

## Notes on the Agromyzidae (Dipt.) in the Naturhistorisches Museum in Wien

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### *Melanagromyza cunctans* (Mg.)

While working on a revision of the Ethiopian Agromyzidae I have recently examined specimens from the Belgian Congo, Uganda and Egypt (and also from India) which appear to be referable to *M. cunctans* (Mg.). In order to clarify this problem I have examined 3 syntypes from the von Winthem collection, which Meigen used for his cursory description. One of the specimens is now so badly damaged as to be valueless, the second is without its head but from its black squamal fringe is clearly a different, unidentifiable species, while the third, a male, is in perfect condition and I designate this specimen herewith as lectotype.

The lectotype is labelled "Madrid, 29 July" and it is thus established that Meigen's species is in fact the species which has been recorded widely in southern Europe and North Africa and was re-described by Hendel (1936).

The puparium of this species was described and figured by de Meijere (1938) from puparia obtained by Buhr from *Lotus corniculatus* L. in Corsica. I have unfortunately not been able to trace the specimen in the Zoological Museum Amsterdam used by de Meijere for his description but in the essential arrangement of the posterior spiracular processes, each with 6 buds and an irregular truncate horn, this appears to agree with the puparium of a specimen bred from "pea stems" at Pusa, S. India in the collection of the British Museum (Natural History), and as far as can be judged from this single specimen, it is also the same species.

I consider that specimens from the Belgian Congo, Uganda and Egypt, which I have recently studied, are also the same species.

Two British specimens which I have examined have a slightly wider frons than the lectotype and the mesonotum appears to be slightly less shining but in the absence of confirmatory biological evidence, it is not considered justified to describe these as a new species.

The biological evidence so far available suggests that *M. cunctans* (Mg.) is an oligophagous internal stem-feeder on the Papilionaceae. Records known to me are as follows:

- India, Pusa — bred from "pea stems",
- Uganda — bred from stems of *Crotalaria ?juncea*,
- Egypt — caught on soya beans,
- Corsica — bred from stems of *Lotus corniculatus* L.

Until a detailed study can be made of the immature stages bred from the different genera on which the species is known to occur, it cannot be decided whether these records refer to a species group rather than to a single species.

### *Phytomyza opaca* Hendel

I have recently examined two undetermined specimens very close to *Phytomyza opaca* Hd., collected by Zerny at the Wolayersee in Oberkärnten at an altitude of 2.000 m. I have also studied the type of *P. opaca* Hd., a male taken by Hendel at the Pyhrnpaß, also in Austria. Zerny's specimens, both females, differ from Hendel's type in the following respects:

The 3rd antennal segment is not regularly rounded but more rectangular and in one specimen with a distinct angle at the upper corner; the pubescence is appreciably longer. The jowls appear somewhat deeper and are slightly over half the vertical height of the eye (in *opaca* Hd. the jowl to eye ratio is 16 : 40, not 1 : 3, as stated by Hendel). The specimens are also larger, the wing length being 3,2 mm. (*opaca* Hd. — 2,7 mm.).

In all 3 specimens the 2 upper orbital bristles (ors) are arranged in a similar characteristic way, placed on the inner margin of the orbits, conspicuously distant from the margin of the eye. The general colouration and all other characters agree closely.

In view of the similar, high altitude locality of capture of *opaca* Hd. and Zerny's specimens and the striking general similarity, I consider it correct to refer Zerny's two female specimens to *opaca* Hd. The existing differences may well be sexual.

Only if more material becomes available and in particular if the biology can be clarified, can it satisfactorily be decided whether or not two species are concerned.

### *Phytobia (Dizygomyza) iridis* (Hendel) (*Dizygomyza iridophaga* Hendel, syn. nov.)

*D. iridophaga* was described by Hendel from specimens bred in France, reportedly, from *Iris pseudacorus* L. The species was differentiated from *D. iraeos* (R.-D.), which feeds exclusively on *I. pseudacorus* L., basically by its black mid and hind knees and by its broader jowls; and from *iridis* (Hendel), which was thought at that time to feed exclusively on *I. foetidissima* L., by its different biology and again by the colour of the knees, which in this latter species are described as "yellowish-brown" on the mid and hind legs.

