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# The system of the Catocalinae – a historical survey

(Lepidoptera, Noctuidae)

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## Summary

The present paper reviews the family-group names of the Catocalinae subfamily within the Noctuidae (Lepidoptera). The underlying concepts and their historical evolution to date are described. All known family group names which were assigned within the Catocalinae are listed. New status: Anumet[ini] Wiltshire, 1976 **stat. rev.**, new synonyms: Lagopter[idae] Kirby, 1897 **syn. nov.** of Dysgoni[idae] Moore, [1885] 1884-7; Lygephil[ini] Wiltshire, 1976 **syn. nov.** of Toxocamp[idae] Guenée, 1852; Mocis[ini] Berio, 1992 **syn. nov.** of Remigil[idae] Guenée, 1852; Pangrapt[inae] Grote, 1882 **syn. nov.** of Focill[idae] Guenée, 1852; Phaeocym[ini] Grote, 1890a **syn. nov.** of Omopter[idae] Grote, 1895.

## Zusammenfassung

Die vorliegende Arbeit schildert die historische Entwicklung des Systems der Unterfamilie Catocalinae (Noctuidae, Lepidoptera) und enthält eine Liste der Familiengruppennamen, die innerhalb der Catocalinae vergeben wurden. Taxonomische Änderungen: Anumet[ini] Wiltshire, 1976 **stat. rev.**, Lagopter[idae] Kirby, 1897 **syn. nov.** von Dysgoni[idae] Moore, [1885] 1884-7; Lygephil[ini] Wiltshire, 1976 **syn. nov.** von Toxocamp[idae] Guenée, 1852; Mocis[ini] Berio, 1992 **syn. nov.** von Remigil[idae] Guenée, 1852; Pangrapt[inae] Grote, 1882 **syn. nov.** von Focill[idae] Guenée, 1852; Phaeocym[ini] Grote, 1890a **syn. nov.** von Omopter[idae] Grote, 1895.

## Introduction

“All natural bodies share with one another a greater or a lesser affinity; the sum of all these affinities forms the epitome of a natural system in abstracto. The proposal of a system in this sense is impossible for the human spirit, in that man is not able to fully investigate the origin and constitutuion of all natural bodies in all their relationships to one another. A list of the natural bodies in accordance with the manner in which they appear to, and are recognised by, the human spirit forms a system in concreto. In abstracto there can be only one system of nature; in concreto there can be as many as the human spirit can judge and interpret. All systems formed in this way are therefore only attempts to investigate the one, unalterable law of nature” (Herrich-Schaeffer 1843).

[“Alle Naturkörper stehen zu einander in grösserer oder geringerer Verwandtschaft; die Summe aller dieser Verwandtschaften bildet den Inbegriff eines Systemes der Natur in Abstracto. Die Aufstellung eines Systemes in diesem Sinne ist für den menschlichen Geist unmöglich, indem er nicht befähigt ist, alle Naturkörper in allen Beziehungen zueinander, alle in ihrem Werden und Seyn vollständig zu erforschen. Eine Zusammenstellung der Naturkörper gemäss der Art und Weise, wie sie dem menschlichen Geiste erscheinen

und von ihm erkannt werden, gibt ein System in Concreto. In Abstracto kann es also nur ein System der Natur geben; in Concreto so viele, als der menschliche Geist die Natur auf verschiedene Weise auffassen und beurtheilen kann. Alle auf diese Art gebildete Systeme sind also nur Versuch, das eine und unabänderliche Gesetz der Natur zu erforschen" (Herrich-Schäffer, 1843).]

The lepidopterists working systematically were always eager to represent the system in his „natural“ arrangement even if they did not know, or could not formulate, „the one, unalterable law of nature“, i.e. mutation recombination and selection as driving forces of evolution. The term ‘affinity’ was at this time abstract. It was based on similarity alone and not on descendance. For this reason earlier systems could not claim to be constructed exclusively from monophyletic groups. Wing pattern, wing form and position initially stood in the foreground as characters (Borkhausen 1792). Subsequently morphological and anatomical features were increasingly adopted as arguments for taxa and their classification. The importance of the praeimaginal stages was recognised and used at an early stage (see e.g. Denis & Schiffermüller 1775). The diversity of knowledge and the different opinions of several lepidopterists resulted in different systematic models which are still, in part, not monophyletic and which are thus impossible to falsify. Kitching (1984) vividly demonstrates the historical evolution of schemes for the family Noctuidae.

To date around 35,000 species have been described within the family Noctuidae (Yela & Kitching 1999), arranged in about 30 subfamilies (Nye 1975, Poole 1989, Fibiger 1990, Heppner 1991, Speidel & al. 1996a). About 7,000 species with approximately 10,000 described taxa are currently assigned to the subfamily Catocalinae. The systematics and phylogeny of this subfamily represents an unresolved problem (e.g. Kitching 1984; Mitchell & al. 2000). The principal reasons for this are the historical evolution of the systematics of this subfamily, the enormous species abundance, the insufficiently known morphological variety, the predominant distribution of the genera and species in the tropical and subtropical region as well as the lack of specialists able to survey this group on a world-wide basis. It is safe to assume that the Catocalinae are not a monophylum in their current delimitation.

The most practical approach for a long-term solution of this problem is to distinguish uniform (i.e. monophyletic) groups within the Catocalinae – including all taxa known world-wide – and to examine these separately (Kitching 1984, Berio 1992, Wiltshire 1990, Speidel & Naumann 1995). Only after this can hypotheses be developed for the kinship of these groups in relation to each other and/or a systematic scheme for the Catocalinae. For the delimitation of uniform groups numerous older and younger models exist which need to be taken into account. In this paper the changing historical evolution is presented and the availability of all known family group names is checked.

## Methodology

The term Catocalinae is used here in the current sense which includes the so-called Ophiderinae (Noctuinae sensu Hampson).

All taxa at the family-group rank as well as the mentioned genera for the Catocalinae were extracted from the relevant literature. The original spelling and original grouping was adopted. As a consequence of the successive development of the systematics with synonyms and

changing interpretations it is difficult to compare all opinions concerning the arrangement of the genus groups by various authors directly. Therefore the current systematic position of the mentioned species in all publications has been checked. The work of Poole (1989) and Nye (1975) formed the basis for this. If the present species assignment differs from that in the original work, then the current one is added in square brackets [ ]. In case of assignment to another genus, subfamily or family, this is indicated by round brackets ( ).

The few species of the Catocalinae in the Holarctic region represent only a small section of this world-wide group. Therefore the many travelogues, faunal lists, etc. which include a grouping of the species into suprageneric units from this region without justification were not analysed in so far as no new family-group names are proposed here.

## History

The Catocalinae species placed initially by Linné in the genus *Noctua* were arranged by Hübner (1816 ff.) in his list into numerous genera. This list forms the basis of our present systematics on a world-wide basis. He consistently employed the taxonomic units genus (Coitus/Verein), tribus (Familia) and subfamily (Stirps/Stamm) (cf. Hemming 1937: 16). The species of the Catocalinae were arranged by Hübner into 9 subfamilies (table 1).

On the other hand Boisduval (1829, 1833) distinguished only two major subunits, the Catocalides (*Ophideres*, *Ophiusa*) and the Homopterides (*Polydesma*, *Cyligramma*, *Erebus*). The basic idea of Hübner (1816), to consolidate similar genera into groups was consistently continued by Guenée in the following years. Guenée (1837: 321) initially used the tribus names Catocalidi, Ophiusidi, Noctuoidi and Noctuo-Phaloenidi in his survey of the European Noctuidae. However, he later (Guenée 1841) added further tribus names and their definitions (table 2).

In his following comprehensive study of all known Lepidoptera he significantly revised the system of the Catocalinae (Guenée 1852a,b, 1854) and arranged the known genera into numerous groups. Walker (1857-1858) adopted this system in its entirety. He added the newer species only (in part with new generic terms) and revised the approach at the genus level (table 3).

The systematic studies of Duponchel (1844), Herrich-Schäffer (1843, 1845, 1847), Packard (1869), Meyrick (1895), Tutt (1896), Haworth (1803-28), Lederer (1857) and Smith (1893) predominantly considered the species of Europe and/or North America. The species of the Catocalinae were mostly put only into one family-group because of their small number of species occurring in these areas. As mentioned already, this geographically limited consideration is not suitable for carrying out systematic groupings. This “nordic” viewpoint – to put the Catocalinae into a single subfamily – obviously dominated the systematic thinking and strongly influenced the subsequent development of ideas. A.R. Grote formed in North America an exception to this general tendency. He endeavoured to distinguish family groups and name them. His opinions were of course subject to changes over time. Since his family-group names are today frequently misquoted, we express here the relevant contents of his papers; publications which are often difficult to come by. Fundamentally he subdivided the Noctuae (as a family) into Noctuelitae fasciatae (includes mostly the quadrifine Noctuidae) and Noctuelitae nonfasciatae (all trifine Noctuidae as well as the quadrifine groups mentioned in the table) (Grote 1882, table 4).

**Table 1:** Hübner 1816 ff.

Tribus (Family)	
Stirps (Subfamily)	
Coitus (Genus)	
<hr/>	
Semigeometrae	
Plusiae	
Inscriptae	
<i>Westermannia</i> (Chloephorinae), <i>Euchalcia</i> (Plusiinae), <i>Agrapha</i> (Plusiinae), <i>Syngrapha</i> (Plusiinae), <i>Antographa</i> (Plusiinae), <i>Polychrysis</i> (Plusiinae)	
Innaratae	
<i>Panchrysis</i> (Plusiinae), <i>Diachrysis</i> (Plusiinae), <i>Chrysaspidia</i> [ <i>Plusia</i> (Plusiinae)], <i>Chrysodeixis</i> (Plusiinae), <i>Argyrosticka</i> (Amphipyridae)	
Erotylae	
Selectae	
<i>Eustrotia</i> (Eustrotiinae), <i>Argyrostrotis</i> [ <i>Argyrostrotis</i> , <i>Deltote</i> (Eustrotiinae)], <i>Emmelia</i> (Eustrotiinae)	
Promiscuae	
<i>Antarchaea</i> [ <i>Phytometra</i> ], <i>Hapalotis</i> [ <i>Athetis</i> (Amphipyridae), <i>Cryphia</i> (Bryophilinae), <i>Pseudeustrotia</i> (Pseudeustrotiinae)]	
Anthophilae	
Proporicae	
<i>Glenopteris</i> , <i>Dialithis</i> , <i>Phrictia</i>	
Blandae	
<i>Acolasis</i> [ <i>Coenipeta</i> , <i>Sympistis</i> ], <i>Eublemma</i> (Acontiinae), <i>Porphyria</i> [ <i>Eublemma</i> (Acontiinae)], <i>Eromene</i> [ <i>Eublemma</i> (Acontiinae)], <i>Trothisa</i> [ <i>Eublemma</i> (Acontiinae)], <i>Ecthetis</i> [ <i>Eublemma</i> (Acontiinae)]	
Flavifunctae	
<i>Acontia</i> [ <i>Xanthodes</i> (Bagisarininae)], <i>Aegle</i> (Stiriinae)	
Simulatae	
<i>Odice</i> [ <i>Eublemma</i> (Acontiinae), <i>Argyrolepidia</i> (Agaristinae), <i>Acantholipes</i> , <i>Xestia</i> (Noctuidae)], <i>Apaustis</i> (Amphipyridae)	
Heliothentes	
Alacres	
<i>Phycoma</i> [ <i>Phycoma</i> , <i>Macrodes</i> , <i>Dolichosomastis</i> ], <i>Hemeroplanis</i>	
Moderatae	
<i>Helia</i> [ <i>Idia</i> (Hermiiniinae), <i>Coenipeta</i> , <i>Metria</i> ], <i>Anthocitta</i> [ <i>Coenipeta</i> ], <i>Eutalia</i> (Euteliinae), <i>Coenipeta</i>	
Tristes	
<i>Melipotis</i> [ <i>Melipotis</i> , <i>Ercheia</i> ], <i>Catephia</i> , <i>Aedia</i> [ <i>Aedia</i> , <i>Tyta</i> ], <i>Tarache</i> [ <i>Acontia</i> (Acontiinae)], <i>Metria</i>	
Celetes	
<i>Sympistis</i> [(Cucullinae), <i>Anarta</i> (Hadeninae)], <i>Melicleptria</i> [ <i>Schinia</i> (Heliothinae), <i>Protoschinia</i> (Heliothinae), <i>Heliothis</i> (Heliothinae)], <i>Panemeria</i> (Amphipyridae or Stiriinae), <i>Chimaera</i>	
Meropides	
Incomptae	
<i>Athysania</i> [ <i>Gonodonta</i> ], <i>Gonodonta</i> , <i>Trissophaea</i> [ <i>Endocima</i> ]	
Festivae	
<i>Maenas</i> [ <i>Endocima</i> ], <i>Rhytia</i> [ <i>Endocima</i> ], <i>Otbreis</i> [ <i>Endocima</i> ], <i>Acacallis</i> [ <i>Endocima</i> ], <i>Corycia</i> [ <i>Endocima</i> ]	
Elevatae	
<i>Ischyia</i> [ <i>Ischyia</i> , <i>Phyllodes</i> ], <i>Coronis</i> [ <i>Ferenta</i> ]	
Abstrahentes	
<i>Antaea</i> [Notodontidae]	
Ascalaphae	
Frequentes	
<i>Astictae</i> [ <i>Lygephila</i> ], <i>Ophiussa</i> [ <i>Lygephila</i> ], <i>Clytie</i> , <i>Athyria</i> , <i>Mocis</i> [ <i>Mocis</i> , <i>Celiptera</i> ], <i>Phoberia</i> [ <i>Phoberia</i> , <i>Minucia</i> , <i>Mocis</i> , <i>Ophiussa</i> , <i>Panopoda</i> ], <i>Platya</i> [ <i>Platya</i> , <i>Dyonyx</i> , <i>Goniapteryx</i> , <i>Pseudophisma</i> ], <i>Perasia</i> , <i>Chalciope</i> [ <i>Chalciope</i> , <i>Mocis</i> ], <i>Parallelia</i> [ <i>Parallelia</i> , <i>Grammodes</i> ], <i>Dysgonia</i> , <i>Achaea</i> , <i>Bendis</i> [ <i>Lesmone</i> , <i>Dysgonia</i> , <i>Servodes</i> ]	
Concolaratae	
<i>Hemeroblennum</i> , <i>Thermesia</i> [ <i>Hemeroblennum</i> ], <i>Gorgonia</i> (Druckfehler) [ <i>Gorgone</i> ], <i>Apistis</i> [ <i>Gorgone Anticarsia</i> ], <i>Chamina</i> (Druckfehler) [ <i>Chamina</i> , <i>Azeta</i> ], <i>Itonia</i> [ <i>Itonia</i> ]	

