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SYNONYMIC NOTES ON THE GLYPHIPTERYGIDAE, WITH SELECTION OF NEOTYPES FOR TWO *PHYLLONORYCTER* SPECIES, LITHOCOLLETIDAE (LEPIDOPTERA)

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The intended revision of the family Glyphipterygidae for the series "Microlepidoptera Palaearctica" formed an opportunity for a study of old literature and of the presumably glyphipterygid types of Johann C. Fabricius, now preserved in the Copenhagen Museum, Denmark. During this study the advisability of selection of neotypes for two common *Phyllonorycter* species (family Lithocolletidae), became apparent. Resulting synonymic notes and neotype selections are presented here. These notes are being published in agreement with Mr. O. Karsholt and Dr. E. Schmidt Nielsen, who are publishing jointly "Notes on some Lepidoptera described by Linnaeus, Fabricius and Ström", at this moment (1976).

The author is obliged to the authorities of the Copenhagen Museum, for the loan of the precious material and to the following colleagues, for their kind help and interest: Dr. Ing. Niels L. Wolff and Dr. Ebbe Schmidt Nielsen, Copenhagen Museum, Denmark; Mr. Ole Karsholt, Ebbinge, Denmark; Dr. J. D. Bradley, Commonwealth Institute of Entomology, London; Dr. I. W. B. Nye and Mr. D. Carter, British Museum (Natural History), London; Mr. Gerfried Deschka, Steyr, Austria; Mr. Oswald Tiedemann, Hamburg, Western Germany; and especially, to my friend, Professor Dr. L. B. Holthuis, Leiden Museum, for his valuable advice on problems of nomenclature.

Choreutis sehestediana (Fabricius, 1777) comb. nov.

Anthophila punctosa Haworth, 1811: 472. **Syn. nov.**

The type specimen in the Fabricius Collection has been cited in the very useful catalogue of "Type material of J. C. Fabricius" by Miss E. Zimsen, as follows (p. 533).

439. *Pyralis Sehestediana* Gen Ins. p. 293. "Chilonii Alnetis Dom de Sehestedt", Ent. Syst. III.II p. 279.152. — Kiel 1 specimen.

The holotype is partly spread, slightly dusty and without the abdomen, but otherwise in reasonable condition. The discoloured brownish label reads "Sehestediana" in brownish ink, written with a goose quill, obviously in Fabricius' hand. The species is well identifiable by the arrangement and size of the white costal dots and by the presence of the yellowish transverse fascia from costa before termen, clearly showing that the type is conspecific with *Anthophila punctosa* Haworth, 1811: 472, which name is a junior synonym.

Phyllonorycter blancardella (Fabricius, 1781)

The unique specimen of "*Tinea blancardella*" in Fabricius' Collection is cited by Miss Zimsen thus (1964: 540).

561. *Tinea Blanchardella* [sic], Spec. Ins. II, p. 305.91. "in Angliae nemoribus [memoribus, err. typ.], Mus. Dom. Yeats". Ent. Syst. III.II p. 327.175. Ent. Syst. Suppl. p. 500.186. — Kiel 1 specimen.

In 1968, Dr. Ing. Niels L. Wolff studied this specimen which was old and mouldy, but recognizable at once as a *Glyphipterix* species. The intact abdomen provided an excellent slide and proved unmistakably to be of a female of *Glyphipterix fischeriella* Zeller, 1839, = *G. simpliciella* Stephens. Dr. Wolff kindly permitted me to publish his discovery here (see below, sub *G. simpliciella* Stephens).

The original specimen consists now of the following parts: a microscopical slide, with labels at the left: /blancardella/ (in Fabricius' hand, written with a goose quill, in faded brownish ink, brownish discoloured paper)/ Genit. prep. ♀ Niels L. Wolff 1968/*Glyphipteryx fischeriella* Z. ♀, Niels L. Wolff det./. Labels at the right: /Wing and pin found on bottom of box, teste A. Diakonoff/. This slide contains right fore wing under a cover glass, glued at the angles and a small original pin, glued beside.

