SHILAP Revista de Lepidopterología
ISSN: 0300-5267
avives@eresmas.net
Sociedad Hispano-Luso-Americana de Lepidopterología
España

Razowski, J.
Diagnoses and Remarks on Genera of Tortricidae, 2: Cochylini (Lepidoptera: Tortricidae)
SHILAP Revista de Lepidopterología, vol. 39, núm. 156, diciembre, 2011, pp. 397-414
Sociedad Hispano-Luso-Americana de Lepidopterología
Madrid, España

SHILAP Revta. lepid., 39 (156), diciembre 2011: 397-414 CODEN: SRLPEF ISSN:0300-5267

Diagnoses and Remarks on Genera of Tortricidae, 2: Cochylini (Lepidoptera: Tortricidae)

J. Razowski

Abstract

Diagnoses of the 68 described genera of Cochylini are provided along with redescriptions and comments where necessary. *Platphalonidia* is synonymized with *Phalonidia*, and *Platphalonia* Razowski, gen. n. is described.
KEY WORD: Lepidoptera, Tortricidae, Cochylini, diagnoses, remarks, new genus.

Diagnosis y comentarios sobre los géneros de Tortricidae, 2: Cochylini (Lepidoptera: Tortricidae)

Resumen

Se proporciona la diagnosis de 68 géneros de Cochylini con nuevas descripciones y comentarios cuando es necesario. *Platphalonidia* es sinonimizado con *Phalonidia* y se describe *Platphalonia* Razowski, gen. nov.
PALABRAS CLAVE: Lepidoptera, Tortricidae, Cochylini, diagnosis, comentarios, nuevo género.

Introduction

This is the second in a series of papers on the tortricid genera; the first was devoted to Phricanthini, Tortricini, and Schoenotenini (RAZOWSKI 2009a). The goal of this series is to present a compilation of the existing data on tortricid genera and to identify what is known and where information is incomplete or lacking. The parts of this series will be published in non-systematic order, depending on the sequence of completion of each group. Diagnoses are based on features provided in the original description, augmented by comments from subsequent papers. New diagnoses are proposed where earlier ones are either unavailable or inadequate. Other characteristics of the genera are included when necessary or relevant.

The literature abounds with re-descriptions and diagnoses of tortricid genera, but many are rather short, frequently lacking comparisons with similar or related taxa. Detailed comparative diagnoses are not only useful in systematic work but are required by the International Code of Zoological Nomenclature (1999) for descriptions of new taxa.

Morphological features that define many genera require revision and/or augmentation. Also, definitions of some genera require brief comments. Some original diagnoses are quoted verbatim, especially when no subsequent evaluation has been done.

The account for each genus consists of the original reference, type-species (t. sp.) with the countries of origin (in case of large countries also with their provinces, or large islands), the number of species included originally (e.g., monotypic), and the number of species known at present, the latter often based on the catalogue by BROWN (2005). AFR-Afrotropical, AU-

Australian, HOL -Holarctic, NEA-Nearctic, NEO-Neotropical, OR-Oriental, PAL-Palaearctic. Synonymies are treated in a similar way; the older, well known synonymies easily found in the literature are cited in a shortened form, i.e., without references. The references refer to re-descriptions and diagnoses. The genera are arranged alphabetically which simplifies the index to include only synonyms.

Systematic part

Acarolella Razowski & Becker, 1983

Acarolella Razowski & Becker, 1983, *Acta zool. cracov*., **26**(13): 443, t. sp.: *Euxanthis stereopis* Meyrick, 1931, Argentina, monotypic. Three species included. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: RAZOWSKI & BECKER (1983) originally suggested that *Acarolella* was close to *Anielia*, *Eugnosta*, and *Carolella* (the last now regarded as a synonym of *Eugnosta*). These genera differ in the structures of the transtilla and valva. RAZOWSKI (1994) compared *Acarolella* with *Anielia* and *Eugnosta*. *Acarolella* is characterized by two supposed autapomorphies: the arch-shaped transtilla and the presence of a bristled lobe of the disc on the valva.

Actihema Razowski, 1993

Actihema Razowski, 1993, *Acta zool. cracov*., **36**(1): 147, t. sp.: *Hysterosia hemiacta* Meyrick, 1920, Kenya; monotypic. AFR.

Diagnosis: RAZOWSKI (1993) originally compared *Actihema* with *Eugnosta*; the two have similar male genitalia, but in *Actihema* the top of the socius protrudes dorsally as in *Eupoecilia*. The process of the juxta and its terminal spiny broadening are probable autapomorphies for *Actihema*.

Aethes Billberg, 1820

Aethes Billberg, 1820, *Enum. Insect*.: 90, t. sp.: *Pyralis smeathmanniana* Fabricius, 1781, Great Britain.

Chlidonia Hübner, [1825], *Verz. bekannter Schmett*.: 393, t. sp.: [*Phalaena*] *hartmanniana* Clerck, 1759, Europe.

Phalonia Hübner, [1825], *Verz. bekannter Schmett*.: 393, t. sp.: *Tortrix tesserana* [Denis & Schiffermüller], 1775, Austria.

Dapsilia Hübner, [1825], *Verz. bekannter Schmett*.: 394, t. sp.: [*Tortrix*] *rutilana* Hübner, [1814-17], Germany.

Lozopera Stephens, 1829, *Syst. Cat. Br. Insects*, (2): 191, t. sp.: *Pyralis francillana* Fabricius, 1794, England.

Chrosis Guenée, 1845, *Annls Soc. ent. Fr*., (2)3: 300, t. sp.: *Tortrix decimana* [Denis & Schiffermüller], 1775, Austria.

Argyridia Stephens, 1852, *List Specimens Br. Anim. Colln. Br. Mus*., 10: 83, t. sp.: *Tinea dipoltella* Hübner, [1810-13], unknown.

Coecaethes Obraztsov, 1943, *Mitt. münch. ent. Ges*., **33**: 99, t. sp.: *Lozopera mauritanica* Walsingham, 1898 sensu Obraztsov, 1943 = *Aethes amseli pamirana* Razowski 1967, Afghanistan.

Cirriaethes Razowski, 1962, *Acta zool. cracov*., **7**: 414, t. sp. *Lozopera mauritanica* Walsingham, 1898, Morocco, established as a subgenus of *Aethes* Billberg, 1820. One hundred and twenty six species included now. PAL/OR/NEA/NEO.

RAZOWSKI (1970b, 1987, 1994, 2009b), SABOURIN *et al.* (2002): Re-descriptions.

Diagnosis: RAZOWSKI (1994) recognized that *Aethes* and *Aethesoides* are closely related, sharing two synapomorphies: the presence of slender, curved socii from a broad, hairy base and the rod-like sclerite coupling the tegumen with the valva. According to RAZOWSKI (2009b), the two genera have a similar thread-like distal part of the socii but *Aethes* has a more generalized valva.

Aethesoides Razowski, 1964

Aethesoides Razowski, 1964, *Annls zool.,* **22**(61): 357, t. sp.: *Phalonia distigmatana* Walsingham, 1897, t. l.: Granada, West Indies. Nine species included now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: RAZOWSKI (1964) originally compared *Aethesoides* with *Aethes*, noting the similar socii and some other genital characters. RAZOWSKI (1994) provided a more thorough diagnosis and mentioned that the rod-like costal part of the valva, the long sacculus, and the short partially membranous median part of the caudal edge of valva with its small lobe are supposed autapomorphies of this genus.

Agapeta Hübner, [1825]

Agapeta Hübner, [1825], *Syst.-alphab. Verz.*: 58; t. sp.: *Tortrix zoegana* Linnaeus, 1767. Four species included now. PAL.

RAZOWSKI (1970b, 1987): Re-descriptions.

Diagnosis: RAZOWSKI (2009b) indicated that *Agapeta* is closely related to *Ceratoxanthis*; short transtilla. The two genera share withy *Fulvoclysia* a yellow forewing colour. *Agapeta* differs from *Ceratoxanthis* by its small socii, simple sacculus, strong sclerites of the basal region of disc of the valvae, and the presence of a distal process of the juxta. Almost all known species have a large sterigma and lack sclerites of the corpus bursae, the only exception being *A. zoegana*.

Amallectis Meyrick, 1917

Amallectis Meyrick, 1917, *Trans. ent. Soc. London*, **1917**: 1, t. sp.: *Amallectis devincta* Meyrick, 1917, monotypic, t. l. Peru. NEO.

RAZOWSKI 1994: Re-description.