Ornatae
<i>Nyctipao</i> [ <i>Erebus</i> ], <i>Argina</i> [ <i>Erebus</i> ], <i>Speiredonia</i> [ <i>Speiredonia</i> , <i>Spirama</i> , <i>Ommatophora</i> ]
Undosae
<i>Orosema</i> [ <i>Ascalapha</i> ], <i>Syrnia</i> [ <i>Letis</i> , <i>Thysania</i> ], <i>Blosyris</i> [ <i>Hemeroblemma</i> ], <i>Letis</i> , <i>Cyclopis</i>
Lemures
Accidentes
<i>Autophila</i> , <i>Zale</i> , <i>Phaeocyma</i> [ <i>Metria</i> , <i>Zale</i> ]
Restinguentes
<i>Anthracia</i> [ <i>Anthracia</i> , <i>Zale</i> ], <i>Apopestes</i> , <i>Mormo</i> (Amphyperinae)
Blepharoniae
Caerulescentes
<i>Mormonia</i> [ <i>Catocala</i> ], <i>Catocala</i> (Druckfehler) [ <i>Catocala</i> ]
Coccineae
<i>EUNETIS</i> [ <i>Catocala</i> ], <i>Lamprosia</i> [ <i>Catocala</i> ], <i>Astiotis</i> [ <i>Catocala</i> ]
Flavae
<i>Epbesia</i> [ <i>Catocala</i> ], <i>Parthenos</i> [ <i>Euparthenos</i> ], <i>Encora</i> [ <i>Catocala</i> ], <i>Corisce</i> [ <i>Catocala</i> ]
Brephiae
Dubiae
<i>Entactis</i> [ <i>Phalaenoides</i> (Agaristinae)], <i>Pais</i> [ <i>Brephos</i> (Agaristinae)]
Vulgares
<i>Archieraris</i> (Geometridae), <i>Allotria</i>
Euclidiæ
Maculatae
<i>Drasteria</i> [ <i>Drasteria</i> , <i>Mocis</i> , <i>Euclidia</i> , <i>Caenurgina</i> ], <i>Gonospilea</i> [ <i>Euclidia</i> ], <i>Callistegi</i> [ <i>Callistegi</i> , <i>Cerocala</i> , <i>Caenurgina</i> ], <i>Calymma</i> (Acontiinae), <i>Hypena</i> (Hypeninae)]
Fasciatae
<i>Schinia</i> (Heliothinae), <i>Synthymia</i> (Amphipyridinae)
Lineatae
<i>Prothymia</i> [ <i>Phytometra</i> ]

Table 2: Guenée 1841

Tribus
Genus
Calpidi
<i>Calpe</i> [ <i>Calyptra</i> ]
Amphipyridi
<i>Mania</i> [ <i>Naenia</i> (Noctuinae), <i>Mormo</i> (Amphipyridinae)], <i>Amphipyra</i> [ <i>Autophila</i> ], <i>Syntomopus</i> [ <i>Pyrois</i> (Amphipyridinae)], <i>Philopyra</i> [ <i>Amphipyra</i> (Amphipyridinae)]
Ophiuridi
<i>Exophilya</i> [ <i>Lygephila</i> ], <i>Cerocala</i> , <i>Ophiura</i> [ <i>Clytie</i> , <i>Prodotis</i> , <i>Dysgonia</i> ], <i>Toxocampa</i> [ <i>Lygephila</i> ], <i>Catephia</i> , <i>Ophiodes</i> [ <i>Minucia</i> , <i>Ophiura</i> ]
Catocalidi
<i>Catocala</i>
Phalaenoidi
<i>Brephos</i> [ <i>Archieraris</i> ] (Geometridae, Archierarinae)
Acontidi
<i>Acontia</i> [ <i>Acontia</i> (Acontiinae), <i>Xanthodes</i> (Bagisarinae), <i>Tyta</i> (Tytinae)]
Noctuo-phalaenidi
<i>Euclidia</i> [ <i>Euclidia</i> , <i>Callistegi</i> ], <i>Anthophila</i> [ <i>Aegle</i> (Stiriinae)], <i>Micra</i> [ <i>Eublemma</i> (Acontiinae)], <i>Leptosia</i> [ <i>Metacrostis</i> (Acontiinae)], <i>Glossodice</i> (Acontiinae)], <i>Erastris</i> [ <i>Pseudenstrotia</i> (Pseudeustrotiinae)], <i>Elaphria</i> (Hadeninae)], <i>Hydrelia</i> [ <i>Deltote</i> (Eustrotiinae)], <i>Agrophila</i> [ <i>Emmelia</i> (Eustrotiinae)], <i>Phytometra</i> , <i>Haemerosia</i> [ <i>Haemerosia</i> (Hadeninae)], <i>Coccidiphaga</i> (Acontiinae)], <i>Oratoscelis</i> [ <i>Calymma</i> (Acontiinae)], <i>Glaphyra</i> [ <i>Eublemma</i> (Acontiinae)], <i>Rhyppaglia</i> (Acontiinae), <i>Phyllophila</i> (Eustrotiinae)], <i>Microphysa</i> [ <i>Odice</i> (Acontiinae)]

**Table 3:** Guenée 1852a, b, 1854; Walker 1858 (Phalange Quadrifidae)

Tribus
Family
Genus
<hr/> Sericeae
Palindidae
<i>Palindia</i> [ <i>Eulepidotis</i> ], <i>Homodes</i>
Dyopsidae
<i>Dyomyx</i> , <i>Dyops</i> [ <i>Dyops</i> , <i>Litoprosopus</i> ]
Variegatae
Eriopidae
<i>Emarginea</i> (Amphipyridae) <i>Cosmodes</i> , <i>Callopietria</i> (Amphipyridae), <i>Liineopalpa</i> , <i>Eriopus</i> [ <i>Callopietria</i> (Amphipyridae)], <i>Coxina</i>
Eurhipidae
<i>Phlegetonia</i> [ <i>Eutelia</i> (Euteliinae)] <i>Penicillaria</i> (Euteliinae), <i>Eurhipia</i> [ <i>Eutelia</i> (Euteliinae)], <i>Anuga</i> (Euteliinae), <i>Ingura</i> [ <i>Paectes</i> (Euteliinae)]
Placodidae
<i>Placodes</i> [ <i>Eucarta</i> (Amphipyridae)], <i>Diastema</i> (Eustrotiinae)
Plusidae
<i>Abrostola</i> (Plusiinae), <i>Calyptris</i> , <i>Plusia</i> [ <i>Autoplusia</i> , <i>Euchalcia</i> , <i>Polychrysis</i> , <i>Diachrysis</i> ... (alle Plusiinae)], <i>Thyria</i> [ <i>Argyrosticka</i> (Amphipyridae)], <i>Basilodes</i> (Amphipyridae), <i>Plusiodonta</i> , <i>Chliara</i> (Notodontidae), <i>Concana</i> , <i>Calyptris</i>
Calpidae
<i>Oraesia</i> , <i>Gonodonta</i> , <i>Calpe</i> [ <i>Calyptra</i> ], <i>Hapigia</i> (Notodontidae), <i>Diamuna</i> [ <i>Darceta</i> (Agaristinae)], <i>Clitis</i> [ <i>Darceta</i> (Agaristinae)], <i>Ferenta</i> , <i>Deva</i> [ <i>Plusiodonta</i> ], <i>Gadera</i> [ <i>Plusiodonta</i> ], <i>Devena</i> , <i>Ecregma</i>
Hemiceridae
<i>Canodia</i> (Notodontidae), <i>Arycophora</i> (Chloephorinae), <i>Hemiceras</i> (Notodontidae), <i>Plusiodes</i> [ <i>Westermannia</i> (Chloephorinae)], <i>Achantodes</i> (Crambidae), <i>Lymphorta</i> (Notodontidae)
Hyblaeidae
<i>Phycodes</i> (Glyphipterigidae), <i>Hyblaea</i> (Hyblaeidae), <i>Nolasena</i>
Gonopteridae
<i>Rhynchodes</i> , <i>Cosmophila</i> [ <i>Anomis</i> ], <i>Anomis</i> , <i>Eriocera</i> , <i>Monogona</i> [ <i>Hypsoropha</i> ], <i>Thalatta</i> [ <i>Thalatta</i> , <i>Anomis</i> ], <i>Gonitis</i> [ <i>Anomis</i> ], <i>Gonoptera</i> [ <i>Scoliopteryx</i> ], <i>Rusicada</i> [ <i>Anomis</i> ], <i>Scoedisa</i> [ <i>Anomis</i> ], <i>Targalla</i> (Euteliinae), <i>Siavana</i> [ <i>Panopoda</i> ], <i>Scoliopteryx</i>
Intrusae
Amphipyridae
<i>Barydia</i> (Notodontidae), <i>Syntomopus</i> [ <i>Pyrois</i> (Amphipyridae)], <i>Amphipyra</i> (Amphipyridae), <i>Mania</i> [ <i>Naenia</i> (Noctuidae)], <i>Mormo</i> (Amphipyridae)]
Toxocampidae
<i>Exophila</i> [ <i>Exophyla</i> , falsche Schreibweise], <i>Spintherops</i> [ <i>Apopestes</i> , <i>Autophila</i> ], <i>Toxocampa</i> [ <i>Lygephila</i> ], <i>Plecoptera</i> , <i>Hermionodes</i> , <i>Chabuata</i> (Hadeninae)
Stilbidae
<i>Stilbia</i> (Amphipyridae)
Extensae
Polydesmidae
<i>Pantylia</i> , <i>Pandesma</i> , <i>Polydesma</i> , <i>Diatenes</i>
Homopteridae
<i>Phaeocyna</i> [ <i>Zale</i> ], <i>Alamini</i> [ <i>Pericyma</i> ], <i>Xylis</i> [ <i>Zale</i> ], <i>Homoptera</i> [ <i>Zale</i> , <i>Metria</i> ], <i>Ypsia</i> [ <i>Zale</i> ], <i>Anthraccia</i> [ <i>Pseudanthraccia</i> ], <i>Dugaria</i> [ <i>Pericyma</i> ], <i>Cortyta</i>
Hypogrammidae
<i>Safia</i> [ <i>Metria</i> ], <i>Yrias</i> [ <i>Metria</i> , <i>Kakopoda</i> ], <i>Stimmia</i> [ <i>Metalectra</i> ], <i>Campometra</i> [ <i>Metria</i> ], <i>Cyclodes</i> , <i>Lepidodes</i> , <i>Praxis</i> , <i>Ericia</i> , <i>Coorba</i> , <i>Caenipeta</i> [ <i>Coenipeta</i> , falsche Schreibweise], <i>Hypogramma</i> [ <i>Coenipeta</i> , <i>Hypogrammodes</i> ], <i>Allotria</i> , <i>Briada</i> [ <i>Felinia</i> ], <i>Brana</i> , <i>Endrapa</i> , <i>Corsa</i> , <i>Gadirtba</i> , [ <i>Iscladia</i> (Sarothripinae)], <i>Cicynna</i> , <i>Harmia</i> , <i>Avatba</i> , <i>Ercheia</i> , <i>Plotheia</i> , <i>Diomea</i> , <i>Crioia</i> , <i>Tbria</i> [ <i>Pandesma</i> ], <i>Cropia</i> (Amphyperinae) <i>Lusia</i> [ <i>Amilaga</i> (Herminiinae)] <i>Prospalta</i> , <i>Decelea</i> [ <i>Cropia</i> (Amphyperinae)], <i>Elonsa</i> , <i>Callyna</i> (Amphyperinae), <i>Prometopus</i> (Amphyperinae)

## Limbatae

## Catephidae

*Cocytodes* [Arcte], *Catephia* [Catephia, Nagia], *Anophia* [Aedia], *Erygia*, *Odontodes* (Stictopterinae), *Stictoptera* [*Stictoptera*, *Nagara* (Stictopterinae)], *Lophoptera* (Stictopterinae), *Audea*, *Steiria* [*Stictoptera* (Stictopterinae)], *Aucha* (Amphipyridae), *Aegilia* (Stictopterinae), *Minica* [*Stictoptera* (Stictopterinae)], *Maceda* (Chloephorinae), *Paetica* (Amphipyridae)

## Bolinidae

*Leucanitis* [Drasteria], *Panula*, *Bolina* [Melipotes, Drasteria], *Syneda* [Drasteria], *Gerespa* [Melipotes], *Biula* [Bulia], *Coronta* [Melipotes], *Diopa*

## Hypocalidae

*Hypocala*

## Catocalidae

*Parthenos* [Enparthenos], *Catocala*, *Blenina* (Sarothripinae), *Allotria*

## Ophideridae subf. Ophideridae

*Ophideres* [Eudicma], *Graphigona*

## Ophideridae subf. Phyllodidae

*Miniodes*, *Phyllodes*, *Potamophora* [Ischyia], *Lygniodes*

## Patulae

## Erebidae

*Oxyodes*, *Hemeroblemma*, *Peosina* [Hemeroblemma], *Blosysris* [Hemeroblemma], *Brujas* [Hemeroblemma], *Ramphia*, *Sypna*, *Leti*, *Tavia* [Tavia, Speiredonia], *Syrnia* [Letis], *Latebraria*, *Anisonenra*, *Thysania*, *Cyclopis*, *Erebus*

## Ommatophoridae

*Speiredonia*, *Sericia* [Speiredonia], *Dasypodia*, *Patula* [Erebus], *Argiva* [Erebus], *Nyctipao* [Erebus], *Cyligramma*, *Ommatophora*, *Carthaea* (eigene austr. Familie Carthaeidae, Bombycoidea), *Beregra* [Cyclodes]

## Hypopyridae

*Calliodes*, *Spirama*, *Hypopyra* [Hypopyra, Spirama], *Hamodes*, *Entomogramma*

## Bendidae

*Hulodides*, *Enmonodia* [Hypopyra], *Homaea*, *Hulodes* [Erebia, Dysgonia]

## Bendides

*Itonia*, *Bendis* [Lesmone]

## Serpentinae

## Ophiuridae

*Sphingomorpha*, *Crino*, *Bardaxima*, *Iontha*, *Lagoptera* [Thyas, Dysgonia, Artena], *Ophiodes* [Ophiura, Thyas, Minucia], *Ophylx*, *Pseudobia* [Chytie], *Cerbia* [Pandasma], *Geria* [Achaea], *Ophisma* [Ophisma, Mimophisma, Dysgonia, Achaea, Heliophisma], *Artena*, *Achaea* [Achaea, Ercheia], *Serodes*, *Naxia*, *Sysgonia*, *Calesia*, *Hypaetra* [Aratba, Aeneurethina], *Athyra*, *Ophiura*, [Dysgonia, Parallelia], *Agnomonina* [Argyrostromis] *Fodina* [Fodina, Parachalciope], *Grammodes* [Grammodes, Chalciope]

## Euclididae

*Trigonodes*, *Heteropygas*, *Pelamia* [Mocis], *Cerocala*, *Drasteria* [Caenurgina, Caenurgia], *Euclidia* [Euclidia, Callistege]

## Poaphilidae

*Bocula*, *Lyssia* [Phoberia], *Phytometra*, *Poaphila*, [Argyrostromis, Pticbodus, Phoberia, Caenurgina, Panula], *Phuryx* [Pticbodus, Perasia, Celiptera, Nymbis], *Celiptera*, *Mocis*, [Celiptera, Perasia, Argyrostromis], *Caenurgia*

## Remigidae

*Remigia* [Mocis], *Nymbis*, *Felinia*, *Isogona*, *Panopoda*, *Epidromia*, *Ceromacra*

## Pseudo-Deltoididae

## Focillidae

*Zethes* [Zethes, Zethesides, Pangrapt], *Thyridospila*, *Cultripalpa*, *Focilla* [Euclitistis, Mazacycla, Claterna], *Azatba*, *Milyas*, *Azeta*

## Amphigonidae

*Lacera*, *Amphigonina* [Amphigonina, Euclitistis, Phycoma, Ephyrodes], *Teratocera* [Syllectra], *Claterna*, *Galappa* [Euclitistis]

## Thermesidae

*Sympis* [Sympis, Platyia, Facidina], *Argidia*, *Cotuxa* [Platyia], *Orthogramma* [Epitauza], *Sanys* [Sanys, Condate, Marapana], *Heterospila*, *Thiona*, *Thermesia* [Epidromia, Antiblemma, Anticarsia, Azeta, Metallata, Phaeoblemma, Epitauza, Maxera, Hypospila, Saroba], *Azaxia* [Anticarsia], *Hypospila*, *Azeta*, *Selenis* [Selenisa, Helia], *Menecina*, *Thyridos*, *Ephyrodes*, *Dagassa* [Renodes], *Renodes*, *Gracilodes*, *Marmorina* [Pangrapt], *Mecodina*, *Agyra*, *Capnodes*, [Antiblemma, Azeta, Erebrostota], *Dialithis*, *Chypansa*, *Gerisa*, *Hypenaria* [Gorgone, Azeta, Antiblemma], *Plaxia* [Gorgone, Anticarsia, Epitauza, Ephyrodes], *Marthama* [Agyra], *Palyna*, *Empelathra*, *Talariga*, *Obroatis*, *Juncaria*, *Ginaea* [Platyia], *Azirista* [Argidia], *Edyma*, *Chadaca* [Herminodes], *Pessida* [Pterhemia]

## Deltoidites

## Platydidae

*Trigonia* [*Claterna*], *Macrodes*, *Ametris*, *Neviasca*, *Episparis*], *Midila* (Crambidae), *Masca*, *Platydia* [*Yidalpta*]

## Hypenidae

*Dichromia* [*Hypena* (Hypeninae)], *Rhodina*, *Rhynchina* (Hypeninae), *Madopa* [*Colobochyla*], *Pterbenia*, *Ceraptila* [*Rhynchina* (Hypeninae)], *Sarmatia* (Hypeninae), *Hypena* (Hypeninae), *Hypenodes* [*Schrankia* (Strepsimaninae)], *Schrankia* [sic.], *Hypenodes* (Strepsimaninae)]

## Herminidae

*Cyclopteryx*, *Rivula* (Rivulinae), *Sophronia*, *Simplicia*, *Herminia*, *Nodaria*, *Hydrillodes*, *Bleptina*, *Aristaria*, *Tortricodes*, *Sitophora*, *Helia*, *Glenopteris*, *Renia*, *Rejextaria*, *Physula*, *Homogramma*, *Heterogramma*, *Mastygophora* (Druckfehler) [*Mastigophorus* (Herminiinae)], *Clanyma*

**Table 4:** Grote 1882 "Noctuae" (partim)

## Subfamily

## Genus

**Noctuelitae (Nonfasciatae)** (only important subfamilies for the Catocalinae are extracted here)

## Anomiinae

*Anomis*, *Pteraeobolix* [*Amyna* (Eustrotiinae)], *Chytoryza* [*Amyna* (Eustrotiinae)], *Aletia* [*Alabama*, *Anomis*]

## Litoprosopinae

*Litoprosopus*

## Euteliinae

*Eutelia* (Euteliinae), *Marasmalus* [*Marathyssa* (Euteliinae)]

## Ingurinae

*Ingura* [*Paectes* (Euteliinae)]

## Calpinae

*Calpe* [*Calyptra*], *Plusiodonta*, *Basilodes* (Stiriinae), *Hemiceras* (Notodontidae), *Phiprosopus* (misspelling) [*Phyprosopus*], *Hypsoropha*

...

