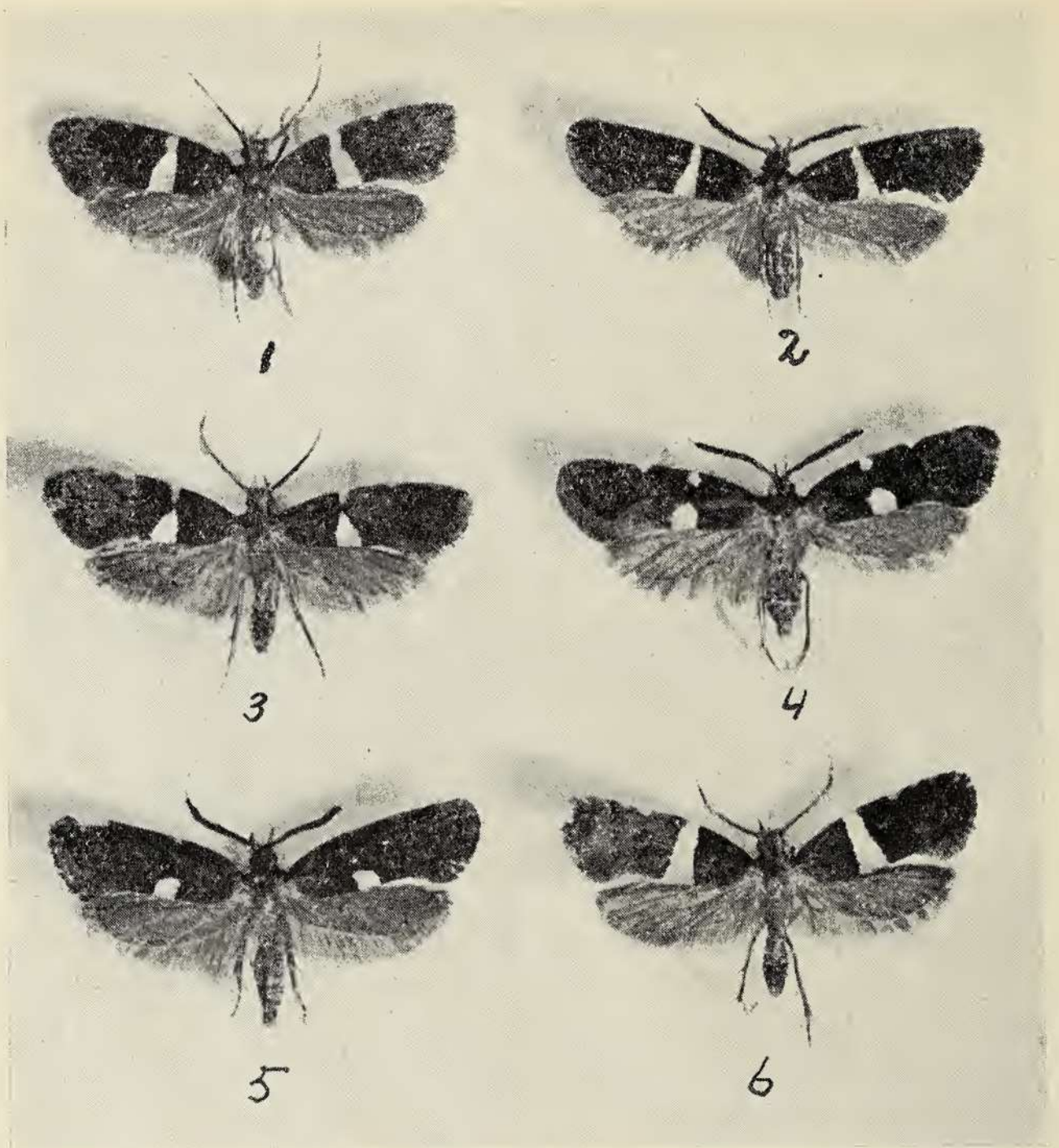
*reducta* n.ab. no dot at costa, fascia uninterrupted (var. b. F. R.).

*interrupta* n.ab. fascia interrupted (var. c. F. R.).

*dorsomaculata* n.ab. of the fascia only a dot on the dorsum is left.

*addenda* n.ab. between costal dot and apex are two other indistinct dots.

Ab. *dorsomaculata* is very rare and so is ab. *addenda*. Ab. *interrupta* shows much variation; sometimes there are only two little dots left on costa and dorsum. The type form is relatively rare.



*Eidophasia messingiella* F, R. 1. type form, 2. ab. *reducta* n. ab., 3, 4. ab. *interrupta* nov. ab., 5. ab. *dorsomaculata* n. ab., 6. ab. *addenda* n. ab.

Subsp. *infuscata* Staudinger (1871, Horae Soc. Ent. Rossicae 7 : 238) is a dark form from Greece in which the fascia is terminally ill-bordered.

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