

Synonyms of European Tortricidae and Noctuidae, with special reference to the publications of Hübner, Geyer and Frölich

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Summary. *Pyralis approximana* Fabricius, 1798 is synonymized with *Acleris ferrugana* (Denis & Schiffermüller, 1775). *Epagoge peramplana* Hübner, 1825, in combination with *Aphelia* Hübner, 1825 is introduced as the valid name for the species known as *Aphelia amplana* (Hübner, 1813). Frölich is established as the correct author of the species currently known as *Lozotaeniodes formosana* (Geyer, 1830). *Tortrix venustana* Frölich, 1828 is a new synonym of *Celypha aurofasciana* (Haworth, 1811). *Olethreutes valesiana* Rebel, 1907 (not 1906) is placed in the genus *Phiaris* Hübner, 1825. *Tortrix perlana* Frölich, 1830 is a new synonym of *Eublemma pulchralis* (Villers, 1789).

Zusammenfassung. *Pyralis approximana* Fabricius, 1798 wird mit *Acleris ferrugana* (Denis & Schiffermüller, 1775) synonymisiert; *Epagoge peramplana* Hübner, [1825], neu kombiniert mit *Aphelia* Hübner, 1825 wird als gültiger Name für die als *Aphelia amplana* (Hübner, 1813) bekannte Art eingeführt; Frölich wird als der richtige Autor der gegenwärtig als *Lozotaeniodes formosana* (Geyer, 1830) geführten Art festgestellt; *Tortrix venustana* Frölich, 1828 ist ein neues Synonym von *Celypha aurofasciana* (Haworth, 1811); *Olethreutes valesiana* Rebel, 1907 (nicht 1906) wird in die Gattung *Phiaris* Hübner, 1825 gestellt. *Tortrix perlana* Frölich, 1830 ist ein neues Synonym von *Eublemma pulchralis* (Villers, 1789).

Résumé. *Pyralis approximana* Fabricius, 1798 est synonymisé sous *Acleris ferrugana* (Denis & Schiffermüller, 1775). *Epagoge peramplana* Hübner, 1825, en combinaison avec *Aphelia* Hübner, 1825, est introduit comme nom valide pour l'espèce connue sous le nom de *Aphelia amplana* (Hübner, 1813). Frölich est établi comme étant l'auteur correct de l'espèce connue jusqu'à présent sous le nom de *Lozotaeniodes formosana* (Geyer, 1830). *Tortrix venustana* Frölich, 1828 est un nouveau synonyme de *Celypha aurofasciana* (Haworth, 1811). *Olethreutes valesiana* Rebel, 1907 (non 1906) est placé au sein du genre *Phiaris* Hübner, 1825. *Tortrix perlana* Frölich, 1830 est un nouveau synonyme de *Eublemma pulchralis* (Villers, 1789).

Key words. Lepidoptera, Tortricidae, Noctuidae, nomenclature, synonymy, Europe.

Introduction

Jakob Hübner contributed considerably to the knowledge of European Tortricidae in the Tortrices part of the 'Sammlung europäischer Schmetterlinge'. This part is not dated, but the 53 plates were published, according to Hemming (1937), from 1799 until 1833. Only the first 47 plates were edited by Hübner himself, the remaining by Geyer. There is no text to the plates published by Hübner. All plates have the headline 'Tortrices', i.e. the generic name with plural ending. Therefore, we regard all the species published without text to be originally combined with *Tortrix*. Plates 1 to 29 were published in 1799, plate 30 in 1800, plates 31 to 37 in 1813, 38 to 41 in 1817, 42 to 43 in 1819, 44 in 1822, 45, 46 in 1823, 47 in 1829, 48 to 52 in 1830 and 53 in 1833 (Hemming, 1937: 284–291). Geyer edited plates 48 to 53, but he is only the author of the names published in plate 53. The new descriptions for species figured in plates 48 to 52 were authored in an accompanying text, which is dated 1830, by Franciscus A. G. von Frölich from Ellwangen (Germany).