**Noctuelitae (Fasciatae)**

## Catocalinae

*Drasteria* [*Caenurgia*], *Litosea* [*Caenurgia*], *Hypocala*, *Euclidia* [*Euclidia*, *Callistegae*], *Grammodes* [*Dysgonia*], *Panula* [*Pannula*, *Cissusa*], *Litocala*, *Syneda* [*Drasteria*], *Cirrbobolina* [*Bolina*, *Melipotis*], *Melipotis*, *Stictoptera* [*Magusa* (Amphipyryinae)], *Catocala*, *Allotria*, *Andrewsia* [*Catocala*], *Parthenos* [*Euparthenos*]

## Ophiderinae

*Ophideres* [*Eudocima*]

## Toxocampinae

*Strenoloma* [*Spiloloma*], *Toxocampa* [*Lygephila*], *Synedoida* [*Drasteria*], *Phoberia*, *Celiptera*, *Pseudolimacodes* [*Fagitana* (Amphipyryinae)], *Phuryx* [*Ptichodis*, *Argyrostrotis*], *Parallela*, *Agnomonina* [*Argyrostrotis*], *Palindia* [*Eulepidotis*], *Harveya* [*Panopoda*], *Panopoda*, *Pleonectyptera* [*Hemeroplanis*], *Remigia* [*Mocis*], *Poaphila* [*Argyrostrotis*, *Ptichodis*], *Trama* [*Lesmone*], *Eutoreuma* [*Isogona*], *Isogona*, *Capnodes* [*Antiblemma*], *Anticarsia*, *Antiblemma* [*Metallata*.], *Agassizina*

## Erebinae

*Erebus* [*Ascalapha*], *Thysania*, *Zale*, *Pheocyna* [*Zale*, *Pseudanthracia*], *Homoptera* [*Zale*], *Enbolina* [*Enbolina*, *Metria*, *Heteranassa*, *Coenipeta*], *Ypsia* [*Zale*], *Pseudanthroecia* (Druckfehler) [*Pseudanthracia*], *Selenis* [*Selenisa*], *Homopyralis*, [*Metalectra*, *Toxonprucha*], *Matigramma*, *Argillophora* (Eustrotiinae), *Spargaloma* (Hypeninae), *Hexeris* (Thyrididae)

## Brotiinae

*Brotis* [*Geometridae*]

## Pangraptinae

*Sylectra*, *Pangraptia*, *Phalaenostola* (Herminiinae)

## 'Deltoides'

*Pseudaglossa* [*Idia* (Herminiinae)], *Epizeuxis* [*Idia* (Herminiinae)], *Megachyta* [*Zanclognatha* (Herminiinae)], *Litognatha* [*Macrochilo* (Herminiinae)], *Chytolita* (Herminiinae), *Pityolita* [*Zanclognatha* (Herminiinae)], *Zanclognatha* (Herminiinae), *Cleptomita* [*Zanclognatha* (Herminiinae)], *Coptocnemia* [*Hemeroplanis* ('Hypeninae')], *Pallachira* [*Macrochilo* (Herminiinae)], *Philometra* [*Phalaenostola* (Herminiinae)], *Salia* [*Colobochyla*], *Rivula* (Rivulinae), *Palthis* (Herminiinae), *Phalaenophana* (Herminiinae), *Pseudorgyia*



## Hypeninae

*Sisyrrhyna* [*Macrochilo* (Herminiinae)], *Capis* (Eustrotiinae), *Renia* (Herminiinae), *Tetanolita* (Herminiinae), *Bleptina* (Herminiinae), *Hypenula* (Herminiinae), *Lomanaltes* (Hypeninae), *Hypena* (Hypeninae), *Eulintneria* [*Lascoria* (Herminiinae)], *Dercetis* [*Redectis* (Herminiinae)]

Table 5: Grote 1890a

Noctuidae (*Noctuae nonfasciatae*)

**Tribus:** ...Orthosiini, Caleocampini, Cuculliini, Cleophanini, Euteliini (*Eutelia*, *Ripogenus* [*Eutelia* (Euteliinae)]), Ingurini (*Ingura* [*Paectes* (Euteliinae)]), Anomiini (*Anomis*, *Aletia* [*Alabama*, *Anomis*], *Pteraetholix* [*Amyna* (Eustrotiinae)], *Chytoryza* [*Amyna* (Eustrotiinae)]), Litoprosopini (*Litoprosopus*), Calpini (*Calpe* [*Calyptra*]), Stiriini, Plusiini, Heliothini, Tarachini, Cerathosiini, Eustrotiini, Hyblaeini (Hyblaeidae)

Catocalinae oder „Geometrifforme“ Noctuidae (*Noctuae fasciatae* sensu Borkhausen):

**Tribus 1:** Catocalini (*Catocala*, *Ophideres* [*Endocima*], *Euparthenos* ...“*The Ophiderinae and Toxocampinae of my checklist are probably not to be separated from this tribe...*“);

**Tribus 2:** Pheocymini „this comprise the Erebiinae of my Check List“ (*Pheocyma* [*Zale*; *Pseudanthracia*], *Homoptera* [*Zale*], *Pericyma*, *Zethes*, *Erebus* [*Ascalapha*], *Thysania*). -“*Hexeris* [Thyrididae], *Syllectra*, *Brotis* (Geometridae) probably are to be separated. The tribe Pangraptini (*Pangrapta*, *Phalaenostola* Herminiinae)) seems close ... to *Deltoids*“.

Table 6: Grote 1895 (only "Catocaline moths")

## Subfamily

## Genus

## Euclidiini

*Euclidia* [*Euclidia*, *Callistege*], *Drasteria* [*Caenurgia*], *Caenurgia*, *Dysgonia*, *Panula*, *Agnomonia*, *Poaphila*, [*Argyrostromis*, *Pticchodis*], *Phurys* [*Pticchodis*, *Argyrostromis*], *Parallelia*, *Phoberia*, *Celiptera*

## Melipotini

*Synedoida* [*Drasteria*], *Melipotis*, *Hypocala*, *Litocala*, *Syneda*, [*Drasteria*], *Cirrhobolina* [*Bolina*, *Melipotis*]

## Eulepidotini

*Palindia* [*Eulepidotis*], *Eulepidotis*

## Sictopterini

*Sictoptera* [*Magusa*], *Magusa* (Amphipyriinae)

## Ascalaphini

*Ascalapha*, *Strenoloma* [*Spiloloma*], *Siavana* [*Panopoda*], *Panopoda*, *Fagitana* (Amphipyriinae), *Argillophora* (Eustrotiinae), *Remigia* [*Mocis*], *Pleonectyptera* [*Hemeroplanis*], *Antiblemma* [*Metallata*.], *Anticarsia*

## Catocalini

*Catocala*, *Andrensia* [*Catocala*], *Allotria*

## Ophiderini

*Ophideres* [*Endocima*], *Euparthenos*

## Toxocampini

*Toxocampa* [*Lygephila*], *Eutoreuma* [*Isogona*]

## Thysaniini

*Thysania*, *Letis*, *Erebus* [*Ascalapha*]

## Pheocymini

*Pheocyma* [*Zale*, *Pseudanthracia*], *Zale*, *Pseudanthracia*, *Ypsia* [*Zale*], *Canpometra* (*Eubolina*), *Trama* [*Lesmona*], *Pericyma*, *Selenis* [*Selenisa*], *Yrias* [*Metria*], *Homopyralis* [*Metalectra*, [*Toxonprucha*], *Matigramma*, *Spargaloma* (Hypeninae)

## Pangraptini

*Pangrapta*, *Zethes*, *Phalaenostola* (Herminiinae), *Syllectra*

## Hexerini (Thyrididae)

*Hexeris*

## Boletobiini

*Boletobia* [*Parascotia*], *Aventia* [*Laspeyria*], *Dyaria* [*Coenodomus*, (Pyralidae)], *Acherdoa* (Amphipyriinae)

In his following papers Grote increasingly refined and modified his system (Grote 1883, 1889, 1890a, 1890b, 1895, 1896a). (Grote 1890a, table 5). Eventually he subdivided the Catocalinae into 15 tribes (Grote 1895, table 6).

**Table 7:** Moore 1884-1887

Family
Genus
Orthosidae
<i>Aramuna</i> [Bocula]
Acontiidae
... <i>Brana</i>
Palindiidae
<i>Homodes</i>
Plusiidae
... <i>Birtha</i> [Marcipa]
Calpidae
<i>Oraesia</i> , <i>Arsacia</i> , <i>Calpe</i> [Calyptra]
Hemiceridae
<i>Westermannia</i> (Chloephorinae)
Hyblaeidae
<i>Hyblaea</i> (Hyblaeidae), <i>Maceda</i> (Chloephorinae)
Gonopteridae
<i>Cosmophila</i> [Anomis], <i>Gonitis</i> [Anomis], <i>Rusicada</i> [Anomis], <i>Tbalatta</i> , <i>Falana</i>
Ophiuidae
<i>Ophusia</i> [Pantylia], <i>Plecoptera</i> , <i>Lygephila</i>
Homopteridae
<i>Pandesma</i> , <i>Anodapha</i> [Polydesma], <i>Panilla</i> , <i>Girpa</i> [Ericeia], <i>Caduca</i> , <i>Homoptera</i> (of Poole 1989)
Hypogrammidae
<i>Briada</i> [Felinia], <i>Corsa</i> , <i>Calyna</i> (Amphipyridae), <i>Dinumma</i> , <i>Gadirtha</i> , [Iscladia (Sarrothripinae)], <i>Selepa</i> (Sarrothripinae), <i>Symitha</i> [Nycteola, (Sarrothripinae)], <i>Clettbara</i> [Nanaguna (Sarrothripinae)], <i>Plotheia</i> (Sarrothripinae)
Catephidae
<i>Arcte</i> , <i>Catephia</i> [Nagia], <i>Melipotēs</i> [Ercheia], <i>Anophia</i> [Aedia, Risoba (Sarrothripinae)], <i>Mosara</i> , <i>Vapara</i> [Xylostola (Amphipyridae)], <i>Stictoptera</i> (Stictopterinae), <i>Aegilia</i> (Stictopterinae), <i>Lophoptera</i> (Stictopterinae), <i>Gyrtona</i> (Stictopterinae)
Hypocalidae
<i>Hypocala</i>
Caotocalidae
<i>Catocala</i> [Ulotrichopus], <i>Blenina</i> (Sarrothripinae), <i>Aucha</i> (Amphipyridae)
Ophideridae
<i>Othreis</i> [Eudicma], <i>Argadesa</i> [Eudicma], <i>Maenas</i> [Eudicma], <i>Rhytia</i> [Eudicma], <i>Adris</i> [Eudicma]
Phyllodidae
<i>Phyllodes</i> , <i>Ischyja</i> , <i>Agonista</i> [Lygniodes]
Erebidae
<i>Oxyodes</i>
Ommatophoridae
<i>Speiredonia</i> , <i>Sericia</i> [Speiredonia], <i>Patula</i> [Erebus], <i>Argiva</i> [Erebus], <i>Nyctipao</i> [Erebus]
Hypopyridae
<i>Spirama</i> , <i>Hypopyra</i> , <i>Cyclodes</i> , <i>Entomogramma</i> , <i>Taramina</i> [Entomogramma], <i>Ortospana</i>

## Bendidae

*Hulodes*

## Dysgoniidae

*Sphingomorpha*, *Thyas* [*Thyas*, *Ophiusa*], *Minucia* [*Ophiusa*], *Ophiisma* [*Ophiusa*], *Macaldenia* [*Dysgonia*], *Achaea* [*Achaea*, *Chrysopera*], *Serrodus*, *Naxia* [*Dysgonia*], *Delgamma*, *Caranilla* [*Dysgonia*], *Pindara* [*Dysgonia*], *Psimada*, *Anereuthina* [*Aratha*, *Athyrima*], *Ansa* [*Felinia*], *Dysgonia*, *Grammodes*, *Chalciope*, *Fodina* [*Fodina*, *Attatha*], *Calesia*, *Pasipeda* [*Calesia*]

## Tinoliidae

*Tinolius*

## Euclidiidae

*Trigonodes*, *Acontholipes*

## Poaphilidae

*Dierna*, *Arasada* (Acontiinae)

## Remigiidae

*Remigia* [*Mocis*], *Cauninda* [*Mocis*]

## Focillidae

*Zethes* [*Tamba*, *Thermesia* (of Poole 1989), *Hyperlopha*, *Parolulis*], *Egnasia* [*Egnasia*, *Adrapsa*], *Matella* [*Egnasia*], *Nagadeba*, *Daxata*, *Diomea*, *Hingula* [*Rhesala*]

## Thermesiidae

*Platyja*, *Sympis*, *Seneratia* [*Mecodina*], *Hypospila*, *Azazja* [*Anticarsia*], *Sanys* [*Blasticorbinus*], *Sonagara* (Thyrididae), *Dunira*, *Mestleta* [*Autoba*] (Acontiinae), *Lophoruza* (Acontiinae), *Eublemma* (Acontiinae), *Zurobata* (Acontiinae), *Capnodes* [*Attonda*, *Capnodes*, *Saroba*, *Corgatha* (Acontiinae)], *Gesonina* [*Gesonina*, *Daona*]

## Amphigoniidae

*Lacera*, *Amphigonia*

## Platydiidae

*Claterna*, *Episparis*

## Hypenidae

*Corcobara*, *Anoratha* (Hypeninae), *Dichromia* [*Hypena* (Hypeninae)]...