Diagnosis: RAZOWSKI (1994) compared *Amallectis* to *Phalonidia*; the two have the median part of the transtilla large, the valva up-curved, and the sacculus very short. He further recognized the similarity of *Amallectis* to *Saphenista* based on wing venation and male genitalia, suggesting that the two may be synonymous.

Anielia Razowski & Becker, 1983

Anielia Razowski & Becker, 1983, *Acta zool. cracov*., **26**(13) 442, t. sp.: *Anielia paranica* Razowski & Becker, 1983, Brazil. Monotypic. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: This genus was compared to *Acarolella* (RAZOWSKI & BECKER, 1983). Subsequently, RAZOWSKI (1994) compared *Anielia* to *Eugnosta* from which the former differs in the following supposed autapomorphies: the dorsal sclerotization of the socius and the doubly folded transtilla with a dorsal convexity.

Aphalonia Razowski, 1984

Aphalonia Razowski, 1984, *Annls zool*., **38**(13): 276, t. sp.: *Aphalonia monstrata* Razowski, 1984, t. l.: Peru; monotypic. Two species included now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: Originally compared to *Aethes*, RAZOWSKI (1994) mentioned that *Aphalonia* resembles *Eugnosta* in the shapes of the aedeagus, cornutus, distal part of tegumen, and socii. Further, he stated that the supposed autapomorphies of *Aphalonia* are the shape of the socii and the very broad median part of the transtilla. The very strongly sclerotized dorsal edge of the sacculus of *Aphalonia* is found nowhere else except in *Henricus.*

Banhadoa Razowski & Becker, 1983

Banhadoa Razowski & Becker, 1983, *Acta zool. cracov*., **26**(1): 432, t. sp.: *Banhadoa luculenta* Razowski & Becker, 1983, Brazil, monotypic. NEO.

Diagnosis: *Banhadoa* was originally compared to *Saphenista*; it differs by having a very strong semicircular vinculum that is doubly emarginated proximally and a reduced ventral portion of the valva; it also is characterized by the reduced ventral portion of the valva and a peculiar cornutus connected to the lateral wall of the aedeagus.

RAZOWSKI (1994) mentioned that the venation of *Banhadoa* is identical to that of *Phalonidia* and its allies, and that the male genitalia are similar to those of *Phalonidia* and *Saphenista*. However, in *Banhadoa* the cornutus is autapomorphic, connected to lateral wall of aedeagus; and the juxta is high.

Belemgena Razowski & Becker, 1994

Belemgena Razowski & Becker, 1994, *SHILAP Revta. lepid*., **22**(85): 35, t. sp.: *Belemgena phlattotreta* Razowski & Becker, 1994, Brazil, monotypic. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Belemgena* was originally compared to *Lasiothyris*, which has a similar organ of the hindwing but, a reduction of the distinct sclerotization of the costa of valva that is not found in the *Phalonidia* lineage. Two autapomorphies are mentioned: the presence of two processes of the base of the sacculus, the presence of asymmetrical, long ventral parts of the vinculum membranous dorsally, and the reduction of the socii.

RAZOWSKI (1994) compared *Belemgena* to *Lasiothyris* and other species of the lineage of *Phalonidia*; he proposed that the similar shape of the uncus may represent a synapomorphy with *Aphalonia* and *Marylinka*.

Caraccochylis Razowski & Becker, 2007

Caraccochylis Razowski & Becker, 2007, *Acta zool. cracov*., **50B**(2): 112, t. sp.: *Caraccochylis framea* Razowski & Becker, 2007, Brazil, monotypic. NEO.

Diagnosis: *Caraccochylis* was originally assumed to be allied to *Cochylis*, but *Caraccochylis* has a latero-posterior, pocket-like feature of the socii; a small uncus; and a strongly elongate ventrobasal portion of the sacculus.

Cartagogena Razowski, 1992

Cartagogena Razowski, 1992, *Misc. Zool*., **14**(1900): 85, t. sp.: *Cartagogena ferruminata* Razowski, 1992, Costa Rica. Three species included now. NEO.

Diagnosis: *Cartagogena* was originally compared to *Henricus*; the two share similar structures of the tegumen, socii, valva, and transtilla, and a specialized subgenital male tergite. The differences with *Henricus* are in the shape of sacculus, the simple costa of valva, and the presence of a dorsal pouch of the corpus bursae. RAZOWSKI & WOJTUSIAK (2006) suggested that *Cartagogena* may be synonymous with *Henricus* owing to the similar distribution of some characters.

Ceratoxanthis Razowski, 1960

Ceratoxanthis Razowski, 1960, *Polskie Pismo ent*., **30**: 301; t. sp.: *Conchylis argentomixtana* Staudinger, 1871, Russia, SE Europe, monotypic. Five species known now. PAL.

RAZOWSKI (1970b, 1987, 2002, 2009): Re-descriptions.

Diagnosis: RAZOWSKI (1987, 2002, 2009b) compared *Ceratoxanthis* to *Agapeta*. *Ceratoxanthis* can be distinguished by the short sclerite of the basal part of disc of the valva subdorsally, the large socii, the base of the sacculus with a long process, the juxta extending into a pair of long processes, and the sterigma small and tubular. Externally *Ceratoxanthis* is also similar to species of *Agapeta*.

Chloanohieris Diakonoff, 1989

Chloanohieris Diakonoff, 1989, *Annls Soc. ent. Fr. (N.S.)*, **25**: 432, t. sp.: *Chloanohieris comastes* Diakonoff, 1989, Madagascar; monotypic. AFR.

RAZOWSKI (2004): Remarks.

Diagnosis: DIAKONOFF (1989) diagnosed the genus as follows: “A novel genus. It is of

uncertain relationship, its autapomorphies being the combination of the absence of an uncus and socii and the presence of a kind of subscaphium + gnathos".

Cirrothaumatia Razowski & Becker, 1986

Cirrothaumatia Razowski & Becker, 1986, *Acta zool. cracov*., **29**(20): 460, t. sp.: *Phalonia thornosema* Clarke, 1968, Guatemala. Three species known now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: RAZOWSKI & BECKER (1986) mentioned that *Cirrothaumatia* is related to *Parirazona* from which it differs in the presence of the saccular groups of androconial scales and in the shape of the socius. RAZOWSKI (1994) compared it to *Thysanphalonia*, recognizing that both have a tuft of androconial scales in the vicinity of the base of the valva. These genera differ in the structure of the valva and the sacculus, which in *Thysanphalonia* are entirely membranous ventrally and setose, respectively. The scent scales of *Cirrothaumatia* are directed proximally and originate on the bulbous prominence, which is not the case of *Thysanphalonia.*

Cochylidia Obraztsov, 1956

Cochylidia Obraztsov, 1956, *Mitt. Münch. ent. Ges*., **46**: 14, t. sp.: *Tortrix subroseana* Haworth, 1811, Great Britain. Eight species included now. PAL/NEA.

RAZOWSKI (1970b, 1987, 2002, 2009b): Re-descriptions.

Diagnosis: RAZOWSKI (2002) compared *Cochylidia* to *Diceratura* and listed two putative synapomorphies: the structure of the valva and the elaborate distal part of the corpus bursae. According to RAZOWSKI (2009b), *Cochylidia* possesses one putative autopomorphy, the presence of minute spines at the end of the costal arm of the valva.

Cochylidichnium Razowski 1986

Cochylidichnium Razowski 1986, *Acta zool. cracov*., **29**(16): 381, t. sp.: *Cochylidichnium amulanum* Razowski, 1986, Mexico, monotypic. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Cochylidichnium* was originally compared to *Cochylidia* and *Cochylis*; *Cochylidichnium* shares the following putative synapomorphies with these genera: a slender arm-shaped costal portion of the valva (with *Cochylidia*) and a group of slender cornuti and their arrangement in the vesica (with *Cochylis*). RAZOWSKI (1994) also listed the autapomorphies of *Cochylidichnium* - the strong lateral processes of the distal part of the tegumen and the distinct spines at the top of the tegumen.

Cochylimorpha Razowski, 1959

Cochylimorpha Razowski, 1959, *Polskie Pismo ent*., **29**: 440; t. sp.: *Cochylis favillana* Staudinger, 1859, Spain = *Cochylis elongana* Fischer von Röslerstamm, 1839, Poland. PAL.

RAZOWSKI (1970b, 1987, 2002, 2009b): Re-descriptions, synonymies: *Stenodes* Guenée, 1845; *Substenodes* Razowski, 1960; *Parastenodes* Razowski, 1960; *Eustenodes* Razowski, 1960; *Bipenisia* Razowski, 1960; *Euxantoides* Razowski, 1960; *Bleszynskiella* Razowski, 1960; *Paraxanthoides* Razowski, 1960 (all established as subgenera of *Stenodes*).