Second slide, labels at the left side: /*Tinea blancardella* Fabricius 1781, Spec. Ins. II 305 ikke TYPE! ♀ genitalia i Kanadabalsam, dissec. i.vi.1968, Niels L. Wolff/. — Label at the right side: /*Glyphipteryx fischeriella* Zeller, 1839 Niels L. Wolff det./ Stemmer ikke med Fabricius beskrivelse af *Tinea blancardella* N.L.W./.

As this specimen, a *Glyphipterix* species, does not at all agree with the original description of Fabricius, it cannot be the type of his *Tinea blancardella* (cf. also Karsholt & Schmidt Nielsen's remark about this specimen). It seems advisable therefore to fix this name by selecting a neotype for that species.

I hereby select as such a male specimen, with the genitalia entirely agreeing with the figures by Pottinger & LeRoux (1971, figs. 12a-c, 16, 17 and 23a), a specimen in the British Collection, British Museum (Natural History), which is labelled thus: /*Phyllonorycter blancardella* F. / Salisbury, bred 10.4-1.5.1900, E. E. Bankes Coll., B.M. 1928-208/ Neotype, *Tinea blancardella* Fabricius, 1781, selected by A. Diakonoff, 1976/ Gen. no. 9850 A. Diak./.

Glyphipterix simpliciella (Stephens, 1834)

and *G. cognatella* (Stephens, 1834)

The alleged type of Fabricius' *Tinea blancardella* Fabricius has been identified with *Glyphipterix* "fischeriella" Zeller, 1839, by Dr. Wolff, as has been stated above. Recently Dr. J. D. Bradley (1972) substituted for this name the combination *Glyphipterix simpliciella* (Stephens, 1834)¹), as a senior synonym. As Dr. Bradley told me, when looking for a specimen in the Stephens' original collection, he chose a specimen from the series of "Heribeia" *simpliciella* (the original combination), that was labelled "type" at some earlier date, by somebody else.

However, Stephens' description of *Heribeia simpliciella* answers not only the description of *G. „fischeriella"* Zeller, but also that of *G. forsterella* (Fabricius, 1781), mentioning a metallic dot in the black apical spot of the fore wing; of all European *Glyphipterix* species only *G. forsterella* and its forms possess such a dot in the centre of the apical spot. Therefore one might have preferred the choice of the following name in Stephens' 1834 paper, viz. *Heribeia cognatella*, a true "fischeriella". However, Dr. Bradley's choice is perfectly valid, as he indicated in the original collection as lectotype of *G. simpliciella* a specimen from the original (apparently mixed) type series of Stephens, even though this specimen does not quite fit the description: in *fischeriella* the metallic dot is at the margin of the apical spot.

In order to prevent any further dispute in the present case I wish to state (1) that the name *Tinea blancardella* Fabricius, 1781, cannot be used for *Glyphipterix* "fischeriella" Zeller, as the specimen in Fabricius' Collection under the name "blancardella", indicated as type by Miss Zimsen, is not the Fabrician type of *blancardella*; (2) that by Bradley's selection of the name *Glyphipterix simpliciella* (Stephens), both *G. fischeriella* Zeller and *G. cognatella* (Stephens) have become synonyms of *G. simpliciella* (Stephens). In order to prevent further change of names and resulting confusion, I wish to adopt the name *Glyphipterix simpliciella* (Stephens) over *G. cognatella* (Stephens).

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¹) Not to be confused with *Glyphipterix simplicella* Christoph, 1882, from the Far East.

The lectotypes of these two species, in the British Collection, British Museum (Natural History), London, designated herewith, are labelled thus.

[*Heribeia simpliciella* Stephens]

/Type (round label, red margin, print)/ *simpliciella* mihi (print)/ Stephens Coll. *Glyphipteryx fischeriella* d. Named by Stephens (print and ink)/. Abdomen of this male specimen is intact (teste A. Diakonoff).

[*Heribeia cognatella* Stephens]

/Type (round label, red margin, print)/ *cognatella* mihi (print)/ Stephens Coll. *Glyphipteryx cognatella* c. Named by Stephens (print and ink)/. Abdomen of the male specimen is intact (teste A. Diakonoff).