Frölich was one of the first authors who specialized in Tortricidae. He has left us two publications on Tortricidae. The first one is a faunistic paper on the Tortricidae of Württemberg (South-West Germany) containing many new descriptions (Frölich 1828). However, most of Frölich's names were later forgotten, because they were not recognizable (Guenée 1845: 111). The second publication of Frölich is the aforementioned text relating to the specimens figured in plates 48 to 52 in Geyer's continuation of Hübner's '*Sammlung europäischer Schmetterlinge*' (Frölich 1830, in Hübner 1796 ff.). A part of these names are erroneously attributed to Geyer in the modern literature, but Geyer only edited the later part of the volume on Tortricidae after Hübner's death, as stated above.

Some errors relating to these early authors still persisting in recent literature are corrected in the present paper. A few other corrections concerning the authorship of European Tortricidae are also included.

The nomenclature of the two common species of *Acleris*, *A. notana* (Donovan) (the *Betula*-feeder) and *A. ferrugana* ([Denis & Schiffermüller]) (the *Quercus*-feeder), has caused a lot of confusion in the past. We deal with one old synonym that threatens the stability and correct a mistake that appeared in *Microlepidoptera Palaearctica* volume 6 (Razowski 1984) on the group. Our corrections do not diminish the value and usefulness of the important publications of Razowski (especially 1984, 2001), though they are sometimes in conflict with statements of that author (in these mentioned publications).

Systematic Part

Tortricidae

Acleris ferrugana ([Denis & Schiffermüller], 1775)

Tortrix ferrugana [Denis & Schiffermüller], 1775: 128

Tortrix rufana sensu Hübner, 1799: Tortr., pl. 20, fig.127, nec Denis & Schiffermüller, 1775

Pyralis approximana Fabricius, 1798: 478. **syn. n.** Type locality: Halae Saxonum [Halle, Saxony]

Tortrix tripunctulana Haworth, 1811: 417

Tortrix bifidana Haworth, 1811: 418

[*Teras*] *lythargyrana* Treitschke, 1830: 264. Invalid name.

Tortrix brachiana Freyer, 1833: 33

Tortrix rubidana Herrich-Schäffer, 1851: 146

Teras lithargyrana Herrich-Schäffer, 1851: 147

Teras selasana Herrich-Schäffer, 1851: 147

Peronea fissurana Pierce & Metcalfe, 1915: 325

Notes. *Pyralis approximana* Fabricius, 1798 was listed as a doubtful synonym of *Acleris tripunctana* Hübner (= *notana* Donovan) by Obratzov (1956: 132) and Razowski (1966: 442, 1984: 269). We propose to place it in synonymy with *Acleris ferrugana* ([Denis & Schiffermüller], 1775). This change will maintain current nomenclatural usage of both species involved. The original description of *approximana* (Fabricius, 1798: 478), translated from latin, "...forewings shining yellow. Three dots, nearly black, on the edge of the wing.....resembling *boscana*", could represent both *notana* and *ferrugana*, but most likely the latter which is slightly more yellowish than *notana* in most specimens. *Acleris notana* normally has a more brownish hue.

Fabricius described *Pyralis centrana* Fabricius, 1794, which was later placed in synonymy with *Acleris rhombana* (Denis & Schiffermüller, 1775) by Leraut (1997: 141). This name was listed as a doubtful synonym of *Acleris notana* (Donovan, 1806) by Obraztsov (1956: 132) and Razowski (1966: 442, 1984: 269). The specific names *centrana* and *approximana* (types are either lost (*centrana*) or could not be traced (*approximana*) according to Zimsen, 1964) have not been used as valid names after 1899 (ICZN, 4th ed., Art. 23.9.1) and would not threaten *Acleris notana* (Donovan, 1806) anyway, but a reversal of precedence could be avoided, if the future selection of type specimens follows the present suggestions: A specimen of *Acleris rhombana* should be selected as neotype of *centrana*, and a specimen of *Acleris ferrugana* as neotype or eventually lectotype of *approximana*.