Diagnosis: According to RAZOWSKI (2009b): "No constant character separating this genus from *Phtheochroa* is found; in hindwing veins Rs-M1 long stalked, M3-CuA1 stalked; males without costal fold; males without any apical process of tegumen should be included in *Cochylimorpha*; exceptionally a reduction of uncus is, however, found in *Phtheochroa* (e.g. in the *P. rugosana* group of species). Other characters are a separation of the arms of vinculum and membranisation of anteostial sterigma in the majority of *Cochylimorpha*."

Cochylis Treitschke, 1830

Cochylis Treitschke, 1830, *Schmett. Eur*., **7**: 233, t. s.: P [*Tortrix*] *rubellana* Hübner, [1823], Germany = *Tortrix roseana* Haworth, 1811, Great Britain.

Conchlis Sodoffsky, 1837, *Bull. Soc. Imp. Nat. Moscou*, **10**(6): 93, unjustified emendation of *Cochylis* Treitschke.

Thyraylia Walsingham, 1897, *Proc. Zool. Soc. London*, **1897**: 138, t. sp.: *Conchylis bunteana* Robinson, 1868, USA.

Acornutia Obraztsov, 1941, *Dt. ent. Z. Iris*., **57**: 68; t. sp.: *Tortrix nana* Haworth, 1811.

Pontoturania Obraztsov, 1943, *Mitt. münch. ent. Ges*., **33**: 96, 97; t. sp.: *Conchylis defessana* Mann, 1861.

Cochylichroa Obraztsov & Swatschek, 1958, *in* Swatschek, *Abh. Larvalsyst. Insekten*, **3**: 233; t. sp.: *Eupoecilia atricapitana* Stephens, 1852.

Longicornutia Razowski, 1960, *Polskie Pismo ent*., **30**: 287, 314; t. sp.: *Cochylis phaleratana* Herrich-Schäffer, 1851 = *Cochylis epilinana* Duponchel, 1842.

Neocochylis Razowski, 1960, *Polskie Pismo ent.*, **30**: 315, 316; t. sp.: *Conchylis calavrytana* Rebel, 1906 = *Cochylis molliculana* Zeller, 1847. Established as a subgenus of *Cochylis* Treitschke.

Paracochylis Razowski, 1960, *Polskie Pismo ent*.**, 30**: 315, 316; t. sp.: *Cochylis amoenana* Kennel, 1899. Established as a subgenus of *Cochylis* Treitschke.

Brevicornutia Razowski, 1960, *Polskie Pismo ent.*, **30**: 315, 317; t. sp.: *Cochylis pallidana* Zeller, 1847. Established as a subgenus of *Cochylis* Treitschke.

Rolandylis Gibeaux, 1985, *Ent. gall*., **1**(4): 348; t. sp.: *Rolandylis catalonica* Gibeaux, 1985, France = *Phalonia maiana* Kearfott, 1907, USA. Seventy six species included now. PAL/OR/NEA/NEO.

RAZOWSKI (1970b, 1987, 1994, 2002, 2009b): Re-descriptions.

Diagnosis: RAZOWSKI (1987) compared *Cochylis* to *Diceratura* and *Cochylidia* and mentioned that it is more advanced, having a distinctly specialized distal part of the tegumen and usually vestigial socii. Putative synapomorphies of the three genera are the shape of the sterigma, with its anterior membranous sack, and the distal portion of the ductus bursae. He also discussed the status of the subgenera. (RAZOWSKI (1994) mentioned further supposed synapomorphies: the presence of non-capitate cornuti and the cone-like cluster of short spines in the vesica, the sack of intersegmental membrane attached to the sterigma, the shape of the sterigma, and the position of the accessory bursa. RAZOWSKI (2002) compared *Cochylis* with *Diceratura* and *Cochylidia* and several New World genera and mentioned only on supposed synapomorphy - the cone-shaped cluster of cornuti. According to RAZOWSKI (2009b), *Cochylis* is similar and probably allied to *Cochylidia* and *Diceratura*, but *Cochylis* has a highly specialized socii complex. The female genitalia resemble those of *Cochylidia* and *Diceratura*, but those of *Cochylis* have a more distinct membranous sack extending from the distal part of the corpus bursae.

Combosclera Razowski 1999

Combosclera Razowski 1999, *Polskie Pismo ent.*, **68**(1): 58, t. sp.: *Comosclera cingens* Razowski 1999, Mexico; monotypic. NEA?/NEO.

Diagnosis: *Combosclera* was originally compared to *Phtheochroa*; the former can be distinguished by having the wall of the tegumen sclerotized laterally, the socius sclerotized and, sparsely hairy, the transtilla with sublateral lobes and a large median arch, and a bifid process on the top of the juxta. These characters and the paired funnel-like sclerites of the dorsal wall of the sterigma are the supposed autapomorphies of this genus.

Commophila Hübner, [1825]

*Commophil*a Hübner, [1825], *Verz. bekannter Schmett*.: 392; t. sp.: [*Tortrix*] *aeneana* Hübner, [1799-1800].

RAZOWSKI (1970b 1987, 2002, 2009b): Re-descriptions.

Diagnosis: According to RAZOWSKI (2009b), *Commophila* is very closely related to *Eugnosta*, but males of *Commophila* have a small median part of the transtilla, and the anteostial part of the sterigma is emarginate at the ostium bursae.

Remarks: The characters provided above may prove to be of specific importance only, and the genus is probably synonymous with *Eugnosta*. For further comments see RAZOWSKI (1987).

Coristaca Razowski, 1992

Coristaca Razowski, 1992, *Misc. zool*., **14**(1990): 99, t. sp.: *Coristaca capsularia* Razowski, 1992, Costa Rica. NEO.

RAZOWSKI 1994. Re-description.

Diagnosis: *Coristaca* was originally compared to the *Phalonidia* and *Cochylis* groups of genera. RAZOWSKI (1994) supposed that *Coristaca* should be placed between the two genera and that its autapomorphies are the relative positions of the socii and uncus, apparently disguising any potential synapomorphy with any known genus. Similarly strong sclerotization of the socii is present in some genera, but their shape and position are entirely different.

Cryptocochylis Razowski, 1960

Cryptocochylis Razowski, 1960, *Polskie Pismo ent.*, **30**: 313, t. sp.: *Conchylis conjnctana* Mann, 1864, Russia. Two species included now. PAL.

RAZOWSKI (1970b, 1987, 2002, 2009b): Re-descriptions.

related to *Cochylis*, but *Cryptocochylis* can be distinguished by its unusual, bifid termination of the transtilla.

Deltophalonia Razowski & Becker, 2003

Deltophalonia Razowski & Becker, 2003, *Polskie Pismo ent*., **72**: 157, t. sp.: *Deltophalonia chlidonibrya* Razowski & Becker, 2003, Ecuador, monotypic. Four species included now. NEO.

Diagnosis: In the original description, *Deltophalonia* was compared to *Tenoa*, which has a similar shape of the socii and valva complex. The following characters are probable autapomorphies of *Deltophalonia*: presence of a transverse dorsal sclerite of the tegumen with a median hairy prominence; the shapes of the socii, sacculus, the curved, well-sclerotized pulvinus, and the terminal lobes of caulis; and the presence of a concavity above the end of the sacculus.

Diceratura Djakonov, 1929

Diceratura Djakonov, 1929, *Rev. russ. Ent*., **23**: 155, t. sp.: *Cochylis purpuratana* Herrich-Schäffer, 1851. Austria = *Conchylis ostrinana* Guenée, 1845. France. Nine species included now. PAL.

RAZOWSKI (1970b, 1987, 2002, 2009b). Re-description.

Diagnosis: RAZOWSKI (2002) compared *Diceratura* to *Cochylimorpha*, treating it as more advanced, owing to its specialized distal part of the tegumen and its strongly reduced socii. According to RAZOWSKI (2009b), *Diceratura* is closely related to *Cochylidia*, but *Diceratura* lacks minute spines at the end of the costal part of the valva. The female genitalia areas similar to those of *Cochylidia*.

Dinophalia Razowski & Becker, 1993

Dinophalia Razowski & Becker, 1993, *SHILAP Revta. lepid*., **21**(84): 234, t. sp.: *Dinophalia egregia* Razowski & Becker, 1993, monotypic, t. l. Costa Rica. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Dinophalia* was originally included in the *Phalonidia* group of genera on the basis of the structures of the aedeagus, cornutus, and socii. It was compared with *Cochylis* and *Mourecochylis* (RAZOWSKI & BECKER, 1993).