I have bred considerable series of both *iraeos* (R.-D.) and *iridis* (Hd.) and have examined the types of *iridis* (Hd.) and *iridophaga* (Hd.) and am now satisfied that *iridophaga* (Hd.) is not a good species on the basis of the following evidence:

1. It seems established that *iraeos* (R.-D.) does feed exclusively on *I. pseudacorus* L., This species has all knees bright yellow.
2. *D. iridis* (Hd.) occurs commonly in this country not only on *I. foetidissima* L. which is doubtless its original host, but also on at least two frequently cultivated species — *I. ochroleuca* L. and *I. moneuria spuria*. These two species could easily be confused, when not in flower, with *I. pseudacorus* L.

3. The description of *iridis* (Hd.) is based on specimens which are not fully pigmented. It is correct that in the type specimens the hind and mid legs are yellowish-brown, as stated by Hendel, but in the fresh and fully-developed specimens which I have bred from numerous localities the knees of the mid and hind legs are quite distinctly black.
4. The jowls in the type of *iridophaga* (Hd.) are not  $\frac{1}{3}$  height of eye in centre and  $\frac{1}{2}$  at rear, as stated by Hendel, but at most  $\frac{1}{5}$  in centre and  $\frac{1}{3}$  at rear. I have specimens of *iridis* (Hd.) with exactly similar proportions.
5. The type of *iridophaga* (Hd.) thus agrees completely with *iridis* (Hd.). I therefore consider it reasonable to assume that an error was made in the identity of the food-plant, which was not *I. pseudacorus* L. but one of the cultivated *Iris* species, on which *iridis* (Hd.) is now known to feed. I therefore sink *iridophaga* (Hendel) herewith and place it as a synonym of *Dizygomyza iridis* (Hendel).

Acknowledgements. I wish to express my gratitude for the advice given me by Prof. E. M. Hering, Berlin when discussing these species; and I am greatly indebted to the Naturhistorisches Museum, Wien for kindly making available to me the types dealt with in this paper.

### References

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### Buchbesprechung

Simms, Eric: *Voices of the Wild*. 230 S., 15 Taf. Putnam & Company Limited, 42 Great Russell Street, London WC 1. 1957. Geb. 21 s.

Mehr als 40.000 Meilen hat der Verfasser auf unzähligen Exkursionen zurückgelegt, um im Auftrag des Britischen Rundfunks für dessen naturkundliches Tonarchiv Stimmen von heimischen Vögeln und Säugetieren auf Schallplatte und Tonband festzuhalten. Er hat sich dieser Aufgabe, die genaue biologische Kenntnisse, unerschöpfliche Geduld, jägerische List, technisches Können und körperliche Ausdauer in hohem Maße voraussetzt, mit glühender Begeisterung gewidmet und zu ihrer Durchführung die verschiedensten Lebensräume der Ebene und des Gebirges, Küsten, Moore, Sümpfe, Heiden und Wälder zu allen Jahreszeiten, bei Tag und Nacht, sowohl seiner engeren britischen Heimat aufgesucht als auch Abstecher nach Spanien und in das Vogelparadies der südfranzösischen Camargue gemacht. Als meisterhafter Schilderer läßt er die Eigenart der Landschaft unmittelbar vor den Augen des Lesers ersehen, ihn an den Schwierigkeiten der Tonaufnahme, der Spannung während des Ansitzes, der Vielfalt der Beobachtungen aus dem Leben der belauschten Tiere, von denen er als geschulter Biologe hochinteressant zu berichten weiß, teilnehmen sowie die Freude nachempfinden, die die gelungenen Aufnahmen etwa aus dem intimen „Wortschatz“ einer Dachsfamilie oder des zärtlichen Geflüsters bei der Brutablöse von Vogelpaaren als „klingenden“ Lohn bereiten. Für den Verhaltensforscher, der das tierische Lautinventar für seine Forschungsziele dringend benötigt, nicht minder aber für jeden Freund exakter naturkundlicher Berichterstattung bietet das Buch eine ebenso anregende wie belehrende Lektüre, zusätzlich gewürzt durch die lebensbejahende, fröhliche Darstellungskunst des Autors.

G. Rokitsansky

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