

**Notes on the genera *Epicorsia* HUBNER, 1818  
*Deltobotys* MUNROE, 1964 and *Paracorsia* MARION,  
1959 with the description of a new genus  
(Lepidoptera, Pyraloidea, Crambidae, Pyraustinae)\***

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**Abstract**

*The synonymy of Paracorsia is discussed, Deltobotys is considered a valid genus; a new genus, Palepicorsia is erected for Botys ustrinalis CHRISTOPH, formerly placed in Epicorsia HÜBNER. Metasia ossealis STAUDINGER and Scopula palmalis SWINHOE are designated junior synonyms of B. ustrinalis CHRISTOPH and the correct publication dates of two formerly established junior synonyms, Metasia emiralis OBERTHUR and Metasia excavatalis RAGONOT are given.*

Key words: Pyraloidea, Crambidae, taxonomy, new genus.

**Samenvatting**

*Deltobotys en Paracorsia worden als goede genera beschouwd. Er wordt een nieuw genus beschreven, Palepicorsia voor Botys ustrinalis CHRISTOPH. Deze soort werd hiervoor in Epicorsia geplaatst. Metasia ossealis STAUDINGER en Scopula palmalis SWINHOE zijn nieuwe synoniemen van B. ustrinalis. De correcte datum van publicatie van de synoniemen: Metasia emiralis OBERTHUR en Metasia excavatalis RAGONOT worden gegeven.*

Abbreviations: BMNH: The Natural History Museum, London. MNHU: Museum für Naturkunde der Humboldt-Universität zu Berlin. GPKM: Genital preparation, K. MAES. Coll.K.M: Collection K. MAES, Tervuren.

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\* Received 25.IV.1994.

### History

The monotypic *Paracorsia* was erected by MARION (1959) for *Pyalis repandalis* [DENIS & SCHIFFERMÜLLER] when MUNROE (1958) showed that the type designations for the genus *Epicorsia* HÜBNER, 1818 by SHIBUYA (1928), (*Pyalis nyctemeralis* HÜBNER, [1809]) and PIERCE & METCALFE (1938), (*Pyalis repandalis* [DENIS & SCHIFFERMÜLLER], 1775) were incorrect.

Later MARION (1973) regarded *Deltobotys* MUNROE, 1964 as a junior synonym of *Paracorsia* based on the resemblance of the clasper or sella. In addition, MARION (1959, 1973) placed *Botys ustrinalis* CHRISTOPH in *Epicorsia*. Recent check lists of the west palaearctic lepidoptera (LERAUT, 1980; VIVES MORENO, 1992) follow the opinions of MARION (l.c.).

### Discussion

I consider *Deltobotys* a valid genus. Based on the description and figures by MUNROE (1964) *Deltobotys* differs from *Paracorsia* by a flat frons, a slender, sharply triangular uncus with only a few setae on the apex, a narrow clasper on the valva without an editum bearing modified setae, a small tooth-like sclerotization on the sacculus near the base of the clasper, a fairly wide ductus bursae, a base of the ductus seminalis that is wide, originating at some distance beneath the antrum.

In *Paracorsia* (Plate 3) the frons is slightly protruding, rounded, the moderately broad uncus is dorsally covered with numerous setae, the clasper is broad and carries an editum with modified setae, the ductus bursae is long and rather narrow, coiled at the base of the corpus bursae and a narrow ductus seminalis originates just beneath the antrum.

*Botys ustrinalis* CHRISTOPH is clearly different from the *Epicorsia* species figured by MUNROE (1958, 1976 and 1978). *Epicorsia* species have male genitalia with an editum and modified setae on a long and narrow, medially directed arm, the aedoeagus at distal end shallowly and unsymmetrically divided and tympanal organs with fornix tympani narrow and completely underneath the venula prima. *B. ustrinalis* lacks these structures in the male genitalia and can therefore not be placed in *Epicorsia*. It has a very small uncus, a simple sella with an editum of flattened setae and the fornix tympani is broad and adjacent to the venula prima. A new genus is erected for *B. ustrinalis* CHRISTOPH.