According to RAZOWSKI (1994), *Dinophalia* belongs to the *Phalonidia* group of genera; the concave ventral surface of the uncus, the shape of the median part of the transtilla (concave ventrally), and the atrophy of its lateral parts are putative autapomorphies of the genus. Forewing markings are similar to those of *Juxtolena*; and other features suggest that *Dinophalia* is probably related to *Mourecochylis.*

Empedcochylis Razowski, 1994

Empedcochylis Razowski, 1994, *Acta zool. cracov*., **37**(2): 281, t. sp.: *Enallcochylis empeda* Razowski & Becker, 1986, Costa Rica, monotypic. NEO.

Diagnosis: *Empedcochylis* was originally compared to *Enallcochylis* with which it shares the following putative synapomorphies: a long aedeagus with a subterminal caulis, a very long row of cornuti terminating proximally, plate-shaped structure of the valvellae fused with one another ventrally, the curved sacculus terminating in a ventral process, and the presence of the pulvinus directed ventrally. The supposed autopomorphy of this genus is a very large apical lobe of the tegumen.

Enallcochylis Razowski & Becker, 1986

Enallcochylis Razowski & Becker, 1986, *Acta zool. cracov*., **29**(20): 468, t. sp.: *Enallcochylis enochra* Razowski & Becker, 1986, Costa Rica. Single species known. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Enallcochylis* was originally compared to *Cochylis*; the two share apomorphic, non-capitate cornuti forming a compact group in the vesica. RAZOWSKI (1994) adds the shape of the distal part of the aedeagus with its broad orifice, and compared the genus to *Empedcochylis*. The supposed autapomorphy of *Enallcochylis* is the presence of a flat pocket, the ventral wall of which is linked with the juxta, formed by large valvellae fused with one another ventrally.

Eugnosta Hübner, [1825]

Eugnosta Hübner, [1825], *Verz. bekannter Schmett*.: 394, t. sp.: [*Tortrix*] *lathoniana* Hübner, [1799-1800], Europe. Seventy six species included now. PAL/AFR/OR.

Argyrolepia Stephens, 1829. *Syst. Cat. Br. Insects* (2): 190, t. sp.: [*Tortrix*] *lathoniana* Hübner, [1799-1800], unknown.

Safra Walker, 1863, *List Specimens lepid. Insects Colln. Br. Mus*., **27**: 195, t. sp.: *Safra metaphaeella* Walker, 1863, China = *Conchlis dives* Butler, 1878, Japan.

Trachybyrsis Meyrick, 1927, *Exotic Microlepid*., **3**: 368, t. sp.: *Trachybyrsis euglypta* Meyrick, 1927, monotypic, Rwanda.

Carolella Busck, 1939, *Bull. S. Calif. Acad. Sci.*, **38**: 104, n. nov. for *Pharmacis* Hübner, 1823, preocc. by *Pharmacis* Hübner, [1820]; t. sp.: *Pharmacis sarthana* Hübner, 1823, hereditarius.

RAZOWSKI (1970b, 1987, 1994, 2002, 2009b): Re-descriptions.

Diagnosis: According to RAZOWSKI (2009b) *Eugnosta* is closely related to *Commophila* and *Prochlidonia*, and also is comparable to *Eupoecilia* and some tropical genera. The majority of the Palaearctic species of *Eugnosta* are easily distinguished by the lustrous forewing ground colour. Male genitalia are distinguished by large, well-sclerotized socii; female genitalia are similar to those in several other genera. Males of *Commophila* differ only slightly from *Eugnosta*, and the two genera may prove synonymous. *Prochlidonia* differs from *Eugnosta* only in the shape and size of the caulis.

Remarks: *Eugnosta, Commophila*, and *Prochlidonia* form a group characterized by long, erect socii. In the Neotropics there are two closely related genera, viz., *Anielia* and *Acarolella*. No autapomorphy for *Eugnosta* could be identified. The Palaearctic species are mostly characterized by silvery forewing ground colour (one exception only) whilst New World and Afrotropical species have whitish, brownish, or similar ground colour. Only one Nearctic species has a silvery ground colour.

Eupoecilia Stephens, 1829

Eupoecilia Stephens, 1829, *Nom. Br. Insects*: 48, t. sp.: [*Tortrix*] *angustana* Hübner, [1796-99], Europe. Thirty six species included now. PAL.

Clysia Hübner, [1825], *Verz. bekannter Schmett*.: 409, preocc. by *Clysia* Leach, 1817; t. sp.: *Tinea ambiguella* Hübner, 1796, Germany.

Clysiana Fletcher, 1940, *Entomologist's Rec. J. Var*., **52**: 17, replacement name for *Clysia* Hübner, [1825], t. sp.: [*Tinea*] *ambiguella* Hübner, 1796, Germany.

Arachniotes Diakonoff, 1952, *Verh. K. ned. Akad. Wet., Nat*., **63**: 24, t. sp.: *Arachniotes dactylota* Diakonoff, 1952, New Guinea.

RAZOWSKI (1969, 1970b, 1987, 2002, 2009b): Re-descriptions.

Diagnosis: According to RAZOWSKI (2009b) *Eupoecilia* is closely related to *Eugnosta* and its allies, but *Eupoecilia* is easily distinguished by having a dorso-basal lobe of the socius and a wreath-like arrangement of the distal cornuti.

Falseuncaria Obraztsov & Swatschek, 1958

Falseuncaria Obraztsov & Swatschek, 1958, *in* Swatschek, *Abhandl. Larvalsyst. Insekten*, **3**: 232, t. sp.: *Tortrix ruficiliana* Haworth, 1811, Great Britain. Six species included now. PAL.

RAZOWSKI (1970b, 1987, 2002, 2009b): Re-descriptions.

Diagnosis: Synapomorphies for *Falseuncaria, Cochylidia, Diceratura*, and *Cochylis* include the presence of a cluster of minute spines in the vesica and a membranous sack anterior to the sterigma (RAZOWSKI 2002). Putative autapomorphies of *Falseuncaria* are the very long process of the top of the tegumen, the apical configuration of the tegumen, the fused socii, and the shape of the transtilla (RAZOWSKI 2002).

RAZOWSKI (2009b) presented the following diagnosis: "Facies similar to that of *Cochylis* but *Falseuncaria* with distal part of tegumen extending into a long process; the structures of the tegumen's apical portion includes the fused socii. The structure of sterigma and anterior membranous sack resemble *Cochylis*."

Fulvoclysia Obraztsov, 1943

Fulvoclysia Obraztsov, 1943, *Z. Wien. ent. Ges*., **28**: 43, t. sp.: *Fulvoclysia armeniaca* Obraztsov, 1943, Armenia = *Conchylis pallorana* Lederer, 1864, Turkey; monotypic. Eleven species described at present. PAL.

RAZOWSKI (1970b, 1987, 2002, 2009b): Re-descriptions.

Diagnosis: In facies, *Fulvoclysia* is similar to *Agapeta* and *Ceratoxanthis*. The male genitalia of *Fulvoclysia* differ in the presence of spiny areas of valva and small aedeagus that tapers distally just beyond the zone; the sterigma is weakly sclerotized except for a ring around the ostial area which is oval, tapering distally.

Geitocochylis Razowski, 1984

Geitocochylis Razowski, 1984, *Bull. Pol. Acad. Sci., Sér. Sci. Biol.*, **32**(7-8): 273, t. sp.: *Geitocochylis gustatoria* Razowski, 1984, Mexico. Four species included now. NEA/NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Geitocochylis* was originally compared to *Cochylis* and its allies with which it shares a very similar cluster of cornuti. RAZOWSKI (1994) provides the following autapomorphies for *Geitocochylis*: the presence of a short, strongly sclerotized uncus-like process from the top of the tegumen; the broad fusion of the valva with the lateral lobe of the transtilla; the secondary flexion of the area in the postbasal part of the costa of the valva; and the distinctly sclerotized, broad, bucket-shaped sterigma. He also mentions the putative synapomorphies with *Cochylis*: the shapes of the valvae, aedeagus, and sterigma, and the non-capitate cornuti forming a cluster.

Gryposcleroma Razowski, 1986

Gryposcleroma Razowski, 1986, *Acta zool. cracov*., **29**(16): 383, t. sp.: *Gryposcleroma schidia* Razowski, 1986, Mexico, monotypic. NEA.