During the comprehensive study of tropical (oriental) material Moore (1884-87) (table 7) and Cotes & Swinhoe (1888) (table 8) oriented themselves on the system of Guenée which seems to have come into general recognition at this time. This is also indicated by the studies of Pagenstecher (1894) (table 9) and Kirby (1897) a few years later. At the time of these publications nobody presumably suspected that they would remain the last studies containing detailed subdivisions of the Catocalinae for almost eight decades. Kirby published in 1897 a well-illustrated survey still using Guenée's system, in which he drew a small number of typical representatives for every genus. He initially separated out the Ophiderinae from the quadrifine noctuids and subdivided them strongly (table 10). Why he failed to continue this concept further in his later study (Kirby 1907) remains unexplained. His reasons are unknown and must be a subject for speculation.

About at the same time in the German-speaking region – then a centre of Palaearctic lepidopterology – there was a struggle over guiding principals with respect to systematic work.

Rebel (1898) pointed out the necessity of phylogentic systematics as the basis for a modern system of the Lepidoptera. In his opinion the selection of the morphological features used was decisive and the forming of relationships based on mere similarities was impossible. He hoped this principle would take precedence over the work of Staudinger during the preparation of their joint catalogue (Staudinger & Rebel 1901).

**Table 8:** Cotes & Swinhoe 1888

Family
Genus
<b>Group Noctues</b>
Palindidae
<i>Homodes</i>
Diopsidae
<i>Anumeta</i>
Eurhipidae
<i>Rhesala</i> , <i>Targalla</i> (Euteliinae), <i>Penicillaria</i> (Euteliinae), <i>Eutelia</i> (Euteliinae), <i>Annga</i> (Euteliinae), <i>Varnia</i> , <i>Baniana</i> , <i>Arcte</i> , <i>Chlumetia</i> (Euteliinae), <i>Chlumetia</i> (Euteliinae)], <i>Metachrostis</i> (Acontiinae)
Eriopidae
<i>Callopietria</i> (Amphipyridae), <i>Perciana</i> (Hypeninae), <i>Phalga</i> (Euteliinae), <i>Cotanda</i> [ <i>Callopietria</i> (Amphipyridae)], <i>Methorasa</i> [ <i>Callopietria</i> (Amphipyridae)], <i>Lugana</i> [ <i>Elusa</i> (Hadeninae)]
Hyblaeidae (eigene Familie)
<i>Hyblaea</i> (Hyblaeidae), <i>Maceda</i> (Chloephorinae)
Gonopteridae
<i>Cosmophila</i> [ <i>Anomis</i> ], <i>Arthisma</i> , <i>Ruscada</i> [ <i>Anomis</i> , <i>Savara</i> , <i>Maurilia</i> (Chloephorinae)], <i>Gonitis</i> [ <i>Anomis</i> ], <i>Coarica</i> , <i>Falana</i> , <i>Thalatta</i> , <i>Ossonoba</i>
Amphipyridae
<i>Amphipyra</i> (Amphipyridae), <i>Tambana</i> [ <i>Trisuloides</i> (Pantheinae)], <i>Perinaenia</i> , <i>Mithila</i> , <i>Blenina</i> (Sarrothripinae), <i>Amrella</i> [ <i>Blenina</i> (Sarrothripinae)], <i>Naenia</i> [ <i>Pareuplexia</i> (Amphipyridae)], <i>Agrotis</i> (Noctuinae), <i>Axiopoena</i> (Arctiidae)
Catocalidae
<i>Catocala</i> [ <i>Catocala</i> , <i>Sarbanissa</i> (Agaristinae)], <i>Ulotrichopus</i>
Hypocalidae
<i>Hypocala</i>
Toxocampidae
<i>Toxocampa</i> [ <i>Lygephila</i> , <i>Rema</i> , <i>Azeta</i> , <i>Pantydia</i> , <i>Plecoptera</i> ], <i>Apopestes</i>
Poaphilidae
<i>Poaphila</i> [ <i>Poaphila</i> , <i>Argyrostratis</i> ], <i>Iluzza</i> [ <i>Iluzza</i> , <i>Talapoptera</i> , <i>Hypospila</i> , <i>Ugia</i> ], <i>Borsippa</i> [ <i>Bocula</i> ], <i>Nasaya</i> [ <i>Marcellada</i> ], <i>Dierna</i> , <i>Phurys</i> [ <i>Loxioda</i> ], <i>Tochara</i> [ <i>Hypospila</i> ], <i>Arasada</i> (Acontiinae)
Xylinidae
<i>Phorica</i> , <i>Lithophane</i> [ <i>Tatbotripa</i> (Sarrothripinae)], <i>Xylina</i> (Cucullinae)], <i>Xylina</i> [ <i>Oglasa</i> ], <i>Lyncestis</i> [ <i>Melipotis</i> ], <i>Epimecia</i> [ <i>Rhynchodontodes</i> (Hypeninae)], <i>Corymbia</i> (Notodontidae), <i>Cucullia</i> (Cucullinae), <i>Jarasana</i> [ <i>Melipotis</i> ]
Catephidae
<i>Briarda</i> [ <i>Felinia</i> , <i>Lineopalpa</i> ], <i>Arcte</i> , <i>Catephia</i> [ <i>Nagia</i> ], <i>Hypospila</i> , <i>Aucha</i> , <i>Mosara</i> , <i>Anophia</i> [ <i>Aedia</i> , <i>Catephia</i> , <i>Dasygaster</i> (Hadeninae)], <i>Zarina</i> [ <i>Catephia</i> ], <i>Vapara</i> [ <i>Pandesma</i> , <i>Xylostola</i> (Amphipyridae)], <i>Stictoptera</i> [ <i>Stictoptera</i> (Stictopterinae)], <i>Hypotrissula</i> , <i>Lophoptera</i> (Stictopterinae), <i>Laphygma</i> , <i>Erygia</i> , <i>Odontodes</i> (Stictopterinae), <i>Sadarsa</i> [ <i>Lophoptera</i> (Stictopterinae)], <i>Gyrtona</i> (Stictopterinae), <i>Lophoptera</i> (Stictopterinae), <i>Aegilia</i> (Stictopterinae), <i>Brana</i> , <i>Athyra</i> [ <i>Tephriopsis</i> , <i>Anoba</i> ]
Hypogrammidae
<i>Callyna</i> (Amphipyridae), <i>Dinumma</i> , <i>Burdria</i> [ <i>Odontodes</i> (Stictopterinae)], <i>Corsa</i> , <i>Hypogramma</i> [ <i>Poeta</i> , <i>Pericyma</i> ], <i>Gaditba</i> [ <i>Plotheia</i> (Sarrothripinae)], <i>Iscladia</i> (Sarrothripinae)], <i>Plotheia</i> (Sarrothripinae), <i>Moepa</i> [ <i>Pericyma</i> ], <i>Selepa</i> (Sarrothripinae), <i>Symitha</i> [ <i>Nycteola</i> (Sarrothripinae)], <i>Giaura</i> (Sarrothripinae)], <i>Clettbara</i> [ <i>Nanaguna</i> (Sarrothripinae)]
Polydesmidae
<i>Bamra</i> , <i>Oromena</i> [ <i>Ortopla</i> ], <i>Donda</i> , <i>Pandesma</i> [ <i>Pandesma</i> , <i>Clytie</i> , <i>Belciana</i> ], <i>Polydesma</i> , <i>Thria</i> [ <i>Drasteria</i> ]
Homopteridae
<i>Alamis</i> [ <i>Pericyma</i> ], <i>Caduca</i> , <i>Homoptera</i> [ <i>Caduca</i> , <i>Pericyma</i> , <i>Artigisa</i> , <i>Zale</i> , <i>Homoptera</i> , <i>Heteropalpia</i> , <i>Gnamptonyx</i> ], <i>Panilla</i> , <i>Girpa</i> [ <i>Ericeia</i> ]

## Ophideridae

*Argadesa* [*Eudocima*], *Othreis* [*Eudocima*], *Maenas* [*Eudocima*], *Rhytia* [*Eudocima*], *Khadira* [*Eudocima*], *Adris* [*Eudocima*], *Purbia* [*Eudocima*], *Phyllodes* [*Phyllodes*, *Gloriana*], *Ischyja*, *Lygniodes*

## Erebiidae

*Oxyodes*, *Sypna* [*Sypna*, *Daddala*, *Hypersynpoides*, *Synpoides*], *Anisoneur*

## Ommatophoridae

*Patula* [*Erebus*], *Argiva* [*Erebus*], *Nyctipao* [*Erebus*, *Cyligramma*] *Ommatophora*, *Entomogramma*, *Homaea*, *Speiredonia*, *Sericia* [*Speiredonia*]

## Hypopyridae

*Spiramia* [*Spirama*], *Hypopyra*, *Cyclodes*, *Ortospana*

## Bendidae

*Hulodes*, *Hamodes*

## Ophiussidae

*Melipotes* [*Ercheia*], *Sphingomorpha*, *Iontha*, *Thyas* [*Ophiussa*, *Artena*, *Thyas*], *Ansa* [*Felinia*], *Minucia* [*Ophiussa*, *Serrodus*, *Celiptera*], *Ophiussa* [*Hamodes*, *Ophiussa*, *Artena*, *Ophiussa*, *Dysgonia*], *Platyja*, *Pindara* [*Dysgonia*, *Achaea*, *Psimada*, *Serrodus*, *Naxia* [*Dysgonia*], *Delgamma*, *Caranilla* [*Dysgonia*], *Pasipeda* [*Calesia*], *Macaldenia* [*Dysgonia*], *Calesia*, *Hypaetra* [*Aneruthina*, *Avatha*], *Aneruthina* [*Athyra*, *Avatha*, *Megacephalomania*], *Dordura*, *Ophiussa* [*Dysgonia*], *Grammodes* [*Grammodes*, *Pseudozarba*, *Chalciope*], *Fodina* [*Attatha*, *Fodina*], *Artena*

## Euclididae

*Trigonodes*, *Euclidia*, *Acantholipes* [*Acantholipes*, *Eublemma* (Acontiinae)]

## Remigidae

*Canninda* [*Mocis*], *Remigia* [*Mocis*], *Felinia*

## Group Pseudo-Deltoides

## Focillidae

*Hingula* [*Rhesala*, *Diascia*, *Raparna*], *Zetbes* [*Hyposemansis*, *Hyperlopha*, *Tamba*, *Zetbeside*, *Pangraptia*], *Thyridospila* [*Egnasia*, *Thyrostipa*], *Saraca* [*Pangraptia*], *Harmatelia* [*Ithmabarela*, *Catada*], *Rhaesena* [*Radara*], *Cultripalpa*, *Egnasia* [*Egnasia*, *Eutrogia*, *Aroana*, *Mecodina*, *Tamba*], *Matella* [*Egnasia*], *Moscha* [*Hyperthrocta*], *Daxata* [*Tadaxa*, *Raparna*], *Acharya* [*Acharya*, *Leptotroga*], *Nagadeba*, *Diomea*

## Amphigonidae

*Lacera*, *Amphigonia* [*Amphigonia*, *Lopharthrum*]

## Thermesiidae

*Platyja*, *Sympis* [*Sympis*, *Mecodina*], *Sanyis* [*Condate*, *Marapana*, *Blasticorhinus*], *Thermesia* [*Condate*, *Hypospila*, *Adrapsa*, *Maxera*, *Heterospila*], *Senertia* [*Mecodina*], *Dunira*, *Capnodes* [*Saroba*, *Corgatha* (Acontiinae), *Attonda*, *Sarobides*], *Durdara* (Thyrididae), *Raparna*, *Selenis* [*Lophoruzza* (Acontiinae), *Autoba* (Acontiinae), *Zurobata* (Acontiinae)], *Mestleta* [*Eublemma* (Acontiinae), *Autoba* (Acontiinae), *Saroba*, *Eublemmoides* (Acontiinae), *Zurobata* (Acontiinae), *Lophoruzza* (Acontiinae)], *Sonagara* (Thyrididae), *Azazia* [*Anticarsia*], *Marmorinia* [*Pangraptia*, *Hyposemansis*], *Mecodina*, *Singara* [*Lophoruzza* (Acontiinae)] *Fascellina* (Geometridae, Ennominae), *Pleurota*, *Gesonina* [*Gesonina*, *Eustrotia* (Eustrotiinae), *Macna*, *Ugia*, *Saroba*, *Obdora* [*Tamba*], *Tamba*, *Zinna*, *Sarunga*, *Doranaga* [*Negeta* (Chloephorinae), *Pterogonia* (Chloephorinae)]

## Group Deltoides

## Platydididae

*Masca*, *Episparis*, *Claterna*

## Hypenidae (Hypeninae, ...)

Apparently in the end he only succeeded in part, since the system of the preceding catalogue (Staudinger, in Staudinger & Wocke 1871) was retained to a large extent. In this widely distributed catalogue an already out of date system was used in particular for the subfamily Catocalinae and was thus presumably cemented as a standard.

**Table 9:** Pagenstecher 1894 (Java)

Family
Genus
<b>Noctuæ</b>
Gonopteridae
<i>Gonitis</i> [Anomis]
Homopteridae
<i>Alamis</i> [Pericyma]
Catephidae
<i>Stictoptera</i> (Stictopterinae), <i>Athyra</i> , <i>Borsippa</i> [Bocula]
Ophideridae
<i>Ophideres</i> , <i>Phyllodes</i> , <i>Potamophora</i> [Ischyia], <i>Platyja</i>
Erebidae
<i>Sypna</i> , <i>Anisoneura</i>
Ommatophoridae
<i>Pteroclophora</i> , <i>Spiredonia</i> [Speiredonia], <i>Sericia</i> [Speiredonia], <i>Entomogramma</i>
Hypopyridae
<i>Spirama</i> , <i>Hypopyra</i> , <i>Poeciloptera</i> [Hexamitoptera]
Bendidae
<i>Polydesma</i> [Ericeia]
Ophiuridae
<i>Melipotis</i> [Ercheia], <i>Thyas</i> , <i>Ophisma</i> , <i>Dordura</i> , <i>Psimada</i> , <i>Macaldenia</i> [Dysgonia], <i>Naxia</i> [Dysgonia], <i>Ophiura</i> , <i>Iontha</i>
Euclididae
<i>Trigonodes</i>
Remigidae
<i>Remigia</i> [Mocis]
Thermesidae
<i>Capnodes</i> [Tephriopsis]
<b>Pseudodeltoides</b>
Focillidae
<i>Zethes</i> [Tamba, Vestura]
Amphigonidae
<i>Lacera</i>
<b>Deltoides</b>
Platydidæ
<i>Episparis</i>
Hypenidae
<i>Hypena</i> (Hypeninae), <i>Corcobara</i> (Brontypena)
Herminidae
<i>Nodaria</i> (Herminiinae), <i>Bocana</i> [Simplicia (Herminiinae)], <i>Mastigophora</i> [Oxaenanus (Herminiinae)], <i>Avitta</i> , <i>Aethala</i> [Bocana (Herminiinae)], <i>Bleptina</i> (Herminiinae), <i>Egnasia</i> , <i>Rivula</i> (Rivulinae), <i>Simplicia</i> (Herminiinae), <i>Epixenxis</i> [Foveades (Herminiinae)], <i>Sitophora</i> [Amilaga (Herminiinae)], <i>Heterogramma</i> (Herminiinae), <i>Helia</i> [Idia (Herminiinae)], <i>Homogramma</i> [Adrapsa (Herminiinae)], <i>Hadennia</i> [Bertula (Herminiinae)], <i>Selenodes</i> [Oruzza (Acontiinae)]