### *Palepicorsia* Gen.n.

Gender: feminine

Type-species: *Botys ustrinalis* CHRISTOPH, [1877] 1876

### Diagnosis:

Male genitalia with a very small uncus, dorsally with some simple setae, sella simple, dorsally with small editum of flattened setae; tympanal organs

with a broad fornix tympani adjacent to venula prima. I place it close to *Achyra* GUENÉE, 1849 because of the flattened setae of the editum and the broad fornix tympani, but it lacks the narrow triangular uncus and the transtilla with ventral arms found in *Achyra* species.

### Description:

Frons protruding, pointed. Vertex with rough erect scaling. Labial palpus porrect, triangular, length about 1,5 the diameter of the eye; third segment concealed in pointed anterior scaling of second segment. Maxillary palpus (4 segments) and proboscis well developed, long. Eyes normally developed. Antennae filiform in both sexes. Ocellus present. Body slender. Legs long with normally developed spurs. Fore wing triangular. Subcostal retinaculum present in males. Frenulum simple in males and females.

Tympanal organs: (nomenclature according to MAES, 1985) praecinctorium weakly bifid; tympanal organs moderately invaginated; fornix tympani broad, adjacent to the venula prima; saccus tympani small; venula prima forming a loop; venula secunda strongly sclerotized extending beyond the saccus tympani.

Male genitalia: uncus small and triangular, dorsally with some simple setae; tegumen broad; vinculum moderately developed with a small saccus; valva broad at the base, distally narrow; sella simple, strongly sclerotized, distally bearing minute spines, a small editum with simple setae; juxta double, plate-like; aedoeagus long membranous.

Female genitalia: papillae anales membranous with simple setae; apophyses anteriores and posteriores short; sinus vaginalis membranous; antrum as a small sclerotized tube or ring, open at one side; ductus bursae broadening beneath antrum into a separate pouch, terminating in a narrow ductus seminalis; ductus bursae strongly coiled just before the corpus bursae; the latter with a rhomboid signum and a weakly sclerotized second signum near the base of the appendix bursae.

Range: Spain, N. Africa, Caucasus and Middle East.

### Species:

*Palepicorsia ustrinalis* (CHRISTOPH), [1877] 1876 **Comb. n.**

CHRISTOPH, 1877 Horae Soc. ent. ross. 12: 274, nr. 38 pl. 7, fig. 45 (*Botys*) TL: Derbent

= *ossealis* (STAUDINGER) **Syn.n.**

STAUDINGER, 1880 Horae Soc. ent. ross. 15: 182 (*Metasia*) TL: unknown

= *palmalis* (SWINHOE) **Syn.n.**

SWINHOE, 1884 Proc. zool. Soc. Lond. 1884: 525 (*Scopula*) TL: Pakistan, "Kurrachee"

= *emiralis* (OBERTHUR)

OBERTHUR, 1888 Etudes ent. 12: 36 pl. 6, fig. 33 (*Metasia*) TL: Algeria, Biskra and Omach

= *excavatalis* (RAGONOT)

RAGONOT, 1892, Dt. ent. Z. Iris: in Staudinger: 294 pl. 3, fig. 14 (*Metasia*) TL: Tunisia