RAZOWSKI (1994): Re-description.

Diagnosis: *Gryposcleroma* was originally compared to *Cochylis*, with which it shares a cone-shaped cluster of cornuti, and with *Ceratuncus* with which it shares a horn-shaped process of the uncus.

RAZOWSKI (1994) also compared *Gryposcleroma* with *Revertucaria*; the two genera share the following putative synapomorphies: the direction of the top of the uncus, the elongate distal part of the

valva, and the shape of the transtilla. The secondary membranisation of the costal part of the valva is similar to that found in *Geitocochylis*. Autapomorphies of *Gryposcleroma* are the presence of the large lobes membranously connected with the tegumen and transtilla, the margins of the ventral parts of the uncus base, and the long, horizontal basal process of the valva (see the diagnosis of *Monoceratucus*).

Gynnidomorpha Turner, 1926

Gynnidomorpha Turner, 1926, *Trans. Proc. R. Soc. Austral*., **40**: 158; t. sp.: *Gynnidomorpha mesoxutha* Turner, 1916, Australia; monotypic. Now thirteen species are known.

Piercea Filipjev, 1940. *Trav. Inst. Zool. Acad. Sci. U.R.S.S*., **6**: 171. t. sp.: *Tortrix permixtana* [Denis & Schiffermüller], 1775, Austria. PAL/OR/AU/NEA/NEO.

RAZOWSKI (1970b, 1987 and 2002): Re-descriptions, synonymy: *Piercea* Filipjev, 1940.

Diagnosis: According to RAZOWSKI (2009b) *Gynnidomorpha* is very closely related to *Phalonidia*, but *Gynnidomorpha* can be distinguished by the following characters: the presence of a sclerotized fold between the socii, the costal part of the valva distinctly turned upward dorsally at the base, the socii almost perpendicular to the tegumen, and the end of the median part of the transtilla which is very long, terminating in a pair of minute tips. The presence of the circle of spines in corpus bursae is a putative synapomorphy shared by *Phalonidia* and *Gynnidomorpha.*

Henricus Busck, 1943

Henricus Busck, 1943, *Bull. S. California Acad. Sci*., **42**: 38, replacement name for *Heinrichia* Busck, 1939, *Bull. S. California Acad. Sci*., **38**: 100, 103. preocc. by *Heinrichia* Stresemann, 1931, t. sp.: *Phtheochroa macrocarpana* Walsingham, 1895, USA: California. Fifty two species included now. NEA/NEO.

Irazona Razowski, 1964, *Annls zool.,* **22**(16): 356, t. sp.: *Cochylis comes* Walsingham, 1884, USA: Arizona.

RAZOWSKI (1984, 1991, 1994): Re-descriptions.

Diagnosis: RAZOWSKI (1994) identified the putative autapomorphies of *Henricus* as the bases of the socii connected by a cup-shaped sclerite; the very small, thick juxta; the fusion of the juxta with the caulis; the asymmetric distal processes of the aedeagus; the swollen base of the valva; the presence of subgenital bunches of scent scales; and the cluster-like scent scales connected to vinculum by means of a specialized plate with the vinculum. He suggested that the presence of the sternal abdominal scent organs are probably a synapomorphy of *Henricus, Lasiothyris*, and a few other genera; he also indicated that *Henricus* is very closely related to *Cartagogena* (see the diagnosis for the latter).

Hysterophora Obraztsov, 1944

Hysterophora Obraztsov, 1944, *Dt. ent. Z. Iris*., **57**: 67; t. sp.: *Tortrix maculosana* Haworth, 1811, monotypical. PAL.

Obraztsoviana Razowski, 1960, *Polskie Pismo ent*., **30**: 287, nom. nov. for *Hysterophora* Obraztsov, 1944 after NYE & FLETCHER (1991) a unnecessary replacement name as the latter is not a junior homonym of the unavailable name *Hysterophora* Obraztsov, 1943 (t. sp.: *Hysterophora rocharva* Obraztsov, 1944).

RAZOWSKI (1970b, 2002): Re-description.

Diagnosis: RAZOWSKI (2002): re-described and compared it with *Phtheochroa.* It differs from *Phtheochroa* by the presence of numerous short cornuti, a dorsal groove of the transtilla, and a sclerotized sack of the ductus bursae.

Imashpania Razowski & Wojtusiak, 2008

Imashpania Razowski & Wojtusiak, 2008, *Genus*, **19**(3): 500, t. sp.: *Imashpania imashpinana* Razowski & Wojtusiak, 2008, Ecuador, monotypic. NEO.

Diagnosis: *Imashpania* was diagnosed as follows: "This new genus is related to *Henricus* as the structures of valva, tegumen, and cornutus show; its autapomorphies are the very large, plate-shaped,

well sclerotized socius and the upward curved, pointed apically valvae" (RAZOWSKI & WOJTUSIAK 2008).

Juxtolena Razowski & Becker, 1993

Juxtolena Razowski & Becker, 1993, *SHILAP Revta. lepid*., **21**(84): 235, t. sp.: *Juxtolena omphalia* Razowski & Becker, 1993, Costa Rica, monotypic. Two species included now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: RAZOWSKI & BECKER (1993) mentioned that *Juxtolena* is closest to *Mourecochylis* and *Dinophalia* but is more advanced. Autapomorphies of *Juxtolena* are the presence of the dorsomedian process of the juxta, the apical process of the transtilla, and the bunch of long spines from the distal surface of the valva.

Lasiothyris Meyrick, 1917

Lasiothyris Meyrick, 1917, *Trans. ent. Soc. Lond*., **1917**: 4, t. sp.: *Lasiothyris limatula* Meyrick, 1917, monotypic, Ecuador. Twenty three species included now. NEO.

RAZOWSKI & BECKER (1993), RAZOWSKI (1994): Re-descriptions.

Diagnosis: RAZOWSKI (1994) compared *Lasiothyris* to *Saphenista, Marlinka, Miekleana,* and M*ourecochylis. Lasiothyris* differs from them and other genera of the *Saphenista* group by the presence of a hindwing costal fold and the shape of the abdominal scent organ of the sixth sternite. The female genitalia were compared to those of *Phalonidia;* the shape of the abdominal scent organ was compared to those of *Mielkeana* and *Saphenista*.

Lincicochylis Razowski, 1986

Lincicochylis Razowski, 1986, *Acta zool. cracov*., **29**(16): 38, t. sp.: *Phalonia argentifusa* Walsingham, 1914, Mexico, monotypic. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Lincicochylis* was originally compared to the *Saphenista*-group, with which it shares similar cornutus and female genitalia, and to the *Cochylis*-group of genera, with which it shares a similar costal part of the valva. The separated costal part of valva is homologous with that in *Cochylidia*, and its sclerotized caudal edge with that in *Cochylidichnium.*

RAZOWSKI (1994) mentioned the following putative autapomorphies: the very slender, arch-shaped tegumen; a small median prominence of the top of the tegumen possible representing the uncus; the complete reduction of the socii; the presence of a split of the proximal surface of the costal part of valva; the very long sacculus folded on the discal surface of valva; the elongate-oval projection of the base of the sacculus; the fusion of the latter with the vinculum arm; and the shape of the sterigma-colliculum complex.

Lorita Busck, 1939

Lorita Busck, 1939, *Bull. S. Calif. Acad. Sci*., **38**: 100, t. sp.: *Lorita abornana* Busck, 1930 = *Phalonia scarificata* Meyrick, 1917, USA: California. Five species included now. NEA/NEO.

POGUE (1988; adult, early stages), RAZOWSKI (1994): Re-descriptions.

Diagnosis: POGUE (1988) mentioned only that species of *Lorita* are externally similar to *Saphenista, Thyraylia*, and some *Cochylis*. RAZOWSKI (1994) added that the abdominal scent organs of this genus resemble those in the *Phalonidia* - *Saphenista* group, and the aedeagus is of the *Phalonidia* type. He also listed the following supposed autapomorphies of *Lorita*: the presence of the subterminal, ventral lobe of the tegumen connecting the lateral portions of the transtilla and the strongly convex costa of valva. The shape of the uncus with its weakly sclerotized hairy base and the rigid slender termination may also be included in the autapomorphies of *Lorita*.

Macasinia Razowski & Pelz, 2001

Macasinia Razowski & Pelz, 2001, *NachrBl. Entomol. Ver. Apollo* (N.F.), **22**: 26, t. sp.: *Macasinia furcata* Razowski & Pelz, 2001, monotypic. Four species included now. NEO.