Table 10: Kirby 1897

Tribus
Family
Genus
I. Noctuae Sericiae
Palindidae
<i>Eulepidotis</i>
Dyopsidae
<i>Litoprosopus</i>
II. Noctuae Variegatae
Eriopidae
<i>Callopietria</i> (Amphipyridae)
Eurhipidae
<i>Eutelia</i> (Euteliinae), <i>Varnia</i>
Plusiidae
<i>Abrostola</i> (Plusiinae), <i>Plusia</i> [Diachrysia (Plusiinae), <i>Syngrapha</i> (Plusiinae)]
Calpidae
<i>Gonodonta</i>
Hemiceridae
<i>Hemiceras</i> (Notodontidae)
Hyblaeidae
<i>Hyblaea</i> (Hyblaeidae)
Gonopteridae
<i>Scoliopteryx</i>
III. Noctuae Intrusae
Amphipyridae
<i>Amphipyra</i> (Amphipyridae)
Toxocampidae
<i>Opbiusa</i> [ <i>Lygephila</i> ]
Stilbidae
<i>Stilbia</i> (Amphipyridae)
IV. Noctuae Extensae
Polydesmidae
<i>Pantylia</i>
Homopteridae
<i>Nepbelina</i> [ <i>Zale</i> ]
Hypogrammidae
<i>Anthocitta</i> [ <i>Hypogrammodes</i> ]
V. Noctuae Limbatae
Catephidae
<i>Aedia</i> [ <i>Catephia</i> ]
Bolinidae
Syneda [Drasteria]
Hypocalidae
<i>Hypocala</i>
Catocalidae
<i>Catocala</i>
VI. Noctuae Patulae
Erebidae
<i>Peosina</i> , <i>Letis</i> , <i>Thysania</i> , <i>Erebus</i>
Ommatophoridae
<i>Crisbna</i> [ <i>Erebus</i> ], <i>Nyctipao</i> [ <i>Erebus</i> ], <i>Cylogramma</i>
Hypopyridae
<i>Spiramia</i> [ <i>Spirama</i> ]
Bendidae
<i>Hulodes</i>

- VII. Noctuae Serpentinae  
 Ophideridae  
 Subfam. Ophiderinae  
*Othreis* [*Eudocima*], *Argadesa* [*Eudocima*], *Graphigona*  
 Subfam. Phyllodinae  
*Miniodes*, *Gloriana*, *Phyllodes*  
 Lagopteridae  
*Lagoptera* [*Thyas*] *Nantesia* [*Minucia*]  
 Euclidiidae  
*Euclidia* [*Callistegē*]  
 Poaphilidae  
*Phytometra*  
 Remigidae  
*Remigia* [*Mocis*]
- VIII. Noctuae Pseudo-Deltoidae  
 Focillidae  
*Zethes*, *Focilla* [*Euclitistis*]  
 Thermesiidae  
*Capnodes* [*Saroba*]
- IX. Noctuae Deltoides  
 Platydiidae  
*Euclystis* [*Macrodes*]  
 Hypenidae  
*Calymna* [*Hypena* (Hypeninae)], *Hypena*  
 Herminiidae  
*Mastigophorus* (Herminiinae)  
 Aventidae  
*Laspeyria*  
 Boletobiidae  
*Parascotia*  
 Brephidae  
*Brepbos* [*Archiearis*], (Geometridae, Archiearinae)

Table 11: Richards (1933)

- Group 1:** *Pangrapta-Isogona* series: (*Sylectra*, *Gabara*, *Isogona*, *Metalectra*, *Pangrapta*, *Diallagma*, *Egryllon*)  
*Herminodes-Gabara-Scoleocampa* series: (*Herminodes*, *Gabara*, *Scoleocampa*, *Pseudorgyria*, *Phiprosopus*)
- Group 2:** (*Strenoloma*, *Hypsorophora*, *Alabama*, *Anomis*, *Antiblemma*, *Anticarsia*, *Calpe*, *Capnodes*, *Plusiodonta*, *Rhespecta*)
- Group 3:** *Melipotis-Syneda* series: (*Bolina*, *Cirrhobolina*, *Cissusa*, *Drasteria*, *Hypocala*, *Litocala*, *Melipotis*, *Panula*, *Phoberia*, *Syneda*, *Ulosyneda*, europ. *Leucanitis* (wie *Syneda*))
- Group 4:** (*Eulepidotes*, *Massala*, *Toxocampa*, *Bendis*, *Coenipeta*, *Coxcina*, *Epepsia*, *Epidromia*, *Eubolina*, *Euparthenos*, *Heteranassa*, *Kakopoda*, *Matigramma*, *Panapoda*, *Safia*, *Selenis*, *Siavana*, *Yrias* [*Metria*], *Zale*, *Zaleops*)
- Group 5:** (*Catocala*, *Erebos*, *Focillidia*, *Latebraria*, *Ophideres*, *Peosina*, *Thysania*, *Tyrisa*, (*Gonodonta*, *Litoprosopus*, *Noropsis*, *Scoliopteryx*))
- Group 6:** (*Argyrostratis*, *Caenurgia*, *Celiptera*, *Cutina*, *Doryodes*, *Euclidia*, *Euclidimera*, *Pelamia*, *Phurys*)

A fundamentally modified system of the Noctuidae based on a world-wide survey was established by Hampson around the turn of the century. His views became highly influential on subsequent generations of systematic workers and his influence is still felt strongly today. During the preparation of his fauna of British India (Hampson 1894, 1895) his system of the Noctuidae was not yet fully developed. He still accepted the subfamilies Gonopterinae, Palindiinae, Quadrifinae, Focillinae and Deltoidinae. For taxonomic characters he used features like length of the abdomen and the form of the labial palpis (Hampson 1894: 161). As a result the majority of the present



Catocalinae-species remained in the great block of the quadrifine noctuids. He missed a great opportunity to refine the previous systems during his preparation of the catalogue. He put properly separated taxa – for example the Calpidae – back into the Quadrifinae. Since Hampson was regarded as an authority and a special expert on the Lepidoptera these simplifications, although already understood to be steps backward, were generally accepted. Leech (1900) basically followed Hampson and still distinguished only the Quadrifinae and Focillinae.

In his studies of the fauna of Africa Hampson (1902) evolved his system and separated the present Catocalinae into two subfamilies. The first subfamily – the Catocalinae *sensu stricto* – he first designated as Homopterinae (*Nyctipao*, *Homoptera*, *Audea* ... *Ophiusa*), then later (Hampson 1910) as Catocalinae (*Cyligramma*, *Calliodes*, *Ophiusa*, *Ctenusa*, *Grammodes*, *Attatba*, *Remigia*). He arranged the “remains” into the group of his so-called Noctuinae (= Ophiderinae). He characterised his subfamily Catocalinae by a fully-developed vein 5 (M2) in the hindwing which originates from the proximity of the lower discoidal cell and the spined tibia. He consolidated this view for the Catocalinae in his subsequent world-wide account of the Catocalinae (Hampson 1913). He separated the Noctuinae (= Ophiderinae) by the main distinguishing character “without spined middle tibia” from the Catocalinae “with spined middle tibiae”. Prout (1921) and Richards (1933) later showed that this feature leads to an artificial group and cannot be employed. Prout considered allied genera, for example *Cocytodes*/*Arcte* or *Achaea*/*Mimophisma*, as closely related on the basis of several features, although according to the “spined tibia” character of Hampson they would have had to use the different subfamilies of Catocalinae and/or Noctuinae (= Ophiderinae).

The output of Hampson with respect to the systematics of the Noctuidae is surely undisputed, but for the Catocalinae Hampson cannot be regarded as the precursor of the subject (Kitching 1984). Rather he welded together two monolithic, probably polyphyletic groups or ‘grades’; heterogeneous groups whose separation soon proved to be untenable. His methods have been of great advantages for identification, however the main groups he created are not natural ones.

In spite of some criticisms of the features employed for Hampson’s groupings – for instance by Forbes (1914) who criticised the presence/absence of vein M2 in the hindwing since intermediate forms exist with an already reduced M2 or by Prout (1921), Gaede (1938) and Draudt (1939) who stated “delimitation of the Catocalinae is unsure, [and the] feature of spined middle tibia insignificant” – his divisions were largely followed (Dyar 1902, 1914, Meyrick 1912, Janse 1917, Mosher 1916, Turner 1920, Barnes & Benjamin 1923, Lhomme 1923-35, Bang-Haas 1926). They were particularly carried on in the famous publication of Seitz (Warren 1913, Gaede 1936, 1938, Draudt 1935, 1939, Draudt & Gaede 1944).

This division is mostly employed even now in summarised systematic or faunistic works (McDunnough 1938, Zimmerman 1958, Common 1968, Pinhey 1975, Leraut 1980, 1997, Inoue & al. 1982, Franclement & Todd in Hodges 1983, Poole 1989, Hacker 1990, 1999, etc.). Here allied groups are often separated by means of the feature “tibiae with or without spines” and thus put into either the Catocalinae or Ophiderinae.

Berio (1960, 1992), Kitching (1984), Speidel & al. (1996a), Kitching & Rawlins (1999), and Yela & Kitching (1999) explicitly showed that this procedure does not form any sort of suitable basis for the formulation of phylogenetic systematic hypotheses for the Catocalinae. Some authors reject completely this insupportable division and take all groups together as the Catocalinae (Hodges & al. 1983, Common 1990, Sugi 1992, Kobes 1985, Kononenko 1990). Kitching & Rawlins (1999) also provisionally reject any subdivision of the polyphyletic Catocalinae since the delimitation, composition

and monophyly of most of their constituent groups is uncertain. They removed only the Calpinae (= Ophiderinae *sensu stricto* of other authors) from which they recognised the tribes Calpini, Gonopterini and Anomiini. Yela & Kitching (1999) regarded the Gonopterinae (= Anomiinae) as a further independent subfamily.

The widespread use of Hampson's classification hinders the development of a consistently phylogenetic system. A main reason for holding on to the old system is the complexity within the highly diverse Catocalinae, such that every attempt to resolve the systematics of this subfamily on a phylogenetic basis appears hopeless.

### The new way

In spite of this dilemma there were repeated attempts to achieve progress in the systematics of the Catocalinae through the investigation of different features (in so far as the quadrifine noctuids were included).

The inclusion of the tympanal-organs (Forbes 1916, Eggers 1919, 1925, Richards 1933) or larval features (Gardner 1947, Forbes 1954, Crumb 1956, Beck 1960) brought out different, but sometimes similar, results through which groups could be constructed. These results depended on the examined material and/or the investigated area.

On the basis of different features, illustrated by Boerner (1939), he later distinguished in his fauna of Germany (Boerner 1944, 1949) again two subfamilies (table 12). Richards' (1933) investigations of the tympanal organ brought out 6 groups in the "Erebinae - Catocalinae complex" (table 11). Forbes (1954) also supported the need for a new model and determined a systematic division of the Catocalinae (table 13).

As a result of this development the 150 year old ideas about the systematics of the Catocalinae were picked up again and pushed into a promising direction. One can already speak of a Renaissance when Berio (1960, 1965) published a list of phylogenetic units within the Catocalinae. This important step inspired other researchers. Wiltshire (1976) supported these opinions and he separated several tribes in a consistent continuation of this idea and designated them unfortunately only in part according to the rules of the ICZN. Kitching (1984) picked up this approach to the problem and proposed as an initial solution a first step of forming uniform (= monophyletic) genus-groups (= tribes) within the Catocalinae (incl. Ophiderinae) and a second step of examining these groups separately and later integrating them into a coherent (= consistent-phylogenetic) system.

**Table 12:** Börner 1944, 1949

Subfamily
Tribus
Genus
Catocalinae
Catocalini
<i>Habrostola</i> , <i>Plusia</i> , <i>Euclidia</i> , <i>Catocala</i> , <i>Catephia</i>
Toxocampini
<i>Toxocampa</i> , <i>Apopestes</i>
Scoliopteryginae
Cocytini [Agaristini (in Börner 1932)]
<i>Grammodes</i> , <i>Pseudophia</i>
Scoliopterygini
<i>Scoliopteryx</i>

**Table 13:** Forbes 1954

Subfamily
Tribus
Genus
<b>Catocalinae</b>
Group I
<i>Catocala, Spiloloma</i>
Group II
<i>Parallela, Argyrostrotis, Allotria, Doryodes</i>
Group III
<i>Caenurgina, Caenurgina, Euclidia, Mocis, Celiptera, Ptichodis</i>
Group IV
<i>Zale, Euparthenos (Eubolina?)</i>
<b>Erebinae</b>
Erebini
<i>Erebus, Thysania, Bendis</i>
Panopodini
<i>Panopoda</i>
Synedini
<i>Phoberia, Cissua, Melipotis, Drasteria</i>
Anomiini
<i>Anomis, Alabama, Anticarsia, Calpe, Plusiodonta, Hypsorpha</i>
Scoliopterygini
<i>Scoliopteryx, Pangrapta, Isogona, Salia, Arngisa, Metalectra, Scoleocampa, Tathorhynchus, Spargaloma, Hemeroplanis, Phytometra, Mycterophora, Melanomma, Oxyella, Rivula (Rivulinae), Hormoschista</i>

**Table 14:** Wiltshire 1990

Tribus
Genus
<b>Audeini</b>
<i>Hypotacha, Audea, Ulotrichopus</i>
<b>Achaeini</b>
<i>Achaea, Prodotis, Caranilla, Dysgonia, Attatba</i>
<b>Remigini</b>
<i>Trigonodes, Mocis</i>
<b>Ophiuini</b>
<i>Trichanua, Ophiura, Chytie</i>
<b>Scodionychini</b>
<i>Scodionyx</i>
<b>Pericymatini</b>
<i>Pericyma, Hetropalpia, Tytroca, Gnamptonyx</i>
<b>Anydrophilini</b>
<i>Anydrophila</i>
<b>Drasteriini</b>
<i>Cerocala, Drasteria</i>
<b>Polydesmini</b>
<i>Polydesma</i>
<b>Lyncestini</b>
<i>Lyncestis</i>
<b>Anumetini</b>
<i>Anumeta</i>

Armadini
<i>Epharmottomena, Iranada, Riadbia, Metopstis, Acrobyla, Asplenia, Armada</i>
Catephini
<i>Melanephia, Catephia</i>
Beihamiini
<i>Beihamia</i>
Crioini
<i>Prionofrontia, Proconis</i>
Ericcini
<i>Ericcia</i>
Sphingomorphini
<i>Sphingomorpha</i>
Pandesmini
<i>Thria</i>
Calesiini
<i>Calesia</i>
Trisulini
<i>Auchenisa, Thiacidia, Pteronycta, Sciatta</i>
Toxocampini
<i>Tatborlyuchus, Autophila</i>
Anobini
<i>Anoba</i>
Brevipectenini
<i>Brevipecten</i>
Acantholipini
<i>Acantholipes</i>
Rivulini
<i>Rivula</i> (Rivulinae)
—
<i>Colobochyla, Maxera, Elygea</i>
Anomiini
<i>Anomis, Deinopalpus, Radara</i>
Calpini
<i>Africalpe</i>
—
<i>Anticarsia, Lacera, Zethesides, Crambiformia</i>
Phytometrini
<i>Phytometra, Antarchaea, Myana, Nimasia</i>

**Table 15:** Berio 1992 (Modell IV)

Subfamily
Tribus
Genus
Catocalinae
Catocalini
<i>Mormonia, Lamprosia, Astiotes, Catocala, Ephesia, Ennetis</i>
Euclidini
<i>Callistege, Euclidia</i>
Mocisini
<i>Caenurgia, Trigonodes, Mocis, Remigia, Remigodiodes, Celiptera, Nymbis, Parachalciope</i>

## Lagopterini

*Lagoptera, Dermaleipa*

## Audeini

*Davea, Audea, Ulotrichopus*

## Ctenusini

*Donuctenusia, Ctenusa*

## Scodionyxini

*Acanthonis, Chelecala, Scodionyx*

## Ophiusiini

*Ophiusa, Clytie, Thyas, Anua, Hypanua, Euminnucia, Trichanua, Perophiusa, Peranua, Subanua*

## Achaeni

*Prodotis, Gondysia, Grammodes, Achaea, Dysgonia, Chalciopse, Ophisma, Caranilla, Macaldenia*

## Ercheini

*Ercheia*

## Tachosini

*Tachosa, Hypotacha, Metatacha*

## Ophiderinae

## Erebini

*Cyligramma, Erebus, Ramphia, Anisoneura, Ascalapha, Syrnia, Letis, Blosyris, Teinoletis, Cyclopis, Feigeria, Ronania*

