## On the taxonomy, synonymy and faunistics of the Apomecynini of the Asian-Australian Region (Insecta: Coleoptera: Cerambycidae: Lamiinae). Part 5: Nomenclatural corrections

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#### Abstract

In the first volume of the Australian Longhorn Beetles (Coleoptera: Cerambycidae) that deals with the subfamily Lamiinae by SLIPINSKI & ESCALONA (2013). many nomenclatural acts such as generic synonymies, new combinations, new names etc. are generated. In the past almost all species of Lamiinae were revised by Breuning in his tribal revisions (f. e. BREUNING 1963, 1964). Many of these genera are problematic, the diagnoses are insufficient and the identification of species are impossible in most of the cases where there are keys. Furthermore, many genera contain quite heterogeneous species, for example Sybra Pascoe, 1865, Ropica Pascoe, 1858 and Ichthvodes Newman, 1842 (sensu Breuning). Many of the synonymies of some genera given by SLIPINSKY & ESCALONA (2013) are not helpful in solving these significant confusions. Moreover, all of them are not justified according the taxonomic rules, and are incorrect and incomprehensible.

Consequently, in the present paper we revalidate at least the genera *Hestima* Pascoe, 1867, *Mimosybra* Breuning, 1938, *Neosybra* Breuning, 1938 and *Orinoeme* Pascoe, 1867, which are not congeneric with the large genus *Sybra*.

**Key words:** Cerambycidae, Lamiinae, Apomecynini, revalidisation, Oriental and Australien region

#### Indroduction

Well appreciated was the publication of a comprehensive volume of the australian longhorn beetles written by SLIPINSKY & ESCALONA (2013). The first volume covers all species of the subfamily Lamiinae and gives a comprehensive introduction. All genera are described and illustrated, many features are explained in excellent pictures and drawings. Most of the type specimens of the australian Lamiinae are pictured in part for the first time, and a determination key to all genera is given. Altogether they present 75 generic synonyms, justified only by few remarks under the chapter "Material and methods" (SLIPINSKY & ESCALONA 2013: IX). Nomenclatural acts such as generic synonymies, new combinations or new name assignments are problematic. Many of these acts are not reasonable and according our opinion taxonomically incorrect. For justifications SLIPINSKY & ESCALONA (2013) only use the so called DELTA software (DALLWITZ et al. 2000), a couple of procedures developed for taxonomic applications. In terms of an initial data matrix for the DELTA software, monophyletic groups are generated basically for the nomenclatural acts like generic synonymies. Neither the characteristic features of the type specimens nor their combinations are cited.

Currently, we can speak for the genus *Sybra*, with which we are experienced (WEIGEL & SKALE 2009, 2011, SKALE & WEIGEL 2012, 2014). We have examined the type species *Sybra stigmatica* (Pascoe, 1857) very well and have given a description of the genus accordingly (WEIGEL & SKALE 2009). Following this it isn't elusive SLIPINSKY & ESCALONA (2013) synonymised the mentioned genera with *Sybra*.

Either they incorrect utilized the software or made an ineligible choice of differentiation features. Probably the last one, because they don't examined the type specimens of the genera or used australian species of that genera. Many of the australian genera contain oriental species, and SLIPINSKY & ESCALONA (2013) don't have references to these species, which is critical for understanding.

Two examples: under chapter DIAGNOSIS (SLIP-INSKY & ESCALONA 2013: 227) "prosternal process very narrow, flat or weakly arched behind coxae", this feature for *Sybra* is at least not relevant for the genus *Orinoeme*, and the following passage PROTHORAX "prosternal process ..., distinctly expanded behind coxa", not applicable for this genus either. A following passage ELYTRA (SLIPINSKY & ESCALONA 2013: 228): "elytral surfase distinctly punctate, punctures at least in part forming regular rows" a typical feature for the genus *Sybra*, but not for the *Hestima*, *Orinoeme*, *Mimosybra* and *Neosybra*.

Such diffuse and in part incorrect features are consequentially a result of a bad or unreliable data matrix to separate monophyletic groups.

Furthermore we never transferred the genus *Ichthyodes* Newman, 1842 to the tribe Tmesisternini as stated in SLIPINSKY & ESCALONA (2013: 228).