Diagnosis: According to the original description, *Macasinia* is externally similar to *Saphenista* and its allies. It is closest to *Mielkeana,* having a similar terminal portion of the tegumen and completely reduced socii represented only by sparse hairs.

Maricaona Razowski & Becker, 2007

Maricaona Razowski & Becker, 2007, *SHILAP Revta. lepid*., **35**(137): 68, t. sp.: *Maricaona maricaonana* Razowski & Becker, 2007, Puerto Rico, monotypic. NEO.

Diagnosis: RAZOWSKI & BECKER (2007) mentioned that the facies and transtilla of this genus resemble those of *Henricus*, and that the socii are without free parts, with the apical processes similar to those of *Mourecochylis*. The genus was tentatively placed in the *Phalonidia*-group of genera.

Marylinka Razowski & Becker, 1983

Marylinka Razowski & Becker, 1983, *Acta zool. cracov*., **26**(13): 438, t. sp.: *Marylinka mimera* Razowski & Becker, 1983, Brazil, monotypic. Two species included now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: RAZOWSKI & BECKER (1983) indicated that *Marylinka* is closely related to *Saphenista*, with a similarly shaped aedeagus and cornutus, and the postmedian caulis; it differs from the latter in the shape of transtilla. RAZOWSKI (1994) compared *Marylinka* with *Phalonidia* and *Lasiothyris*, from which *Marylinka* can be distinguished by the apomorphic, plate-shaped median part of the transtilla.

Mielkeana Razowski & Becker, 1983

Mielkeana Razowski & Becker, 1983, *Acta zool. cracov*., **26**(13): 439, t. sp.: *Mielkeana gelasima* Razowski & Becker, 1983, Brazil. Three species included now. NEO.

RAZOWSKI 1994: Re-description.

Diagnosis: *Mielkeana* was originally compared to *Saphenista*, with which it shares similar aedeagus and cornutus. RAZOWSKI (1994) mentioned that it is similar externally and in the genitalia to *Saphenista*; however, *Mielkeana* can be distinguished by the socii in the form of large basal lobes folded ventrally and extending distally into a pair of slender, sharp processes; the median part of the transtilla stout, minutely spined; and the vinculum simple, not fused ventrally. He also mentioned that *Mielkeana* is an off-shoot of the *Phalonidia - Saphenista* branch, showing some common characters with the former. Supposed autapomorphies of *Mielkeana* include the shapes of the aedeagus and the broad median part of the transtilla.

Mimcochylis Razowski, 1985

Mimcochylis Razowski, 1985, *Nota lepid*., **8**(1): 61, t. sp.: *Mimcochylis planola* Razowski, 1985, Mexico. Four species included now. NEA/NEO?

RAZOWSKI (1994): Re-description.

Diagnosis: RAZOWSKI (1985) compared *Mimcochylis* to *Cochylis* and *Falseuncaria* (the three share similar facies); he also stated that *"Mimcochylis* belongs to the *Cochylis*-group of genera as one can judge from the position of the accessory bursa extending dorsally from the antrum area, setose lateral bands in distal portion of sterigma and sack-shaped membrane proximally". RAZOWSKI (1994) added that the dorsal part of the valva is very slender and resembles that in *Cochylidia*. Putative autapomorphies of *Mimcochylis* are as follows: the top of the tegumen with three small prominences; the presence of subapical, dorsal prominence of the tegumen; and a large sack at the end of the ventral surface of the corpus bursae directed distally.

Mimeugnosta Razowski, 1986

Mimeugnosta Razowski, 1986, *Acta zool. cracov*., **29**(18): 416, t. sp.: *Mimeugnosta particeps* Razowski, 1986, Honduras. Five species included now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Mimeugnosta* was originally compared to *Mielkeana*; the two share a similar structure of the distal part of the tegumen which forms a base of socii; in *Mimeugnosta* it is more specialized the latter has very long socii and pectinate scales on the valva.

Monoceratuncus Razowski, 1992

Monoceratuncus Razowski, 1992, *Misc. Zool*., **14**(1990): 102, nom. n. for *Ceratuncus* Razowski, 1986, *Acta zool. cracov*., **29**(16): 382, nom. praeocc. by *Ceratuncus* Petersen, 1957, t. sp.: *Ceratuncus lugens* Razowski, 1986, hereditarius. Eight species included now. NEA/NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Ceratuncus* was originally compared to *Cochylis*, the two share numerous cornuti in the vesica. RAZOWSKI (1994) compared *Monoceratuncus* with the *Cochylis*-group of genera, with which is shares the synapomorphic presence of non-capitate cornuti forming a more or less compact group. Synapomorphies with *Geitocochylis* and *Gryposcleroma* are the flexory membranous area of the postbasal part of the valva and the very broad vinculum; a putative synapomorphy with *Gryposcleroma* and *Revertuncaria* is the shape of the uncus. Autapomorphies of *Monoceratuncus* are the dorsal part of the uncus, the large hook-shaped process of its end part, and the rounded sclerite in the distal part of the sterigma with a characteristic median lobe.

Mourecochylis Razowski & Becker, 1983

Mourecochylis Razowski & Becker, 1983, *Acta zool. cracov*., **26**(13): 440, t. sp.: *Mourecochylis ramosa* Razowski & Becker, 1983, Brazil. Six species included now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: RAZOWSKI & BECKER (1983) treated *Mourecochylis* as allied to *Saphenista*. RAZOWSKI (1994) compared it with *Mielkeana* (the two share similar labial palpus) and mentioned that the female genitalia are of the *Saphenista* - *Phalonidia* type.

Oligobalia Diakonoff, 1988

Oligobalia Diakonoff, 1988, *Annls Soc. ent. Fr.* (N.S.), **24**(2): 162, t. sp.: *Oligobalia viettei* Diakonoff, 1988, Madagascar. AFR.

RAZOWSKI (2004): Remarks.

Diagnosis: In the original description *Oligobalia* is compared to *Trachybrsis* (now considered a synonymy of *Eugnosta*) from which it differs in the shape of the labial palpus and wing venation. According to RAZOWSKI (2004), based on the original description and illustration the transtilla may be vestigial and the valva is provided with distinct groups of bristles.

Parirazona Razowski, 1984

Parirazona Razowski, 1984, *Acta zool. cracov*., **27**(13): 240, t. sp.: *Irazona penthinana* Razowski, 1967, Brazil: Rio de Janeiro. Nine species known now. NEO.

RAZOWSKI & BECKER (1993), RAZOWSKI (1994): Re-descriptions.

Diagnosis: RAZOWSKI & BECKER (1993) and RAZOWSKI (1994) compared *Parirazona* to *Henricus*; *Parirazona* can be distinguished by the following putative autapomorphies the presence of a semimembranous, spoon-shaped process from the ventroapical part of socius; the minute bristles and spines of the inner edge of the socius; the spinulation of the dorsal surface of the median process of the transtilla; the narrow distal portion of the sacculus; and the presence of the ring-shaped sclerite protecting the bases of the ductus seminalis and the accessory bursa.

Phalonidia Le Marchand, 1933

Phalonidia Le Marchand, 1933, *Amat. Papillons*, **6**: 242; t. sp.: *Cochylis affinitana* Douglas 1946, England; monotypic.

Brevisociaria Obraztsov, 1943, *Mitt. münch. ent. Ges*., **33**: 96, t. sp.: *Cochylis gilvicomana* Zeller, 1847, Germany.

Platphalonidia Razowski, 1985, *Nota lepid*., **8**(1): 58, t. sp.: *Phalonia felix* Walsingham, 1895, USA: Colorado - **syn. n.** One hundred and one species included now. PAL/OR/NEA/NEO.

RAZOWSKI (1970b, 1987, 1994, 2002, 2009b): Re-descriptions.

Diagnosis: RAZOWSKI (1999) compared *Phalonidia* to *Lasiothyris* and *Saphenista*, indicating that they have "several sharing characters"; RAZOWSKI (2002) subsequently compared it with New World genera, especially *Saphenista*. Most recently, RAZOWSKI (2009b) indicated that *Phalonidia* is closest to *Gynnidomorpha*, but *Phalonidia* differs in the shape and position of the socii complex which is not perpendicular to the tegumen; the flat, not dorsally upward turned base of costa of valva; and the shape of median part of transtilla. In *Phalonidia* and *Gynnidomorpha* the circle of spines is present in the corpus bursae.

Phaniola Razowski & Becker, 2003

Phaniola Razowski & Becker, 2003, *Polskie Pismo ent*., **72**: 156, t. sp.: *Phaniola implicata* Razowski & Becker, 2003, Brazil, monotypic. Two species now known. NEO.