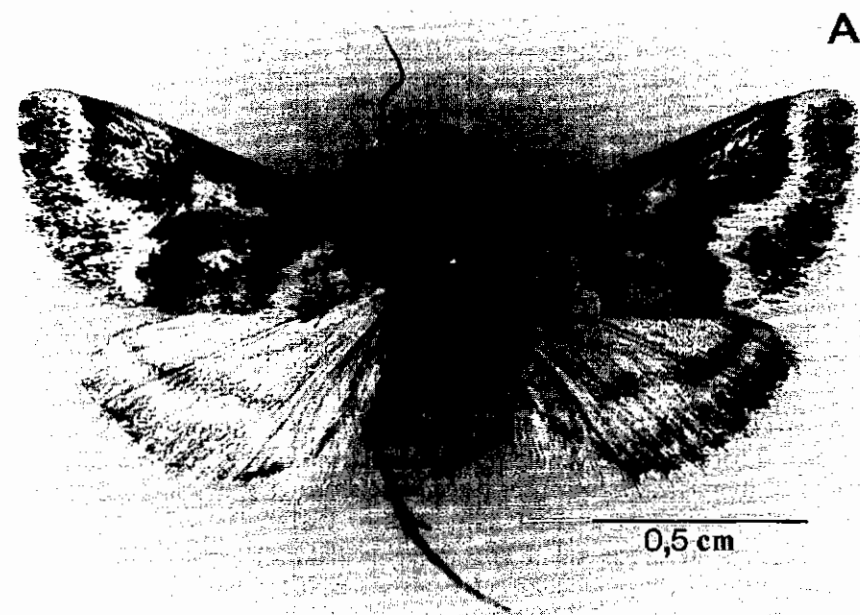


Plate 1. A: *Palepicorsia ustrinalis* CHRISTOPH; B: idem: lateral view of the head; C: idem: dorsal view of the head.

**Nomenclatural notes:**

*Botys ustrinalis* CHRISTOPH, [1877] 1876

MUNROE (1970) pointed out the correct date of publication and designated the lectotype which is in the Zoological Institute of Leningrad. The BMNH has a specimen with a blue label in ZELLER's handwriting: "Conflualis Z.,

Derbent, Christ. lit. 3/73", two green labels, a rectangular "7/7" and a round "418" and a white "Zell. Coll. 1884". CHRISTOPH and ZELLER communicated regularly, exchanging views and specimens and so it may be assumed that this specimen from the ZELLER collection originally came from Christoph. Therefore I designate it here as paralectotype.

*Metasia ossealis* STAUDINGER, 1880

STAUDINGER described the species from a male collected by "Johann on 30 sept." The genitalia of the type-species were later illustrated by AMSEL (1961). He transferred it to the genus *Mardinia*. The male genitalia are conspecific with *ustrinalis* CHRISTOPH. AMSEL stated that the type was in Berlin (MNHU), but it could not be found (B. KRUTZSCH, pers. comm.).

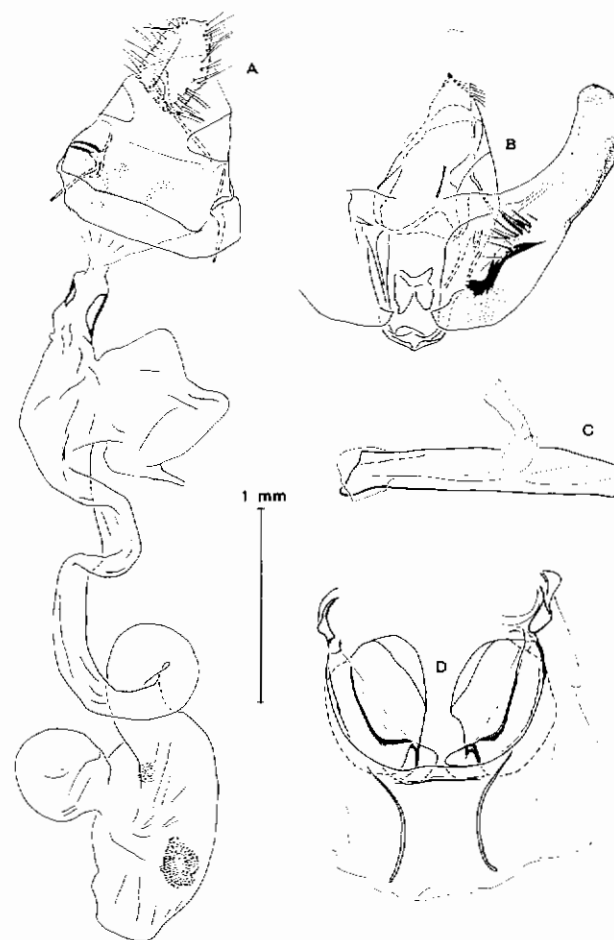


Plate 2. *Palepicorsia ustrinalis* CHRISTOPH.