## Drasterini

*Cerocala, Protomelipotis, Leucanitis (Aleucanitis), Drasteria*

## Ophiderini

*Phyllodes, Miniodes, Miniophyllodes, Lobophyllodes, Endicma, Adris*

## Arcteini

*Cocytodes, Pseudoarcte, Arcte, Paracte*

## Lygephilini

*Eccrita, Lygepbila*

## Polydesmini

*Cortya, Heteropalpia, Pericyma, Moepa, Homaea, Alamis, Dugaria, Matigramma, Beriohansa, Polydesma, Lophotavia, Viattendia*

## Phytometrinae

## Phytometrini

*Phytometra, Antarchaea, Myana, Nimasia*

## Catephini

*Catephia, Aedia, Nagia, Melanepia*

## Anomini

*Anomis, Rusicada, Deinopalpus, Alabama*

## Autophilini

*Autophila, Apopestes, Tathorbynchus*

## Sphingomorphini

*Sphingomorpha*

## Pandesmimi

*Pandesma*

## Thiacidini

*Thiacides, Trisula, Auchemisa, Trisulana, Pteronycta*

## Acantholipini

*Acantholipes*

## Ericeini

*Ericeia*

## Crioini

*Crio, Prionifrontia, Proconis*

## Anumetini

*Anumeta*

## Armadini

*Arnada, Acrobyla, Epharmottomena, Metopistis, Asplenia, Drasteroides, Riadbia, Iranada*

## Brevipectenini

*Brevipecten*

**Table 16:** Beck 1996 (author and year in original spelling of the source)

Subfamily
Genus
Catocalinae Guenée, 1837:
Boletobiini Grote, 1895 ( <i>Parascotia</i> )
Synedini Forbes, 1954 ( <i>Drasteria</i> , <i>Cerocala</i> , <i>Anumeta</i> )
Pangraptini Grote, 1882 ( <i>Zethes</i> )
Exophylini trib. nov. ( <i>Exophyla</i> , <i>Perinaenia</i> )
Achaeini Wiltshire, 1976 ( <i>Dysgonia</i> , <i>Clytie</i> , <i>Prodotis</i> , <i>Grammodes</i> )
Ophiusiini Guenée, 1837 ( <i>Minucia</i> , <i>Ophiusa</i> , <i>Arytrura</i> )
Catocalini Guenée, 1837
Catocalina Guenée, 1837 ( <i>Simplicata</i> gen. nov., <i>Catocala</i> , <i>Hemigeometra</i> , <i>Bihymena</i> gen. nov., <i>Ephesia</i> )
Aventiina (Tutt, 1902) ( <i>Laspeyria</i> )
Catephiina Guenée, 1852 ( <i>Catephia</i> )
Phytometrini Wiltshire, 1990 [= Poaphilini Tutt, 1902] ( <i>Colobochyla</i> , <i>Phytometra</i> )
Toxocampini Guenée, 1852
Euclidiina Guenée, 1852 ( <i>Euclidia</i> , <i>Callistegi</i> , <i>Gonospileia</i> )
Toxocampina Guenée, 1852 ( <i>Rhynchodontodes</i> , <i>Autophila</i> , <i>Cheirophanes</i> , <i>Eccrita</i> , <i>Craccaphila</i> gen. nov., <i>Lygephila</i> , <i>Asctica</i> , <i>Tathorhynchus</i> )
Pandesmini (nach Berio 1992) ( <i>Pandesma</i> )
Acantholipini (nach Berio 1992) ( <i>Acantholipes</i> )
Polydesmini (nach Berio 1992) ( <i>Pericyma</i> )
Scoliopteryginae Spuler, 1908 [recte 1907] (Gonopterinae Herrich-Schäffer, 1845 dito Guenée, 1852) (= Anomiinae Grote, 1882) ( <i>Scoliopteryx</i> )
Ophiderinae Guenée, 1852 ( <i>Calyptra</i> )
Aediinae Beck, 1960 ( <i>Aedia</i> , <i>Anophia</i> )

**Table 17:** Leraut 1997

Subfamily
Genus
Pangaptini [sic]
<i>Zethes</i>
Aventiini
<i>Laspeyria</i>
Calpini
<i>Calyptra</i> , <i>Scoliopteryx</i>
Toxocampini
<i>Tathorhynchus</i> , <i>Apopestes</i> , <i>Autophila</i> , <i>Lygephila</i>
Tytini
<i>Tyta</i>
Polydesmini
<i>Pandesma</i>
Aediini
<i>Aedia</i>
Catephiini
<i>Catephia</i>
Drasteriini
<i>Drasteria</i>

Euclidini
Euclidia, Callistege
Achaeini
<i>Grammodes</i> , <i>Prodotis</i> , <i>Dysgonia</i>
Ophiusiini
<i>Clytie</i> , <i>Ophiusa</i> , <i>Anua</i>
Thysaniini
<i>Ascalapha</i>
Catocalini
<i>Catocala</i>

**Table 18:** Yela 1997

Subfamily
Genus
Catocalini
<i>Catocala</i> , <i>Minucia</i> , <i>Clytie</i> , <i>Ophiusa</i> , <i>Zethes</i> , <i>Dysgonia</i> , <i>Grammodes</i> , <i>Prodotis</i>
Euclidiini
<i>Cerocala</i> , <i>Drasteria</i> , <i>Callistege</i> , <i>Euclidia</i>
Catephiini
<i>Catephia</i>
Tytini
<i>Tyta</i>
Aediini
<i>Aedia</i>
Toxocampini
<i>Lygephila</i> , <i>Tatborhynchus</i> , <i>Apopestes</i> , <i>Autophila</i>
Pandesmini
<i>Pandesma</i>
Aventiini
<i>Laspeyria</i>

Wiltshire (1990) (table 14) and Berio (1992) (table 15) continued this further and arranged the related genera into tribes. Unfortunately Wiltshire neglected, in part, to give a definition and/or description for his new family-group names according to the ICZN which results that these proposed new family group names remain nomenclatorially unavailable. In order to avoid unnecessary confusion, we have judged the family-group names of Berio (1992) as available described by bibliographical reference to his corresponding "Phyla" in his former publications (Berio 1960, 1965) in accordance with article 13.1.2 ICZN. The serious disadvantage of both these studies is, however, that for every newly described tribe no autapomorphy was designated and thus for these no reasonable grounds for their monophyly exist. But the system outlined in Berio seems to be a good basis which can be built upon due to the partly world-wide consideration and because of the use of features which can be interpreted, in part, as apomorphies. Despite the problems, some of Berio's named tribes have begun to be used in faunistic studies (Speidel & Hassler 1989, Yela 1997 table 18, Hacker 1999). On the other hand the further qualification of these models based only on the European species (Beck 1996 table 16, Leraut 1997 table 17) is unqualified and is considered here a step backwards (cf. introduction).

## Perspectives

It is safe to assume that the taxa which are currently united in the Catocalinae (Kitching 1984) are polyphyletic. The adherence to the traditional systematics prevents further progress. Fundamentally necessary is a new way of thinking which rejects the traditional system of the Catocalinae/Ophiderinae in order to exclude “system-constrained” interpretations of results. All available models must be subjected to critical analysis with regard to the features employed. Of course the currently known and employed features are not sufficient to develop a phylogenetic system at the present time. Additional apomorphic features must be sought which can establish supraspecific taxa. New molecular analyses suggest that the Catocalinae can be placed differently within the Noctuoidea (Fang & al. 2000, Mitchell & al. 2000). However, the main species block probably forms a monophyletic unit (Speidel & al. 1996a) and these authors proposed to summarise this block within the tribe Catocalini based on the autapomorphy of “proboscis tip with dorsal sensilla” and the putative autapomorphy of “existence of a corema at the middle tibia” (Barth 1957). The relationships between the individual tribes of the Catocalinae and an answer to the question whether ultimately all tribes (or those except the Catocalini) will be able to remain in this subfamily must to be subject to further investigations.

Investigations which exclusively based themselves on the model of Hampson (1913) and/or the following treatments in Seitz’ encyclopedia (Warren 1913, Gaede 1936-1937, Gaede 1938, Draudt 1935, 1939) or else consider only species for phylogenetic analysis already regarded as closely-related are unsuitable for making progress; as are those considering only the species from a specific area like, for example, Beck (1996). Furthermore it has proven necessary that systematic revisions of the respective group as a first step are necessary in order to exclude the use of synonyms in the phylogenetic analysis.

Furthermore, comparative morphological studies of all taxa of the Catocalinae are necessary. In particular the highly diverse fauna of the tropical and subtropical regions must be included into these investigations. This extensive work can be achieved only by several scientists.

An „atomization“ into countless further tribes should be avoided completely, so long as the degree of affinity of the existing tribes and their possible synonymy remain undetermined. Monophyla characterised by autapomorphies should not be designated until intense investigation has been carried out, in order to avoid nomenclatural confusion in the long run (cf. Speidel & Hassler 1989).

## Catocalinae/Erebinae - Ophiderinae/Othreinae/Noctuinae?

The diverse designations in the past for the same major group - whose monophyletic status has yet to be established - creates confusion. Most widely used is the name Catocalinae (Catocalidi Boisduval, 1829). Therefore we retain this name here as a *nomen protectum*. In fact the name Erebinae (Erebidae Leach, 1815) would have priority, but we choose the name Catocalinae as the designated one in accordance with article 23.9.1. of the ICZN to keep the stability (reversal of precedence), since, firstly, no author used Erebinae in priority as name for the family group instead of Catocalinae since 1899 and, second, the younger synonym is in general use. A distinction between Catocalini and Erebi (Nye 1975: 11, Forbes 1954: 356) also appears unnecessary since both groups agree closely in the structure of the proboscis.

For the Ophiderinae - which were formerly separated from the Catocalinae because of their lack of spines on the middle tibia- three names are available: Ophiderinae



(Ophideridae Guenée, 1852), Othreinae Berio, 1955 and Noctuinae (sensu Hampson 1910). The name Ophiderinae unambiguously has priority here and is also in general use. However, in the famous work of Seitz (Draudt 1935, Draudt & Gaede 1944) the name Noctuinae is generally employed for this group. Berio and Fletcher (1958) proposed Othreinae (Ophiderinae = Noctuinae). This was based on their former opinion for the validity of the generic terms (cf. systematics section). Wiltshire (1971) also still used the name Othreinae.

The use of the name Noctuinae for this group is based on Hampson. He derived the family group names from the oldest generic name in the respective group. The type species of the genera were always the ones which were listed first in the original description of the author (Hampson 1918). For instance Linnaeus (1758) first listed the species *strix* within the genus *Noctua*, such that Hampson (1918: 384) understood this as the type species of *Noctua* and consequently of the Noctuinae. The description of the *Phalaena strix* by Linnaeus is based, however, on a mixture of two big moths: a south-American Noctuidae (*Thysania agrippina* Cramer, 1776) and a south-east Asian Cossidae (*Xyleutes strix* Linnaeus, 1758) (Fletcher & Nye 1982: 170). Apparently Hampson interpreted Linné's description in the sense of the Noctuidae, not in the sense of the Cossidae as became later generally accepted. This procedure of Hampson's stands in contrast to present (and previous?) valid rules of nomenclature. The type species of *Noctua* is *pronuba* (official list of the generic names in zoology: name 1057). Therefore the name is employed correctly for the Agrotinae in the sense of Hampson, but this case is not considered here.

## Systematics

In the following section all names of the family-group of the Catocalinae in a wider sense are listed and their taxonomic status is indicated. Names were taken into consideration in the list even if at least one author put them into the Catocalinae, although they undoubtedly represent independent subfamilies. This is valid for example for the Stictopterinae and Eutelinae which are included within the Catocalinae in some older studies.

The main aim is to produce a sound basis for future investigations of the Catocalinae and for the determination of monophyletic groups. It was not possible to check all already existing names of the family group for their systematic status here. This would require an underlying, well-founded hypothesis as to the phylogeny of the entire subfamily and their environment. Only when this hypothesis has been developed can the higher systematics be corrected. There are likely to be different concurrent models in which the supraspecific taxa will be not different in their components but the rank of these supraspecific taxa can be quite different and can only be determined due to historical continuity.

In accordance with article 11.7. ICZN the name of a family group is formed based on the stem word of an available genus name. Article 29. ICZN regulates the determination of the stem word of the type genus and the use of suffixes. In the following list the correct spelling of the stem word stands at the beginning of line. Wrong or invalid spelling is indicated afterwards as "initial/original spelling". The priority status designating suffix of the respective author is separated from the stem word of the family group name by square brackets. An incorrect appendix of the suffix onto the stem word (e.g. i/ii) is corrected without comment. The name giving type genus of the family group stands afterwards in square brackets.

The ending employed by the authors corresponds to their respective opinion as to the rank within the family group and is in accordance with article 29.2. with respect to the stem word. In this respect the different opinions of several authors to the rank of a taxa are reflected in the different endings. Taxa that are considered to be used in the same sense, but with another rank, are listed with a prefixed equals symbol (=) and the reference in which the another rank is assigned to the taxa is quoted with one prefixed “in “. Inspected references in which the taxa was employed in the same rank are stated in round brackets and – where necessary – explanatory remarks are added.

Unavailable names (for example nomina nuda, homonyms) are characterised with a prefixed asterisk (\*). Nomenclatorial changes carried out in this work are expressed in bold type.

According to the ICZN (1999: 111) a nomen nudum is a name “that if published before 1931, fails to conform to Article 12; or, if published after 1930, fails to conform to Article 13.” All new descriptions which were published after 1930 must satisfy the provisions of Article 13 of the ICZN and must be accompanied by a description or a definition in words or a bibliographic reference to such a published statement, or they must be proposed as a new replacement name for an available name. Designations assigned before 1930 are not subject to these orders. Here it satisfies in the case of the family group names that the formation of a family-group name is from an available generic name (indication). In accordance with article 11.7.1.1. of the ICZN the use of the stem is meant, then the author used the generic name as valid unless there is evidence to the contrary. These designations are valid without further description. All these orders are valid also for family group names, which some authors unfortunately did not consider (for example Wiltshire). Important for family group names is the fact that in accordance with article 50 a nomen nudum can be made available by a corresponding nomenclatorial action (for example a definition). In such cases, however, this active person is regarded then as the author with the date of his publication.

Furthermore it should be noted that Berio (1992) and Wiltshire (1976, 1990) apparently simply name family groups without giving descriptions, but definitions were given in part, however, in the former publications of Berio (Berio 1960, 1965). We evaluate these cases as a correct nomenclatorial action (description by reference to a source) and consider the names as valid; the reference is referred to correspondingly.

\**Acantholip[ini]* Wiltshire, 1990: 228 [*Acantholipes* Lederer, 1857], **nomen nudum** according to article 13.1. ICZN, (Berio 1992, Beck 1996, Hacker 1999)

*Achae[ini]* Wiltshire, 1976: 160 [*Achaea* Hübner, [1823]], definition of the „Phylum di Achaea“ in Berio 1960: 321, synonym of Catocalini (Speidel, Fänger & Naumann 1997), (Speidel & Hassler 1989, Berio 1992, Beck 1996, Leraut 1997, Hacker 1999)

*Aedi[inae]* Beck, 1960: 343 [*Aedia* Hübner [1823]], independent subfamily (Beck 1960, 1996, Speidel & al 1996a, Leraut 1997). The genus *Catephia* (see below) which is habitually similar is not closely allied according to Beck (1996).

\**Aglenidae* Herrich-Schäffer, [1851] 1845: 435 **nomen nudum**. The name is not available according to article 13.2 (11.7.1) ICZN, as it is not formed from an available genus-group name.