Diagnosis: According to the original description *Phaniola* is highly specialized but shows some characters similar to other genera of the *Phalonidia* group where *Phaniola* belongs. Putative autapomorphies of *Phaniola* include the shape of the terminal complex of the tegumen; long, subrigid socii; slender spines from caudal part of valva; and the forked termination of median part of transtilla.

Phtheochroa Stephens, 1829

Phtheochroa Stephens, 1829, *Syst. Cat. Br. Insects*, **2**: 191; t. sp.: [*Tortrix*] *rugosana* Hübner, [1796-99], Europe, monotypic. About one hundred species are known now. PAL/OR/AFR/NEA/NEO.

Synonymies: *Trachysmia* Guenée, 1845; *Hysterosia* Stephens, 1852; *Idiographis* Lederer, 1859; *Propira* Durrant, 1914; *Arce* Joannis, 1919; *Parahysterosia* Razowski, 1960; *Durrantia* Razowski, 1960 (last two described as subgenera).

RAZOWSKI (1970b, 1987, 1991, 1994, 2002, 2009b): Re-descriptions.

Diagnosis: According to RAZOWSKI (2009b),no autapomorphy of *Phtheochroa* is found, and the species have markings similar to some species of *Cochylimorpha* and *Aethes.* Males of many species of *Phtheochroa* have a forewing costal fold. The male genitalia all species (except for members of the *rugosana* group) have a well developed uncus. *Phtheochroa* differs from *Hysterophora* by having fewer cornuti in the vesica (i.e., one or two spiniform cornuti and a plate in *Phtheochroa* whereas numerous cornuti in *Hysterophora*) and a sclerotized sack at the base of ductus bursae in the female genitalia. No consistent character could be found to distinguish females of *Phtheochroa* and *Cochylimorpha*.

Planaltinella Razowski & Becker, 1994

Planaltinella Razowski & Becker, 1994, *SHILAP Revta. lepid*., **22**(85): 33, t. sp.: *Planaltinella rhatyma* Razowski & Becker, 1994, Brazil; monotypic. Twenty-five species are known now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Planaltinella* was originally compared to *Belemgena* (with which it shares similar socii), *Aphalonia* and *Marylinka* (with which it shares a similar uncus), *Eugnosta* (with which it shares a similar shape of the aedeagus), and *Tambomachaya* (with which it share a similar shape of the valva).

RAZOWSKI (1994) mentions that the male genitalia of *Planaltinella* also resemble those of *Tambomachaya*, but the valva is without a ventral prominence, provided with a pollex-like spine.

Platphalonia **Razowski, gen. n.**

Type species: *Saphenista mystica* Razowski & Becker, 1983, **comb. n.**, Brazil: Minas Gerais, Corumbá. Twenty-nine species are transferrable to the genus. NEA/NEO.

Description: RAZOWKI (1994) provided the description under the name *Platphalonidia*.

Diagnosis: *Platphalonia* is most similar to *Phalonidia* and *Cochylis*. The socii are reduced similar to those in *Cochylis*; and the terminal part of the tegumen is perpendicular to the remaining part. The

valva is slender; the sacculus is short and rounded as in many species of *Phalonidia*; and the sterigma and the corpus bursae resemble those of the *Phalonidia*-group of genera. Putative autapomorphies of *Platphalonia* are the group of scent scales from the ventroposterior part of the valva and the incisions of the top of the median part of the transtilla.

Remarks: *Platphalonidia* was described for *Phalonia felix* Walsingham, 1895 and over 10 other species from the New World. Unfortunately the type-species belongs to *Phalonidia* and differs from the remaining New World species.

Plesiocochylis Razowski & Wojtusiak, 2008

Plesiocochylis Razowski & Wojtusiak, 2008, *Genus*, **19**(3): 499, t. sp.: *Plesiocochylis gnathosia* Razowski & Wojtusiak, 2008, Ecuador, monotypic. NEO.

Diagnosis: The original diagnosis is as follows: "Tegumen and valva similar to those in several genera of Cochylini, e. g. *Cochylimorpha*; socii atrophied, gnathos present, fully developed until now never found in this tribe) extending medially to ventro-lateral pocket-like structures of tegumen. Long fork of forewing anal veins speaks rather of the inclusion of this genus in Cochylini."

Prochlidonia Razowski, 1960

Prochlidonia Razowski, 1960, *Polskie Pismo ent*., **30**: 286, 309; t. sp.: [*Tortrix*] *amiantana* Hübner, [1796-99], monotypic, Europe. Two species included now. PAL.

RAZOWSKI (1970b, 1987, 2002, 2009b): Re-descriptions.

Diagnosis: The original description lacked a diagnosis. RAZOWSKI (1987) compared *Prochlidonia* with *Eugnosta* and *Commophila*. According to RAZOWSKI (2009b), *Prochlidonia* is closely related to *Eugnosta*, as evidenced by the shape of socii, but in *Prochlidonia* the caulis is very large, expanding at the end ventrally.

Remarks: Characters of *Prochlidonia* are rather similar to those of *Eugnosta* and may prove to be of specific importance only. Supposed autapomorphies of *Prochlidonia* are the shape and size of the caulis and the dorso-lateral lobes of the juxta.

Revertuncaria Razowski, 1986

Revertuncaria Razowski, 1986, *Acta zool. cracov*., **29**(16): 377, t. sp.: *Revertuncaria spathula* Razowski, 1986, monotypic, Mexico. NEA/NEO?

RAZOWSKI (1994): Re-description.

Diagnosis: The original description mentioned that no synapomorphy with any known genus could be found. The putative autapomorphies of *Revertuncaria* are the strong proximally curved uncus, the stout process of the disc of the valva, and the slender, expanding terminally dorsal part of valva. RAZOWSKI (1994) lists the plesiomorphic characters and suggests that *Revertuncaria* is closest to *Geitocochylis* (see the diagnosis of *Monoceratuncus*).

Rigidsociaria Razowski, 1986

Rigidsociaria Razowski, 1986, *Acta zool. cracov*., **29**(16): 377, t. sp.: *Rigidsociaria erinaceola* Razowski, 1986, monotypic, Mexico. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Rigidsociaria* is related to *Eugnosta* on the basis of the shapes of the valva, socii, and transtilla, and the elongate, bristled sterigma. Some of these parts are of autapomorphic importance: the presence of terminal bristles of the socius and its shape and strong sclerotization; the densely bristled, bifurcate median part of the transtilla; the extended inner lobe of the pocket of the valva; and the elongate sterigma.

Rudenia Razowski, 1985

Rudenia Razowski, 1985, *Polskie Pismo ent*., **55**: 519, t. sp.: *Rudenia pauperculana* Razowski, 1985, Mexico. Five species included now. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Rudenia* was originally recognized as closely related to *Eugnosta.* RAZOWSKI (1994) placed *Rudenia* near *Lorita* based on the similarity of the female genitalia. Putative autapomorphies are the presence of the flat double process of the top of the tegumen, the funnel-like depression of dorsal part of this region of the tegumen, the strongly elongate base of the sacculus parallel to the vinculum arm, the long concavity of the left side of aedeagus, two rows of small sclerotized folds in the postvaginal sterigma beyond the weakly sclerotized part of sterigma, the sclerotized structure of the end of aedeagus; the presence of hairless, well sclerotized socii.

Saphenista Walsingham, 1914

Saphenista Walsingham, 1914, *Biol. Cent.-am. Lepid. Heterocera*, **4**: 296, t. sp.: *Conchylis lacteipalpis* Walsingham, 1891, t. l.: St Vincent, West Indies. One hundred and sixteen species included now. NEA/NEO.

RAZOWSKI (1985, 1994): Re-descriptions.

Diagnosis: RAZOWSKI (1994) treated *Saphenista* and *Phalonidia* as closely related genera which show similarities in the shapes of the socii, transtilla, and valva. He mentioned that the presence of the abdominal scent organs may support the formation of the group which includes the genera from *Phalonidia* to *Mielkeana*. He also mentioned the supposed autapomorphies of *Saphenista*: the tooth-like process of the vinculum, a rather well sclerotized pocket-shaped concavity of the base of valva, and the prominence of the aedeagus (atrophied in some species).