*Scopula palmalis* SWINHOE, 1884

The original description by SWINHOE states "Kurrachee, November". There is no indication on the number of specimens he studied, neither did he designate a type. The collections of the BMNH contain a male and a female labeled as "Kurrachee", presumably Karachi, originating from SWINHOE's collection, both were collected in November. I designate the female specimen with the labels "977 Kurrachee, 11 79" and "Kurachee 84-88" as the lectotype and the male specimen with labels "977 Kurrachee 11.83" and "*Scopula palmalis* Swinhoe Type" as the paralectotype (the male has a glued-on abdomen).

*Metasia emiralis* OBERTHUR, 1888

OBERTHUR states that several specimens, male and female, were collected in May 1885 by M. BLEUSE from Biskra and Omach. The BMNH collection contains three specimens labelled as "cotypes" from the OBERTHUR collection. The male specimen labelled "Algérie Omach, L. BLEUSE May 1885" is here designated as lectotype and the female specimens labelled "Algérie Omach, L. BLEUSE May 1885" and "Algérie Biskra, L. BLEUSE May 1885" are designated as paralectotypes.

*Metasia excavatalis* RAGONOT, 1892

Both species *excavatalis* RAGONOT and *emiralis* OBERTHUR, 1888 were listed by REBEL (1901) junior synonyms. MARION (1959, 1973) lists no synonyms and VIVES MORENO (1992) lists *ustrinalis* CHRISTOPH, 1894 and *emiralis* OBERTHUR, 1922 as junior synonyms, both with incorrect publication dates.

**Redescription of *P. ustrinalis* CHRISTOPH (Plates 1-2)**

External characters: as for the genus, the ground colour is yellowish-white suffused with dark brown or dark grey scales.

The spurs 0,2,4 are normally developed, inner spur double the length of outer spur. Mid-tibia not enlarged.

Fore wings: costa, dark near the thorax, dark coloration ending at the postmedial fascia, antemedial and postmedial fascia dark-brown or dark-grey. Postmedial fascia strongly bent inwards at M3, orbicular and reniform stigmata dark. In dark specimens a whitish subterminal fascia.

The hind wings are pale white with a dark postmedial and subterminal fascia, broad at the costa and narrowing towards the anal area; terminating at the first anal vein.

The antemedial and postmedial fasciae are visible on the underside.

Wing span: 19-20 mm.

Male and female genitalia, tympanal organs: as for the genus.