Tinea cramerella Fabricius, 1781

T. B. Fletcher's surmise (1946) that *Tinea cramerella* Fabricius, 1781, might be a synonym and the oldest available name for *Glyphipteryx fischeriella* Zeller obviously is incorrect. The original description mentions nine marginal markings: five along costa and four along dorsum and termen. This does not agree with the wing pattern of an European *Glyphipteryx* species which usually has no more than three marks on dorsum and termen together. Fabricius' type specimen of *Tinea cramerella*, kindly sent to me on loan by the Copenhagen Museum (Dr. Ing. N. L. Wolff), is in such a poor condition as to be almost unidentifiable: only the thorax remains, with the left fore wing and both hind wings completely faded and partly destroyed by insects. However, the shape of the narrowly lanceolate, acutely pointed fore wing shows clearly as well that this cannot be a *Glyphipteryx* species. Otherwise the identity of *Tinea cramerella* Fabricius must remain obscure.

Glyphipteryx thrasonella (Scopoli, 1763)

and [*Tinea klemannella* Fabricius I and II]

In the second volume of "Species insectorum", Fabricius described *Tinea klemannella* (1781: 304)² which, already judging from the terse but adequate description, has to be a *Glyphipteryx* species. Surprisingly, on p. 509 of the Appendix to the same volume, he described a quite different species under the same name, *Tinea klemannella*, and declared that the first "*klemannella*" should be suppressed, being the same as *Tinea fueslella* Fabricius (p. 301 of the same volume). This second *klemannella* is recorded to be similar but much smaller than the first, and without any reference to a black ternal spot.

²) Since Fabricius did not state anywhere to whom he dedicates *klemannella*, the often used emendation of this name to "*klemannella*" is unjustified.

This latter species has been currently recognized a lithocolletid and is known under the combination *Phyllonorycter klemannella* (Fabricius), a leaf-miner of *Alnus* in Europe. Since the type of this common species is not extant, it would be advisable to select a neotype for it as well. Although the type is cited in Zimsen's Catalogue, it is an error, because, judging from Fabricius' descriptions, this type pertains to the first, larger *Tinea klemannella* [= "*Glyphipterix klemannella*"] and not to the smaller, second *T. klemannella* [= *Phyllonorycter klemannella*].

I therefore now select as neotype of *Phyllonorycter klemannella* (Fabricius, 1781), a male specimen, with the genitalia completely agreeing with the figure of Deschka (1970: 90, fig. 4) and labelled thus: / (Germany, Hamburg), Allersdorf/Holst., Wennbutteiler Wald, 16.5.1959, O. Tiedemann/ NEOTYPE *Phyllonorycter klemannella* (Fabricius, 1781), selected by A. Diakonoff, 1976/ Gen. no. 9823, A. Diak./ The specimen has been deposited in the Hamburg Museum of Natural History, Western Germany.

Miss Zimsen records the two species thus (1964: 540):
560, *Tinea Klemanella* [sic] Spec. Ins. II p. 304.87 "in Angliae hortis Mus. Dom. Yeats — vide no. 578. And sub no. 578: *Tinea Klemanella* [sic] Spec. Ins. II App. p. 509 "Hamburgi Dr. Schulz". Ent. Syst. III.II p. 326.109, Ent. Syst. Suppl. 485.80 — Kiel 1 specimen.

This alleged type specimen was kindly sent to me for investigation. It has a single brownish discoloured label "*Klemannella*", written with a goose quill in brownish ink, in Fabricius' hand; the specimen is in a remarkably good condition, an unspread pinned male, with only the left antenna missing. The genitalia provided a good mount (no. 9355AD), proving definitely Fabricius' statement and the synonymy. It also shows that the type pertains to the large *Tinea klemannella* of page 304, instead of to the small *Tinea klemannella* of p. 509, as is already stated above; at some time the types of the two "*klemannella*" in Fabricius collection, at least, as recorded in Zimsen's Catalogue, must have been interchanged. Fortunately for us, the two species are so different and their descriptions so adequate, that this error does not have any consequences.

"Tinea fueslella" Fabricius, 1781

The already mentioned *Tinea fueslella* is cited by Miss Zimsen (1964: 539), as follows.