Spinipogon Razowski, 1967

Spinipogon Razowski, 1967, *Acta zool. cracov*., **12**(8): 199, t. sp.: *Spinipogon trivius* Razowski, 1967, Brazil. Fourteen species now included. NEA/NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Spinipogon* was originally compared with *Cochylis* based mainly on the similarity of the male genitalia, especially the socii. RAZOWSKI (1994) realized that the perpendicular position of the terminal part of the tegumen and the reduction of the socii occurred probably developed in parallel in some groups of this tribe, hence the affinity between *Spinipogon* and *Cochylis* does not seem so close. *Spinipogon* was thus supposed to be an off-shot of the *Phalonidia* branch just as *Platphalonia* is. The supposed autapomorphies of *Spinipogon* are the presence of a slender sacculus, the membranous postbasal, or submedian portion of the costa of valva, and the large wart-like configuration of the corpus bursae with its lateral surface plicate and strengthened with numerous spines. The top part of this "wart" is extrusible and membranous, except for the median, longitudinal sclerite protecting the base of the ductus seminalis.

Tambomachaya Razowski, 1989

Tambomachaya Razowski, 1989, *SHILAP Revta. lepid*., **17**(66): 205, t. sp.: *Tambomachaa pollexifera* Razowski, 1989, Peru; monotypic. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: *Tambomachaya* was originally compared to *Aphalonia* to which it is similar externally but may not be closely related. RAZOWSKI (1994) mentioned that *Tambomachaya* resembles *Tenoa* in its markings consisting of forewing fasciae rather parallel to one another, and lists the putative autapomorphies of this genus: the broad, setose cucullus-like distal part of the valva, the presence of the pollex, the shape of the socius, and the caulis, the distal parts of which extend from the lateral lobes that are directed ventrally.

Tenoa Razowski, 1994

Tenoa Razowski, 1994, *Acta zool. cracov*., **37**(2): 258, t. sp.: *Tenoa curicoana* Razowski, 1994, Chile; monotypic. NEO.

Diagnosis: *Tenoa* was originally compared to *Tambomachaya* (through its diagnosis); the two have a similar forewing pattern but *Tenoa* has more specialized terminal parts of the socii.

Thysanphalonia Razowski & Becker, 1986

Thysanphalonia Razowski & Becker, 1986, *Acta zool. cracov*., **29**(20): 460, t. sp.: *Thysanphalonia cirrhites* Razowski & Becker, 1986, Mexico, monotypic. NEO.

RAZOWSKI (1994): Re-description.

Diagnosis: RAZOWSKI (1994) compared *Thysanphalonia* with *Phalonidia*; the two have similar venation and habitus. He also mentioned the supposed autapomorphies of *Thysanphalonia*: the heavily sclerotized dorsum of sacculus, the setose termination of sacculus, and the lateral socius.

Velhoania Razowski & Becker, 2007

Velhoania Razowski & Becker, 2007, *Acta zool. cracov*., **50B**(2): 99, t. sp.: *Velhoania paradoxa* Razowski & Becker, 2007, Brazil, monotypic. NEO.

Diagnosis: *Velhoania* was originally characterized to be allied with *Phalonidia* as the shape of aedeagus shows. However, *Velhoania* lacks the base of the socii; has very slender pedunculi; very broad, weakly sclerotized transtilla; a peculiar juxta; and a bipartite valva. In facies *Velhoania* is similar to *Aethes bicuspis* Razowski & Becker, 2002.

Index to synonymies

Arachniotes - Eupoecilia
Arce - Phtheochroa
Argyridia - Aethes
Argyrolepia - Eugnosta
Bipenisia - Cochlimorpha
Bleszynskiella - Cochlimorpha
Brevisociaria - Phalonidia
Carolella - Eugnosta
Ceratuncus - Monoceratuncus
Chlidonia - Aethes
Chrosis - Aethes
Cirriaethes - Aethes
Clysia - Eupoecilia
Clysiana - Eupoecilia
Coecaethes - Aethes
Conchylis - Cochylis
Dapsilia - Aethes
Durrantia - Phtheochroa
Eustenodes - Cochylimorpha
Euxantoides - Cochylimorpha
Heinrichia - Henricus
Hysterosia - Phtheochroa
Idiographis - Phtheochroa
Irazona - Henricus
Lozopera - Aethes
Obraztsoviana - Hysterophora
Parahysterosia - Phtheochroa
Parastenodes - Cochylimorpha
Paraxanthoides - Cochylimorpha
Platphalonidia - Phalonidia
Propira - Phtheochroa
Safra - Eugnosta
Stenodes - Cochylimorpha
Substenodes - Cochlimorpha
Thyraylia - Cochylis
Trachybyrsis - Eugnosta

BIBLIOGRAPHY

BROWN, J. W., 2005.– Tortricidae (Lepidoptera) [in] *World Catalogue of Insects*, **5** 741 pp. Apollo Books, Stenstrup.

INTERNATIONAL CODE OF ZOOLOGICAL NOMENCLATURE. 1999.– *The International Trust for Zoological Nomenclature, 4th ed*.: 306 pp. London.

NYE, I. W. B. & FLETCHER D. S., 1991.– Microlepidoptera.– *The generic names of moths of the World*, **6**: XXIX + 368 pp. Natural History Publications, London.

POGUE, M. G., 1988.– Revision of the genus *Lorita* Busck (Lepidoptera: Tortricidae: Cochylini): a description of the male with descriptions of the female, larva and pupa.– *J. New York ent. Soc.*, **95**(2): 320-327.

RAZOWSKI, J., 1969.– Revision of the genus *Eupoecilia* Stephens (Lepidoptera, Cochylidae).– *Acta zool. cracov.*, **13**(5): 103-130.

RAZOWSKI, J., 1970a.– A short catalogue of Palaearctic Cochylidae (Lepidoptera).– *Acta zool. cracov.*, **15**(8): 341-399.

RAZOWSKI, J., 1970b.– Cochylidae. *In* H. G. AMSEL, F. GREGOR & H. REISSER (eds.).– *Microlepidoptera Palaearctica*, **3:** IV + 528 pp, 161 pls. Wien.

RAZOWSKI, J., 1987.– The genera of Tortricidae (Lepidoptera). Part I: Palaearctic Chlidanotinae and Tortricinae.– *Acta zool. cracov.,* **30**(11): 141-355.

RAZOWSKI, J., 1991.– Second revision of *Henricus* Busck, 1943 (Lepidoptera: Tortricidae).– *SHILAP Revta. lepid.,* **19**(73): 53-66.

RAZOWSKI., J., 1994. - Synopsis of the Neotropical Cochylini (Lepidoptera: Tortricidae).– *Acta zool. cracov.*, **37**(2): 121-320.

RAZOWSKI., J., 2002a.– The genera of Tortricidae (Lepidoptera) common for the Palaearctic and Afrotropical regions.– *Acta zool. cracov.,* **45**(3): 197-205.

RAZOWSKI., J., 2002b.– *Tortricidae (Lepidoptera) of Europe. Tortricidae and Chlidanotinae*, **1**: 247 pp + 16 pls. František Slamka, Bratislava.

RAZOWSKI, J., 2004.– Review of the Genera of Afrotropical Tortricidae (Lepidoptera).– *Acta zool. cracov.*, **47**(3-4): 167-210.

RAZOWSKI, J., 2009.– Diagnoses and remarks on the genera of Tortricidae (Lepidoptera) Part 1. Phricanthini, Tortricini, and Schoenotenini.– *Polskie Pismo ent.*, **78**: 59-90.

RAZOWSKI, J., 2009b.– *Tortricidae of the Palaearctic Region. Cochylini*, **2**: 195 pp. František Slamka, Kraków-Bratislava.

RAZOWSKI, J. & BECKER, V. O., 1993.– Cochylini (Lepidoptera: Tortricidae) collected in Central America and Mexico.– *Acta zool. cracov.,* **29**(20): 441-500.

RAZOWSKI, J. & WOJTUSIAK, J., 2008.– Tortricidae from the mountains of Ecuador. Part III: Western Cordillera (Insecta: Lepidoptera).– *Genus*, **19**(3): 497-575.

SABOURIN, M., MILLER, W. E., METZLER, E. H. & VARGO, J. T., 2002.– Revised identities and new species of *Aethes* from Midwestern North America (Tortricidae).– *J. Lepid. Soc*., **56**(4): 216-233.

J. R.
Institute of Systematics and Evolution of Animals
Polish Academy of Sciences
Sławkowska, 17
PL-31-016 Kraków
POLONIA / *POLAND*
E-mail:Razowski@isez.pan.krakow.pl

(Recibido para publicación / *Received for publication* 28-III-2011)
(Revisado y aceptado / *Revised and accepted* 5-V-2011)
(Publicado / *Published* 30-XII-2011)