Also in other genera only part of many of new synonymies are cited, for example 28 new generic synonymies in *Rhytiphora* Audinet-Serville, 1835. Such nomenclatural nonsense has extensive consequences (f. e. TAVAKILIAN & NEARNS 2014) towards the activities of respectable longhorn beetles specialists. Therefore many of the new names are redundant and will disappear in synonymy in future revisions. We hope specialists working in these groups will rectify this taxonomic nonsense in the near future. In any case SLIPINSKY & ESCALONA 2013 don't contribute to solve the large confusions within the oriental-australian Apomecynini.

Still a headache is within the genus *Mycerinopsis* Thomson, 1864 synonymized with *Sybra* by SLIPINSKY & ESCALONA (2013) too. The synonymy is accepted because *Mycerinopsis* has priority, however, many taxonomic acts are still required. The first step is to study the type of *Mycerinus ardius* Pascoe, 1862 in more detail. According to BREUNING (1964), this species and *Hathlia lacteola* Hope, 1842 are conspecific. It will be important to study these types to correctly determine the generic placement for *Hathlia lacteola*.

Abbreviations

- BMNH British Museum of Natural History London (United Kingdom)
- HT Holotype
- IRSN Institute Royal des Sciences naturelles de Belgique, Bruxelles (Belgium)
- SMTD Senckenberg Staatliches Museum für Tierkunde Dresden (Germany)

### **Taxonomic corrections**

genus *Hestima* Pascoe, 1867: 445 stat. rev. (s.a. WEIGEL & SKALE 2011)

The type species by original designation is Hestima floccosa Pascoe (Weigel & Skale (2011).

Type material examined: *Hestima floccosa*: HT ♀ (BMNH).

According to morphological features as well as genital morphology, *Hestima* is not congeneric with *Sybra*, as already stated in WEIGEL & SKALE (2011). Within the genus *Hestima*, there are currently 14 species (WEIGEL & SKALE 2011), most of them revised by BREUNING (1964) or later described under the genus *Ichthyodes*. There is an urgent need for the revision of the genus *Hestima*. Additionally, the identification of the species is almost impossible with the revision of BREUNING (1964) because the species contained in the genus in part are quite heterogenous and may belong to other genera.

genus *Mimosybra* Breuning 1939: 278 stat. rev. (s.a. WEIGEL & SKALE 2011)

The type species by original designation is *Orinoeme* surigaonis Heller, 1923: 423 (WEIGEL & SKALE (2011).

Type material examined: Orinoeme / Atelais (?) surigaonis: HT & (SMTD).

Recently, about 30 species are included in the genus *Mimosybra* as revised by BREUNING (1964) or described by him later. There is an urgent need of a revision too for clarification of the real generic placement of some species. *Mimosybra* is not congeneric with *Sybra* because of the following characteristics in part already mentioned by WEIGEL & SKALE (2011):

- generally different habitus from *Sybra*,
- punctures not forming regular rows on elytral surface,
- mesotibia with a spine or at least a tubercle in the middle of the inner side,
- apical part of endophallus without a sclerotised structure (called fibula),

genus Neosybra Breuning, 1939: 276 stat. rev.

The type species by original designation is *Neosybra ropicoides* Breuning, 1939: 277

#### Material examined:

A male specimen from northern Laos which was compared with the HT in the BMNH by Carolus Holzschuh (Villach/Austria). Recently about 22 species are included in the genus *Neosybra* revised by BREUNING (1964) or described later. Within this genus there are quite different species; a revision should clarify the true status of the recently included species.

*Neosybra* is different from *Sybra* because of the following features:

- punctures not forming regular rows on elytral surface,
- mesotibia with a minute tooth in the middle of the inner side in males,
- apical part of endophallus without a sclerotised structure (called fibula),
- elytra with tubercles.

genus Orinoeme Pascoe, 1867: 448 stat. rev. (s.a. WEIGEL & SKALE 2011)

The type species by original designation ist *Orinoeme* chalybeata Pascoe, 1867: 448

Type material examined: *Orinoeme chalybeata*: HT & (BMNH). *Orinoeme punctata*: HT & (IRSN).

Recently 37 species are included in this genus as revised by BREUNING (1964) or described later, characteristics are given in WEIGEL & SKALE (2011). According to different morphological features as well as genital features morphology, *Orinoeme* is not congeneric with *Sybra* as already stated in WEIGEL & SKALE (2011). BREUNING (1964) incorrectly mentions *O. punctata* as the type species for the genus, and additionally this species is conspecific with *O. chalybeata*. Both facts have been clarified previously by WEIGEL & SKALE (2011).

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