553. *Tinea fueslella* Fabricius: Spec. Ins. II p. 301.66 "in Germaniae nemoribus Dom de Hattorf" *Tinea Fyeslella* Ent Syst. III.II p. 318.138 "Habitat in Germania Dom. de Hattorff [sic]. Ent. Syst. Suppl. p. 493.72. — Kiel 3 specimens.

Judging from the descriptions which are identical, only one species is concerned, with the name spelled in two ways. I was kindly entrusted with all the three specimens (syntypes) of "*Fyestrella*", no separate material of "*Fuesstrella*" being extant. The three syntypes are partly spread, but only one was with the intact abdomen, a male. This specimen I hereby designate lectotype of *Tinea fuesstrella* Fabricius, 1781 (alias *Tinea fyestrella* Fabricius). It is provided with my labels /Gen. no. 9406/ LECTOTYPE, *Tinea fuesstrella* Fabricius, 1781, ♂, designated by A. Diakonoff, 1975/. The slide proved that indeed it is the same species as *Glyphipterix thrasonella* (Scopoli, 1763) and a junior synonym of that name; all three specimens showed clearly the characteristic black tornal spot of the species (the only European *Glyphipterix* species possessing such markings).

REFERENCES

- BRADLEY, J. D., in G. S. KLOET & W. D. HINCKS, 1972. — A check-List of British Insects, ed. 2, 2: 1-153. London.
- CHRISTOPH, H., 1882. — Neue Lepidopteren des Amurgebietes (Fortsetzung V, Bull. Nr. 4, 1881), Bull. Soc. Imper. Naturalistes Moscou, 57: 37-39.
- DESCHKA, G., 1970. — Lithocolletis chrysella Constant 1885 und zwei nahe verwandte Arten. Nachricht. Bl., bayer. Ent., 18: 85-97, figs. 1-14. München.
- FABRICIUS, J. C., 1777. — Genera insectorum eorumque characteres naturales secundum nvmervm etc.: (14) + 1-310. Chilonii.
- , 1781. — Species Insectorum exhibentes eorum differentias specificas, synonyma auctorum, loca natalia etc., 2: 1-517. Hamburgi et Kolonii.
- , 1794. — Entomologia Systematica emendata et aucta, secundum classes, ordines, genera, species etc., 3 (2): 1-349. Hafniae.
- , 1796. — Index alphabeticus in J. C. Fabricii Entomologiam systematicam: 1-572. Hafniae.
- FLETCHER, T. B., 1946. — Names of Microlepidoptera. — Entomol. Rec. & J. variat., 58: 127-129.
- HAWORTH, A. H. 1803-1828. — Lepidoptera Britannica, sistens digestionem novam etc.: 1-xxxvi + 1-609, Londoni.
- HINCKS, W. D. cf. BRADLEY, J. D.
- HÜBNER, J., [1816-1826]. — Verzeichniss bekannter Schmettlinge (sic): 1-431. Augsburg.
- KARSHOLT, O. & E. SCHMIDT NIELSEN, 1976. — Notes on some Lepidoptera described by Linnaeus, Fabricius and Ström. Ent. scand., 7: 241-251. Lund.
- KLOET, G. S. cf. BRADLEY, J. D.
- POTTINGER, R. P. & E. J. LEROUX, 1971. — The biology and dynamics of Lithocolletis blancardella on Apple in Quebec. Mem. ent. Soc. Canada, 77: I-VI + 1-437, figs. 1-44. Ottawa.
- SCHMIDT NIELSEN, cf. KARSHOLT, O. & E. SCHMIDT NIELSEN
- SCOPOLI, J. H., 1763. — Entomologia carniolica exhibens Insecta Carniolica indigena etc.: 1-29 + 3 + 1-420 + 4. Vindobonae.
- STEPHENS, J. F., 1834. — Illustrations of British Entomology etc., Haustellata, 4: 1-433 + 2. London.
- ZELLER, P. C., 1839. — Versuch einer naturgemässen Eintheilung der Schaben. Isis 1839: 167-220. Jena.
- ZIMSEN, E., 1964. — The type material of J. C. FABRICIUS: 1-656, 2 figs. Copenhagen.