*Amphigon[i]dae* Guenée, 1852b: 336 [*Amphigonia* Guenée, 1852], (Walker 1858, Cotes & Swinhoe 1888, Pagenstecher 1894, Moore 1884-87)

\**Anob[ini]* Wiltshire, 1990: 228 [*Anoba* Walker, 1858] **nomen nudum** according to article 13.1. ICZN, (Hacker 1999)

- Anomif[ini] Grote, 1882a: 33 [*Anomis* Hübner, [1821] 1816], (Grote 1890b, Forbes 1954, Wiltshire 1990, Berio 1992, Hacker 1999, Kitching & Rawlins 1999, Holloway & al. 2001)
- \*Anthophil[idae] Duponchel, 1844: 184 [*Anthophila* Ochseneimer, 1816]. The genus is a **homonym** of *Anthophila* Haworth, 1811 (Lep., Glyphipterygidae) (cf. Nye 1975). Therefore the family-group name is invalid according to article 39 ICZN. The species listed in the original description are presently placed in the genus *Eublemma* Hübner, [1821], = Anthophilidae in Guenée 1852a, = Anthophilinae in Tutt 1896
- Anu[ini] Wiltshire, 1976: 160 [*Anua* Walker, 1858], synonym of Ophiusi[ini] according to Speidel & Hassler (1989), (Leraut 1997), definition of the „Phylum di Anua“ in Berio 1960: 315
- Anumet[ini] Wiltshire, 1976: 161 [*Anumeta* Walker, 1858], **stat. rev.**, previously treated as synonym of Synedini by Speidel & Hassler 1989, (Berio 1992)
- Anydrophil[ini] Wiltshire, 1976: 161, [*Anydrophila* John, 1909], (Wiltshire 1990, Hacker 1999, Speidel & Naumann 1995)
- Apopest[ini] Beck, 1996: 15 [*Apopestes* Hübner, [1823]. The systematic position of this tribe is unclear, it is erroneously placed in the Cucullinae by Beck (1996), whereas it is regarded as synonym of Toxocampini by Leraut (1997)
- Arcte[ini] Berio, 1992: 294, 298, 301 [*Arcte* Kollar, 1844], definition of the „Phylum di Arcte“ in Berio 1960: 308 and Berio 1965
- Armada[ini] Wiltshire, 1961: 626 [*Armada* Staudinger, 1884], (Wiltshire 1976, 1979, Berio 1992, Hacker 1999)
- \*Ascalaph[ini] Grote, 1895: 421 [*Ascalapha* Hübner, [1809]]. **Homonym** of Ascalaphidae Lefebvre, 1842 (as Ascalaphides) (Neuroptera, Owlflies) which is based on the genus *Ascalaphus* Fabricius, 1775. The homonymy is first recorded here, however no replacement name is proposed, as the group probably belongs to the Catocalini., = Ascalaphini in Leraut 1997
- Aude[ini] Wiltshire, 1990: 202 [*Andea* Walker, [1858] 1857], definition of the „Phylum di Audea“ in Berio 1960: 309, (Berio 1992, Hacker 1999)
- \*Autophil[ini] Berio, 1992: 295 (as Antophilini), 298 (as Autophilinae), 302 (as Antophilini), [*Autophila* Hübner, [1823] 1816]. **nomen nudum** according to article 13.1 ICZN. The name would anyway be nothing but a synonym of Toxocampini.
- Aventi[idae] Tutt, 1896: 226 [*Aventia* Duponchel, 1829, synonym of *Laspeyria* Germar, 1811], in the meaning of the group around *Laspeyria flexula* [Denis & Schiffermüller 1775], = Aventidae in Kirby 1897, = Aveniina in Beck 1996, = Aveniini in Leraut 1997
- \*Beihani[ini] Wiltshire, 1990: 223 [*Beibania* Wiltshire 1967], **nomen nudum** according to article 13.1 ICZN. The genus possibly belongs to the generic group *Anumeta*, *Drasteria*, *Cerocala*, *Eremonon*. (Hacker 1999)
- Bendi[dae] Guenée, 1852b: 206 [*Bendis* Hübner [1823] 1816], (original spelling: Bendidae, and again, page 211, as 2nd subfamily Bendides s. str. (cf. Hulodides)), (Walker 1858), = Bendidae in Pagenstecher 1894
- Boletobi[idae] Guenée, [1858] 1857: 328 [*Boletobia* Boisduval, 1840, synonym of *Parascotia* Hübner, [1825]], = Boletobiini in Grote 1895, = Boletobiidae in Kirby 1897, = Boletobiini in Beck 1996, Leraut (1997) erroneously placed the European species in the Rivulinae.
- \*Bolin[idae] Guenée 1852: 57, [*Bolina* Duponchel, [1845]. The genus is a homonym of *Bolina* Rafinesque, 1815 (Mollusca) according to article 53.2 (cf. Nye 1975). Therefore, the family-group name is invalid according to article 39 ICZN. (Walker 1858, Kirby 1897)
- \*Brevipecten[ini] Wiltshire, 1990: 228 [*Brevipecten* Hampson, 1894], **nomen nudum** according to article 13.1 ICZN, (Berio 1992, Hacker 1999)
- Broti[inae] Grote, 1882: 42 [*Broti* Hübner, [1821] 1816, synonym of *Euxoa* Hübner, [1821] (Noctuidae)] replaced by Euxoinae by Warren, 1909
- \*Calesi[ini] Wiltshire, 1990: 224 [*Calesia* Guenée, 1852], **nomen nudum** according to article 13.1 ICZN, (Hacker 1999)
- Calp[idi] Guenée, 1841: 247 [*Calpe* Treitschke, 1825, synonym of *Calypta* Ochseneimer, 1816], = Calpidae in Guenée 1852, Walker 1858, Moore 1884-7, Kirby 1897; = Calpinae in Grote 1882, Kitching & Rawlins 1999, Holloway & al. 2001, = Calpini in Grote 1890a, 1890b, Wiltshire 1990, Leraut 1997, Hacker 1999; = Calpides in Herrich-Schäffer [1851] 1845, Duponchel 1844

- Catephi[i]dae] Guenée 1852b: 40 [*Catephia* Ochsenheimer, 1816], (Walker 1858, Butler 1878, Cotes & Swinhoe 1888, Moore 1884-7, Pagenstecher 1894, Kirby 1897); = Catephiina in Beck 1996, = Catephiini in Leraut 1997, Wiltshire 1990; = Catephini in Berio 1992, Hacker 1999
- Catocal[i]di] Boisduval, 1829: 97 [*Catocala* Schrank, 1802], = Catocalidae in Guenée 1852, Walker 1858, Cotes & Swinhoe 1888, Moore 1884-7, Tutt 1896, Kirby 1897, = Catocalides in Boisduval 1833, Duponchel 1844, Meyerick 1912, = Catocalina in Beck 1996, = Catocalinae in Grote 1882, 1890a, 1895, Tutt 1896, Swinhoe 1899, Mosher 1916, Lhomme 1923-35, Prout 1928, Börner 1932, 1944, 1949, Wiltshire 1990, Berio 1992, Beck 1996, Holloway & al. 2001, = Catocalini Grote 1890a, 1895, Börner 1932, 1944, 1949, Berio 1992, Beck 1996, Leraut 1997), = Erebi[i]dae] Leach, 1815. According to article 23.9.1 ICZN, we propose to give Catocalinae Boisduval, 1829 precedence over Erebiinae Leach, 1815 in the case that these taxa are regarded as synonymous in order to maintain stability.
- Cocyt[i]dae] Boisduval, 1874: 46 (original spelling: Cocytides), [*Cocytia* Boisduval, 1828], synonym of Catocalini (Speidel, Fänger & Naumann 1997) = Cocytini in Börner 1944, 1949 = Cocytiidae in Kiriakoff 1951, 1956, = Cocytiinae in Holloway & al. 2001
- \*Crio[i]ni] Wiltshire, 1990: 223 [*Crioia* Walker, [1858] 1857], **nomen nudum** according to article 13.1 ICZN, (Berio 1992), = Crioni in Hacker 1999
- Ctenus[i]ni] Berio, 1992: 293, 297, 300 [*Ctenusa* Hampson, 1910], definition of „Phylum di Ctenusa“ in Berio 1960: 314
- Dicopi[nae] Grote, 1882: 22 [*Dicopis* Grote, 1874, synonym of *Psaphida* Walker, 1865]. *Psaphida* is usually placed in the Cuculliinae, however transferred in a separate subfamily Psaphidini Grote, 1896b by Poole (1994: 161). Replaced by Psaphidini by Grote, 1896b according to art. 40.2 ICZN. (Grote 1883)
- \*Dipther[inae] [sic] Hampson, 1918: 384 [\**Diphtera* Hübner, [1806]]. The family-group name is based on a genus published in a work rejected for nomenclatural purposes (Hübner [1806]). Therefore, the family-group name Diptherinae Hampson is invalid (ICZN article 39). Hübner included in his genus \**Diphtera* the single species *Noctua aprilina* Linnaeus sensu Hübner, [1803] (= *Phalaena alpium* Osbeck, 1778). Latreille (1818) accepted the wrong secondary spelling *Diphtera* [sic] (instead of *Diphtltera*) and added *Phalaena ludifica* Linnaeus, 1758 (= *Trichosea ludifica* Linnaeus, 1758) as a member of this genus. The latter species, originally not included in the genus, was erroneously accepted as type-species of \**Diphtera* [sic] by Hampson. Therefore, the name can be understood in the sense of the present Pantheinae. \**Diphtera* Hübner, [1806]/\**Diphtera* Latreille, 1818 has nothing to do with the validly described genus *Diphtltera* Hübner, [1809] whose type-species is the catocaline *Diphtltera elegans* Hübner, [1809] by monotypy, = Diptherinae in Prout 1922
- Drasteri[i]ni] Wiltshire, 1976 [1977]: 160 [*Drasteria* Hübner, 1818], synonym of Euclididae Guenée, 1852 (Speidel & Naumann 1995), definition of the „Phylum di Cerocala“ in Berio 1960: 302, (Wiltshire 1990, Leraut 1997), = Drasterini in Berio 1992
- Dyops[i]dae] Guenée, 1852a: 281 [*Dyops* Guenée, 1852], (Walker 1858, Kirby 1897), = Diopsidae [sic] in Cotes & Swinhoe 1888
- Dysgoni[i]dae] Moore, [1885] 1884-7: 156 [*Dysgonia* Hübner, [1823] 1816], Probably this group belongs to the monophylum around *Catocala* and turns out to be a synonym of Catocalini. = Lagopteridae Kirby, 1897 (**syn. nov.**)
- Erchei[i]ni] Berio, 1992: 297, 300 [*Ercheia* Walker, [1858] 1857], definition of the „Phylum di Ercheia“ in Berio 1960: 312
- Ereb[i]dae] Leach, 1815: 134 (original spelling: Erebidia) [*Erebus* Latreille, 1810], here proposed as **nomen oblitum**. The family-group name Catocal[inae] should be given preference over Erebi[inae] according to article 23.9.3 ICZN. The case must be referred to the Commission. Speidel, Fänger & Naumann 1997 similarly treat the name as a forgotten senior synonym of Catocalini, (Guenée 1852, Moore 1884-7, Pagenstecher 1894, Kirby 1897), = Erebiidae in Cotes & Swinhoe 1888, = Erebiinae in Grote 1882, Forbes 1954, = Erebiini in Forbes 1954, Berio 1992
- \*Ericci[i]ni] Wiltshire, 1990: 224 [*Ericcia* Walker, [1858] 1857], **nomen nudum** according to article 13.1. ICZN, (Berio 1992, Hacker 1999)
- Eriop[i]ni] Herrich-Schäffer, [1851] 1845: 379 (ursprüngliche Schreibweise: Eriopodides); [*Eriopus* Treitschke, 1825 synonym of *Callopietria* Hübner, [1821] 1816]. Presently in the subfamily Amphipyriinae. = Eriopidae in Guenée 1852a, Walker 1858, Kirby 1897, Cotes & Swinhoe 1888

- Euclidiidae] Guenée, 1852b: 280 [*Euclidia* Ochsenheimer, 1816], (Walker 1858, Pagenstecher 1894, Moore 1884-7); Speidel & Naumann (1995) substantiate the monophyly of *Drasteria*, *Euclidia* and *Tinolius*. = Euclidiidae in Tutt 1896, Kirby 1897, = Euclidiina in Beck 1996, = Euclidini in Berio 1992, = Euclidiini in Grote 1895, Speidel & Naumann 1995, Leraut 1997, = Tinoliidae Moore, 1884-7 = Drasteriini Wiltshire, 1976 [1977], = Synedini Forbes, 1954, = \*Goniates Duponchel, 1944 (**nomen nudum**)
- Eucocytiidae] Hampson, 1918: 366 [*Eucocyta* Rothschild, 1905], a synonym of Catocalini (Speidel, Fänger & Naumann 1997)
- Eulepidotidae] Grote, 1895: 421 [*Eulepidotis* Hübner, 1823] see Palindidae] Guenée, 1852, = Eulepidotini in Grote 1895
- Eurhipidae] Herrich-Schäffer, [1851] 1845: 380 [*Eurhipia* Boisduval, 1829 a synonym of *Eutelia* Hübner, [1823] 1816], Replaced by Euteliinae by Grote 1882 according to art. 40.2 ICZN (Guenée 1852a, Walker 1858, Cotes & Swinhoe 1888, Kirby, 1897)
- Euteliinae] Grote, 1882: 33 [*Eutelia* Hübner [1823] 1816], an independent subfamily, (Lhomme 1923-35, Prout 1928), = Euteliini in Grote 1890a, 1890b, = Eutelinae in Hampson 1902, 1910, Turner 1920, Seitz 1937, = Eurhipidae Herrich-Schäffer, [1851] 1845, = Phlogophorinae sensu Hampson, 1918
- Exophylini] Beck, 1996: 11 [*Exophyla* Guenée, 1852]
- Focillidae] Guenée, 1852b: 329 [*Focilla* Guenée, 1852, junior synonym of *Euclystis* Hübner, 1823]. Focillidae Guenée, 1852 is valid for the generic group around *Euclystis* according to article 40.1 ICZN, and includes the group around *Pangrapta* and *Zethes*. (Walker 1858, Cotes & Swinhoe 1888, Moore 1884-7, Pagenstecher 1894, Kirby 1897), = Focillinae in Swinhoe 1899, Warren 1913, = Pangraptini] Grote, 1882 (**syn. nov.**)
- \*Goniates Duponchel, 1844: 190 **nomen nudum**. The name is not available according to article 13.2. (11.7.1) ICZN, as it is not formed from an available genus-group name then used as valid. The generic group contains *Euclidia* and can therefore be placed as synonym of Euclidinae], = Goniatidae in Duponchel 1844, Herrich-Schäffer, [1851] 1845
- Gonopteridae] Herrich-Schäffer, [1850] 1845: 319 [*Gonoptera* Berthold, 1827, synonym of *Scoliopteryx* Germar, 1811], = Gonopteridae in Guenée 1852a, Walker 1858, Cotes & Swinhoe 1888, Moore 1884-7, Pagenstecher 1894, Kirby 1897, = Gonopterinae in Warren 1913, = Gonopterini in Kitching & Rawlins 1999. Replaced by Scoliopteryges by Herrich-Schäffer, [1852] 1843-56, according to art. 40.2 ICZN
- Hemiceratae] Guenée, 1852a: 377 (original spelling: Hemiceridae) [*Hemiceras* Guenée, 1852], belongs to the Notodontidae, where it is treated as Hemiceratinae. (Walker 1858, Moore 1884-7, Kirby, 1897)
- Hexerini] Grote, 1895: 422 [*Hexeris* Grote, 1875], belongs to the Thyrididae
- \*Homopterides] Boisduval, 1833: 108 **nomen nudum**, the name is not available according to article 13.2 (11.7.1) ICZN, as it is not formed from an available genus-group name then used as valid. (vgl. Omopteridae). = Homopteridae in Guenée 1852
- \*Homopteridae] Guenée, 1852b: 1 [*Homoptera* Guenée, 1852 is an unjustified emendation of *Omoptera* Guérin-Ménéville, [1832] which is a synonym of *Zale* Hübner, [1818] (Poole 1989)] (Walker 1858, Cotes & Swinhoe 1888, Moore 1884-7, Pagenstecher 1894, Grote 1895, Kirby 1897). = Phaeocyclini Grote, 1890 (**syn. nov.**), = Homopterinae in Hampson 1902
- Hulodidae] Guenée, 1852b: 206 [*Hulodes* Guenée, 1852], established as subfamily of Bendidae by Guenée 1852b, = Bendidae in Cotes & Swinhoe 1888, Moore 1884-7, Kirby 1897
- Hyblaeidae] Guenée, 1852a: 388 [*Hyblaea* Fabricius, 1793], independent family (Hyblaeidae), (Walker 1858, Cotes & Swinhoe 1888, Moore 1884-7, Kirby 1897), = Hyblaeini in Grote 1890a, 1890b
- Hypocalidae] Guenée, 1852b: 73 [*Hypocala* Guenée, 1852], (Walker 1858, Cotes & Swinhoe 1888, Moore 1884-7, Kirby 1897)
- Hypogrammidae] Guenée, 1852b: 20 [*Hypogramma* Guenée, 1852, synonym of *Coenipeta* Hübner, 1818], (Walker 1858, Cotes & Swinhoe 1888, Moore 1884-7, 1897), Hypogrammidae] Guenée, 1852 is valid according to article 40.1. ICZN and must be used for the generic group around *Coenipeta*.
- Hypopyridae] Guenée, 1852b: 192 [*Hypopyra* Guenée, 1852], (Walker 1858, Moore 1884, Cotes & Swinhoe 1888, Pagenstecher 1894 Kirby, 1897), Berio (1965: 320) includes this group in his definition of the „Phylum di Entomogramma“.