Razowski (1984) interchanged the figures of male and female genitalia of the two species *Acleris notana* and *A. ferrugana*. His figure numbered 109 represents *notana* (not *ferrugana*), and figure numbered 113 represents *ferrugana* (not *notana*). The mistake was repeated by Razowski (2001), where genitalia figure 28 is *notana* (not *ferrugana*) and 29 is *ferrugana* (not *notana*).

***Aphelia peramplana* (Hübner, 1825) comb. n.**

Tortrix amplana Hübner, 1813 (“1796”): Tortr., pl. 31, fig. 201

Epagoge peramplana Hübner, 1825 (“1816–1826”): 389 (replacement name for *amplana*)

Note. *Tortrix amplana* Hübner, 1813 (“1796”) is a junior primary homonym of *Tortrix amplana* Hübner, 1799 (“1796”): pl. 5, fig. 24, now placed in the genus *Cydia*. The name *peramplana* is erroneously treated as a synonym of *Cydia amplana* (Hübner, 1799) (Leraut, 1997: 148).

***Lozotaeniodes formosana* (Frölich, 1830) auct. rev.**

Tortrix formosana Frölich, 1830 in Hübner, Tortr.: 9, pl. 51, fig. 319, 320

Type locality: Süd-Frankreich (South France)

This name has erroneously been attributed to Geyer, 1830 in Hübner, 1796 ff. (Razowski in Karsholt & Razowski, 1996: 141; Leraut, 1997: 135)

***Celypha aurofasciana* (Haworth, 1811)**

Tortrix venustana Frölich, 1828: 54. **syn. n.**

Type locality: Elvaci [Germany, Baden-Württemberg, Ellwangen].

The name *venustana* was wrongly attributed to Geyer, in Hübner 1830 (“1796”) (Leraut, 1997: 151), however it had already been used by Frölich, 1828 and Frölich, 1830 (in Hübner, 1796 ff.): 12, pl. 51, fig. 326.

***Phiaris valesiana* (Rebel, 1907) comb. n.**

Olethreutes valesiana Rebel, 1907, Dt. ent. Z. Iris 19: 232.

Type locality: Switzerland, Wallis, Gröben, ca. 1900 m.

Note. This species has been erroneously credited to Guenée, 1844 (Razowski *in* Karsholt & Razowski, 1996: 144; Leraut, 1997: 151) and placed in *Celypha*. However, no description could be found under that reference. The species was listed with correct authorship as a synonym of *Phiaris turfosana* (Herrich-Schäffer, 1851) (Razowski, 1995: 316). In Rebel's original description, the present species is said to be most closely related to *Phiaris turfosana* (Herrich-Schäffer, 1851) and comparative genitalia figures of both species are given. Therefore, *Olethreutes valesiana* is here transferred from *Celypha* to *Phiaris*. The correct date for the description of *Phiaris valesiana* and *Eucosma monstratana* Rebel, which are described in the same publication, is 1907 (Rebel, 1907: 235). It has erroneously been dated 1906 (Razowski *in* Karsholt & Razowski, 1996: 149; Razowski, 1995: 316; Razowski, 2001: 22). Razowski (2001) treated *valesiana* as a synonym of *turfosana*. In our opinion, the genital characters given in the original description indicate that *valesiana* is a distinct species, and evidence to the contrary must be presented before accepting the synonymy.

Noctuidae

Eublemma pulchralis (Villers, 1789)

Tortrix perlana Frölich, 1830 *in* Hübner, Samml. europ. Schmett., Tort.: 8, pl. 50, fig. 316. **syn. n.**

Type locality: Pavia.

The name *perlana* has wrongly been attributed to Geyer, 1830 *in* Hübner, 1796 ff. (Leraut, 1997: 229).

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