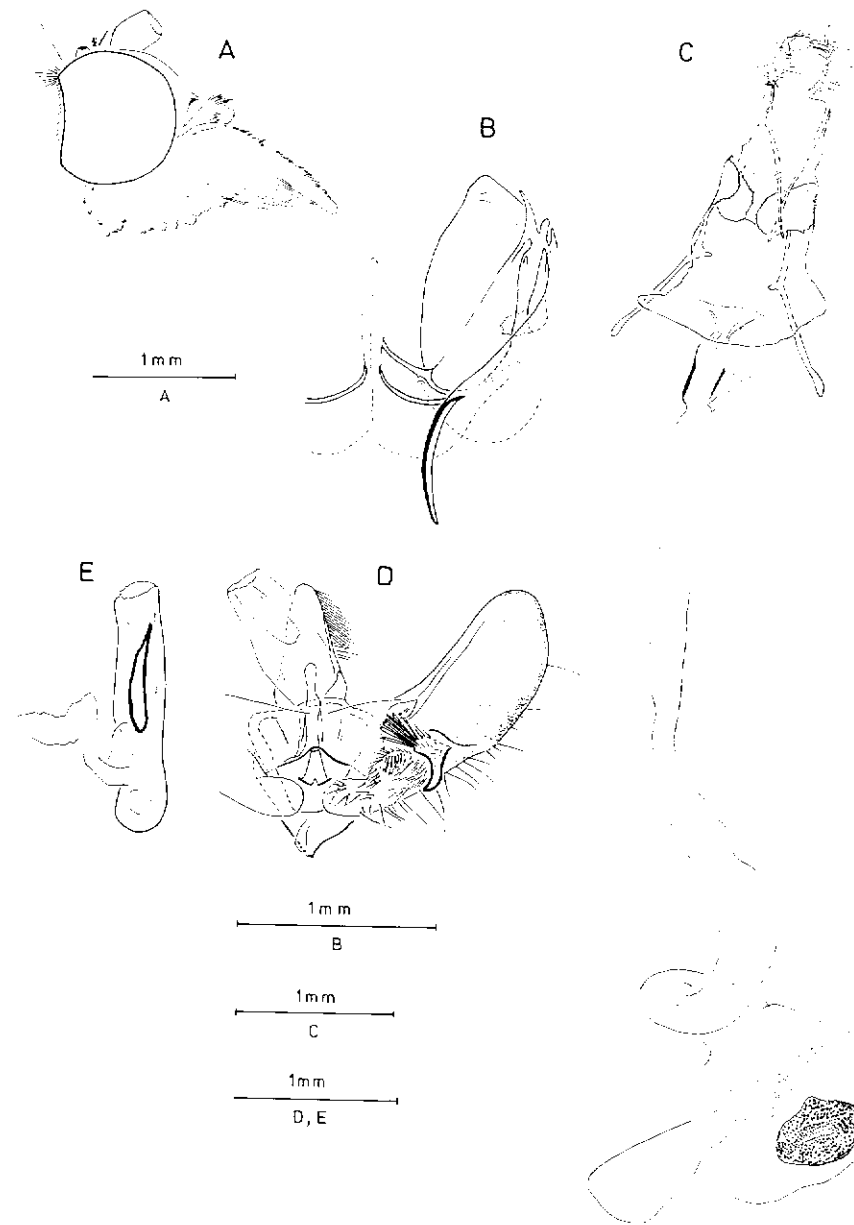


Plate 3. *Paracorsia repandalis* [DENIS & SCHIFFERMÜLLER].

Range: As for the genus.

Life history: not known.

Remarks: The specimens from the Caucasus were much darker than those from other localities but these differences were not substantiated by differences between the genitalia or tympanal organs.

#### Type material studied:

*Botys ustrinalis* CHRISTOPH, [1877] 1876 paralectotype, ♀: Derbent, Zell. Coll., Pyralidae Brit. Mus. Slide N° 19888 ♀ (BMNH); *Scopula palmalis* SWINHOE, 1884 lectotype, ♀: 977 Kurrachee 11-79, Kurrachee 84-88, Pyralidae Brit. Mus. Slide N° 19934 ♀ (BMNH); idem paralectotype, ♂: 977 Kurrachee 11.83 (BMNH). *Metasia emiralis* OBERTHUR, 1888 lectotype ♂: Algérie Omach, L. BLEUSE May 1885 (BMNH); paralectotype ♀: Algérie Omach L. BLEUSE May 1885 (BMNH); paralectotype ♀: Algérie Biskra, L. BLEUSE May 1885 (BMNH); *Metasia excavatalis* RAGONOT, 1892 Holotype ♀: Tunis 91 Vaalog., Origin, *Metasia excavatalis* RAG. type origin (MNHU).

#### Additional material studied:

*Palepicorsia ustrinalis*: ALGERIA: 1♀, Hamman-es Salahin, 13.IV.1904 WLSM, slide N° 19889 ♀ (BMNH); 1♂, idem, 10.IV.1904, slide N° 19890 ♂ (BMNH); SPAIN: 1♂, 1♀, Murcia, Coll. RAGONOT. 95-85 (BMNH); TUNISIA: 1♀, Tozeur, VI.07 (BMNH); ISRAEL: 1♀, Palestine 84-86 (28) (BMNH); CYPRUS: 1♀, Larnaca 20.IV.1901 (BMNH); 1♂: Cyprus 1902-311 (BMNH); IRAN: 1♀: South Caspian 31.VIII.1961, Meyan Kalah Peninsula, S.L. SUTTON (BMNH); IRAQ: 4♂♂, Fao 91-84 Cuming Coll. (BMNH); *Paracorsia repandalis*: FRANCE: 1♂, Les Baux, 19.VII.82, K. MAES, GPKM ♂ 257; 1♀, idem, GPKM ♀ 461 (Coll.KM); 1 ♂, Montpellier 6-16, H. BUREAU, GPKM ♂ 12149 (KBIN).

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