- Ingur[inae] Grote, 1882: 33 [*Ingura* Guenée, 1852], = Ingurini in Grote 1890a
- Lagopter[idae] Kirby, 1897: 171 [*Lagoptera* Guenée, 1852, synonym of *Thyas* Hübner, [1824]], **syn. nov.** of Dysgoni[idae], = Lagopterini in Berio 1992, definition of the „Phylum di Dermaleipa“ in Berio 1965: 298
- \*Leptos[i]dae Herrich-Schäffer, [1851] 1845: 429 (original spelling: Leptosidae) [*Leptosia* Guenée, 1841], Herrich-Schäffer, 1845: 431, homonym of *Leptosia* Hübner, 1818 (Pieridae). Invalid because of the generic homonymy
- Litoprosop[inae] Grote, 1882: 33 [*Litoprosopus* Grote, 1869], = Litoprosopini in Grote 1890a, 1890b
- Lygephil[ini] Wiltshire, 1976: 159 [*Lygephila* Billberg, 1820, synonym of *Toxocampa* Guenée, 1841], **syn. nov.** of Toxocamp[idae] Guenée, 1852 according to article 11.7.1 ICZN, (Berio 1992). Wiltshire mentions the source of the name as „Börner's System“. Börner (1932) only once indicated „Toxocampini [Lygephilini]“. In the later editions there is no reference to Lygephilini (Börner 1939, 1944).
- \*Lyncest[ini] Wiltshire, 1990: 214 [*Lyncestis* Walker, 1857] **nomen nudum** according to article 13.1 ICZN, (Hacker 1999), Speidel & Naumann (1995) treat Lyncestini as synonym of Melipotini Grote, 1895.
- Melipot[ini] Grote, 1895: 421 [*Melipotis* Hübner, 1818], = Lyncestini Wiltshire, 1990, synonymous according to Speidel & Naumann (1995)
- Metoponi[idae] Herrich-Schäffer, [1851] 1845: 386 (original spelling: Metoponidae) [*Metoponia* Duponchel, [1845], synonym of *Aegle* Hübner, [1823] (Stiriine)], **nomen oblitum**, cf. \*Anthophil[idae]
- Mocis[ini] Berio, 1992: 293, 296, 299 [*Mocis* Hübner, [1823] 1816], **syn. nov.** of Remig[i]dae Guenée, 1852 according to article 40.1 ICZN and because of the definition of the „Phylum di Mocis“ in Berio 1960: 318, as he includes the genus *Remigia* Gn.
- Odontod[inae] Hampson, 1918: 192, 383 [*Odontodes* Guenée, 1852]. Synonym of Stictopterinae (e.g. Inoue 1958)
- Ommatophor[idae] Guenée, 1852: 169 [*Ommatophora* Guenée, 1852], (Walker 1858, Butler 1878, Moore 1884-7, Cotes & Swinhoe 1888, Pagenstecher 1894, Kirby, 1897). Predominantly, members of the genus *Erebis* Latreille, 1810 are placed here. Therefore, it is probably a synonym of Catocalini.
- Omopter[idae] Boisduval, 1833: 108 (original spelling: Homopterides) [*Omoptera* Guérin-Ménéville, 1832], corrected spelling according to article 32.5 or article 35 ICZN (Speidel & Naumann 1995), cf. Homopteridae. The name must be used for the generic group around *Zale*. = Phaeocymini Grote, 1890 (**syn. nov.**)
- Ophider[idae] Guenée, 1852b: 108 [*Ophideres* Boisduval, 1832], (Walker 1858, Moore 1884-7, Cotes & Swinhoe 1888, Pagenstecher 1894, Kirby, 1897), = Ophiderinae in Grote 1882, 1890a, Kirby 1897, Prout 1928, Fibiger & Hacker 1990, Berio 1992, = Ophiderini in Grote 1895
- Ophiu[s]idi Guenée, 1837: 321 (1841: 71) [*Ophiusa* Ochsenheimer, 1816] = Ophiusidae in Herrich-Schäffer 1845, Guenée 1852b, Pagenstecher 1894, Walker 1858, Moore 1884-7, Cotes & Swinhoe 1888, = Ophiusides in Duponchel 1844, = Ophiusini in Speidel & Hassler 1989, Wiltshire 1990, Berio 1992, Beck 1996, Leraut 1997, Hacker 1999, = Anuini Wiltshire, 1976
- Othre[inae] Berio, 1955: 133 [*Othreis* Hübner, [1823]], synonym of Ophiderinae (e.g. Leraut 1980). The name was unnecessarily introduced by Berio, as *Ophideres* Boisduval, 1832 was placed as a synonym of *Othreis* at that time, and Berio overlooked the permanent validity of the family-group name Ophiderinae according to article 40.1 ICZN. = Othreinae in Berio 1960, Griveaud & Viette 1961, Wiltshire 1971, 1976
- Palind[i]dae Guenée, 1852a: 274 [*Palindia* Guenée, 1852, synonym of *Eulepidotes* Hübner, 1823], replaced by Eulepidotinae by Grote, 1895 according to art. 40.2 ICZN (Moore 1884-7), = Palindidae in Walker 1858, Kirby 1897, Cotes & Swinhoe 1888, = Eulepidotinae Grote, 1895
- \*Pandesm[ini] Wiltshire, 1990: 224 [*Pandesma* Guenée, 1852], **nomen nudum** according to article 13.1. ICZN, (Berio 1992, Beck 1996)
- Pangrapt[inae] Grote, 1882: 42 [*Pangrapta* Hübner, 1818] **syn. nov.** of Focill[idae] Guenée, 1852, = Pangraptini in Grote 1890a, 1895, Beck 1996, = Pangaptini (misspel.) in Leraut 1997
- Panopod[ini] Forbes, 1954: 361 [*Panopoda* Guenée, 1852]
- Pericym[ini] Wiltshire, 1976: 160 (original spelling: Pericymatini) [*Pericyma* Herrich-Schäffer, [1851] 1845], description of the „Phylum di Pericyma“ in Berio 1960: 320 and partly in Wiltshire 1970, first available name for the Polydesm[ini] cf. Speidel & Hassler 1989, (Wiltshire 1990, Leraut 1997)
- Phaeocym[ini] Grote, 1890a: 109, 145 (original spelling: Pheocymini) [*Phaeocyma* Hübner, 1818], **syn. nov.** of Omopter[idae] Grote, 1895

- Phlogophor[inae] Hampson, 1918: 190, 383 [*Phlogophora* Treitschke, 1825]. The denomination Hampson's refers to the Euteliinae and is based on an incorrectly identified type-species of the genus *Phlogophora*. Hampson accepted *Noctua adularix* Hübner, [1813] as type-species of *Phlogophora*, without reference to the earlier designation of *Phalaena meticulosa* Linnaeus, 1758 by Duponchel (1829). According to articles 41 and 65. 2 ICZN, the Commission had to decide about this name, if the stability of the nomenclature is threatened. In any case, this denomination is not available for the Euteliinae.
- Phyllod[idae] Guenée, 1852b: 119 [*Phyllodes* Boisduval, 1832], described as 2nd subfamily of the Ophider[idae] (Walker 1858, Moore 1884-7), = Phyllodinae in Kirby 1897
- \*Phytometrides Herrich-Schäffer, [1844] 1847: 7 **nomen nudum**. The name is not available according to article 13.2. (11.7.1) ICZN, as it is not formed from an available genus-group name. Herrich-Schäffer used this denomination clearly for a group within the Geometridee (Herrich-Schäffer 1847 [1844]: 1)
- Phytometr[inae] Hampson, 1913: 401 [*Phytometra* Haworth, 1809]. The denomination Hampson's refers to the Plusiinae and is based on a misidentified type-species of the genus *Phytometra*. Hampson accepted *Phalaena festucae* Linnaeus, 1758 as type-species of *Phytometra*, without reference to the earlier designation of *Noctua aenea* Denis & Schiffermüller, 1775 by Westwood (1840). According to article 41 und 65. 2 ICZN, the Commission had to decide on this name, if the stability of the nomenclature would be threatened. In any case, the denomination is not available for the Plusiinae. = Phytometrinae in Warren 1913, Mosher 1916, Lhomme 1923-35, Draudt 1935, Gaede 1936, 1938
- Phytometr[ini] Wiltshire, 1990: 232 [*Phytometra* Haworth, 1809], eventually a synonym of Poaphillidae, = Phytometrini in Berio 1992, Beck 1996, Hacker 1999, = Phytometrinae in Berio 1992, = Phytometridi in Berio 1992.
- \*Platydi[dae] Guenée, 1854: 11 [*Platydia* Guenée, 1854, junior homonym of *Platydia* Costa, 1852 (Brachiopoda)], (Walker 1858, Moore 1884-7, Cotes & Swinhoe 1888, Kirby 1897). Family-group name invalid according to article 39 ICZN (Homonymy of the type-genus)
- Poaphili[idae] Guenée, 1852b: 295 [*Poaphila* Guenée, 1852], (Walker 1858, Moore 1884-7, Cotes & Swinhoe 1888, Kirby 1897). The genus *Phytometra* is included here by Guenée. Phytometrini Wiltshire, 1990 is a synonym of Poaphili[idae], if the group proves to be monophyletic. = Poaphiliidae in Tutt 1896, = Poaphilini in Beck 1996
- \*Polydesm[idae] Guenée, 1852a: 436 [*Polydesma* Boisduval, 1833], junior homonym of Polydesmidae Leach, 1815 (Myriapoda, Diplopoda), formed from the generic name *Polydesmus* Latreille, [1802] having the same stem., (Speidel & Naumann 1995), (Walker 1858, Cotes & Swinhoe 1888, Kirby 1897), = Polydesmini in Speidel & Hassler 1989, Wiltshire 1990, Berio 1992, Beck 1996, Leraut 1997, Hacker 1999. *Lophotavia* Hampson, 1926 is the nearest genus according to present knowledge (Berio 1960). The name of the family-group could be formed from that name. Pericym[ini] Wiltshire, 1976 is the oldest name for the group, if Berio's opinion is right that the genera *Pericyma*, *Lophotavia*, and *Polydesma* form a monophylum (Berio 1960, 1992)
- Remig[idae] Guenée, 1852b: 312 [*Remigia* Guenée, 1852], eventually a synonym of *Mocis* Hübner, [1823] 1816 (cf. Poole 1989)], (Walker 1858, Cotes & Swinhoe 1888, Pagenstecher 1894, Kirby 1897, Moore 1884-7), = Remigini in Wiltshire 1990, = Mocisini Berio, 1992 (**syn. nov.**)
- Rivul[ini] Grote, 1895: 419 [*Rivula* Guenée, 1854], (Börner 1949, Wiltshire 1990, Hacker 1999) = Rivulinae in Speidel & al. 1996a. Presently regarded as an independent subfamily.
- Scodionyg[ini] Wiltshire, 1976: 209 (original spelling: Scodionychini) [*Scodionyx* Staudinger, 1899], definition des „Phylum di Scodionyx“ in Berio 1960: 303, (Wiltshire 1990), = Scodionyxini in Berio 1992, Hacker 1999
- Scolecocamp[inae] Grote, 1883: 148 [*Scolecocampa* Guenée, 1852]
- Scoliopteryg[inae] Herrich-Schäffer, [1852]: 21 (original spelling: Scoliopteryges (Gonopteridae)) [*Scoliopteryx* Germar, 1810] = Scoliopteryginae in Spuler 1907 (Spuler 1901-1908), Börner 1932, Forbes 1954, Fibiger & Hacker 1990, Beck 1996, see Gonopter[idae] Herrich-Schäffer, [1850] 1845
- \*Sphingomorph[ini] Wiltshire, 1990: 224 [*Sphingomorpha* Guenée, 1852], **nomen nudum** according to article 13.1. ICZN, (Berio 1992, Hacker 1999)
- Stictopter[ini] Hampson, 1894: 396 [*Stictoptera* Guenée, 1852] independent subfamily, = Stictopterini in Grote 1895, = Odontodinae Hampson, 1918

- Syned[ini] Forbes, 1954: 362 [*Syneda* Guenée, 1852 a synonym of *Drasteria* Hübner, 1818)]. Synonym of Euclid[i]dae] Guenée, 1852 (Speidel & Naumann 1995), (Beck 1996, Wiltshire 1976, Speidel & Hassler 1989, Hacker 1999)
- Tachos[ini] Berio, 1992: 297, 300 [*Tachosa* Walker, 1869], definition of the „Phylum di Tachosa“ in Berio 1960: 313
- Thermesi[idae] Guenée, 1852b: 342 [*Thermesia* Hübner, 1823], (Walker 1858, Cotes & Swinhoe 1888, Moore 1884-7, Pagenstecher 1894, Kirby, 1897)
- \*Thiacid[ini] Berio, 1992: 295, 298 [*Thiacidas* Walker, 1855], **nomen nudum** according to article 13.1. ICZN
- Thysani[ini] Grote, 1895: 422 [*Thysania* Dalman, 1824], (Leraut 1997)
- Tinoli[idae] Moore, [1885] 1884-7: 184 [*Tinolius* Walker, 1855], synonym von Euclid[i]dae] (Speidel & Naumann 1995)
- Toxocamp[idae] Guenée, 1852a: 419 [*Toxocampa* Guenée, 1841], (Walker 1858, Cotes & Swinhoe 1888, Kirby 1897), = Toxocampini [Lygephilini] in Börner 1932 (first used in the 4th edition), = Toxocampini in Grote 1895, Börner 1949, Speidel & Hassler 1989, Wiltshire 1990, Beck 1996, Leraut 1997, Hacker 1999, = Toxocampina in Beck 1996, = Toxocampinae in Grote 1882, = Lygephilini Wiltshire, 1976 (**syn. nov.**)
- \*Trisul[ini] Wiltshire, 1990: 225 [*Trisula* Moore, 1858], **nomen nudum** according to article 13.1 ICZN
- Tyt[ina] Beck, 1996: 5, 15, 49 [*Tyta* Billberg, 1820], = Tytinae in Speidel, Fänger & Naumann 1996a, = Tytini in Leraut 1997
- Yrias[idae] Guenée, 1852b: 20 (original spelling: Yriadae) [*Yrias* Guenée, 1852 (= *Metria* Hübner, [1823])], described as subfamily of Hypogramm[idae] Guenée, 1852.

This list includes all family group names of Catocalinae s. l. published until December, 2002, with the references to the first valid use of every name which we could find. There are no published catalogues containing these references, and so we may not have indicated the oldest reference in every case. We hope that minor errors are excusable in this first attempt and welcome every correction.

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