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# Revisional notes on Sericini: The taxonomic status of the “Neotropical” genus *Rhynchosymmela* FREY, 1974

(Coleoptera, Scarabaeidae)

With 2 figures

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## Summary

Based on an examination of the holotype, *Rhynchosymmela pallida* FREY, 1974 is recognized as a junior synonym of *Hemiserica nasuta* BRENSKE, 1894. The type locality of *Rhynchosymmela pallida* FREY is suspected to be erroneous. Important morphological characters of the holotype of *Rhynchosymmela pallida* FREY are figured and the distribution of *Hemiserica*, as well as that of *Hemiserica nasuta*, is mapped.

## Zusammenfassung

Basierend auf das Studium des Holotypus von *Rhynchosymmela pallida* FREY, 1974 wurde festgestellt, dass das Taxon ein jüngerer Synonym von *Hemiserica nasuta* BRENSKE, 1894 ist. Es wird angenommen, dass der Locus typicus von *Rhynchosymmela pallida* FREY einer Fundortverwechslung unterlegen haben muss. Wichtige morphologische Merkmale des Holotypus von *Rhynchosymmela pallida* FREY werden abgebildet, und die geographische Verbreitung von *Hemiserica* wie auch von *Hemiserica nasuta* dargestellt.

## Key words

Coleoptera, Scarabaeidae, *Hemiserica*, *Rhynchosymmela*, erroneous type locality, new synonymy, India, Panama

The Sericini is a large tribe within the Scarabaeidae and includes more than 3000 species. Little is known about the species biology. Lacking in Notogea, the tribe is best represented in tropical region. Preliminary investigations on phylogeny of the tribe have shown that Paleotropical and Holarctic species form a monophyletic group. This monophyletic assemblage is regarded as the sister group of a clade of Neotropic taxa, including the genera *Astaena* ERICHSON, 1847 and *Symmela* ERICHSON, 1835 (AHRENS 2002).

The genus *Rhynchosymmela*, which was erected by FREY (1974) for a single species, *Rhynchosymmela pallida* FREY, 1974, from Panama, has been regarded as a representative of the Neotropical fauna (EVANS 2001, 2003). During a recent visit to the Hungarian Natural

History Museum in Budapest, I had the opportunity to examine the holotype of the species under question. It soon became apparent that *Rhynchosymmela pallida* FREY, 1974, was synonymous with *Hemiserica nasuta* BRENSKE, 1894, described from Northern India. Consequently the genus *Rhynchosymmela* must be regarded as a junior synonym of *Hemiserica* BRENSKE, 1894.

### ***Hemiserica* BRENSKE, 1894**

*Hemiserica* BRENSKE, 1894: 11 (type species by monotypy: *Hemiserica nasuta* BRENSKE, 1894).

*Rhynchosymmela* FREY, 1974: 120 (type species by monotypy: *Rhynchosymmela pallida* FREY, 1974), **syn. n.**

The genus *Hemiserica* was erected by BRENSKE (1894) for a single species *Hemiserica nasuta* BRENSKE, 1894, from Northern India. The genus was based on the characteristic shape of labroclypeus, which is narrowed before the strongly reflexed anterior border. Later taxa added to the genus include: *Hemiserica armipes* ARROW, 1945, *H. bilobata* ARROW, 1945, *H. mayarami* KHAN & GHAI, 1980, *H. pallida* ARROW, 1945, and *H. trilobata* KHAN & GHAI, 1980. All these species occur exclusively on the Indian subcontinent (Fig. 2) and are only rarely found in collections. The species occurring in the Himalayas have been revised by AHRENS (in press a).

### ***Hemiserica nasuta* BRENSKE, 1894**

*Hemiserica nasuta* BRENSKE, 1894: 57, 87; BRENSKE 1897: 385, BRENSKE 1902a: Tf. 1.

*Hemiserica clypeata* BRENSKE, 1894: 11 [nomen nudum].

*Hemiserica pallida* ARROW, 1945: 119 (locus typicus: N.W. India).

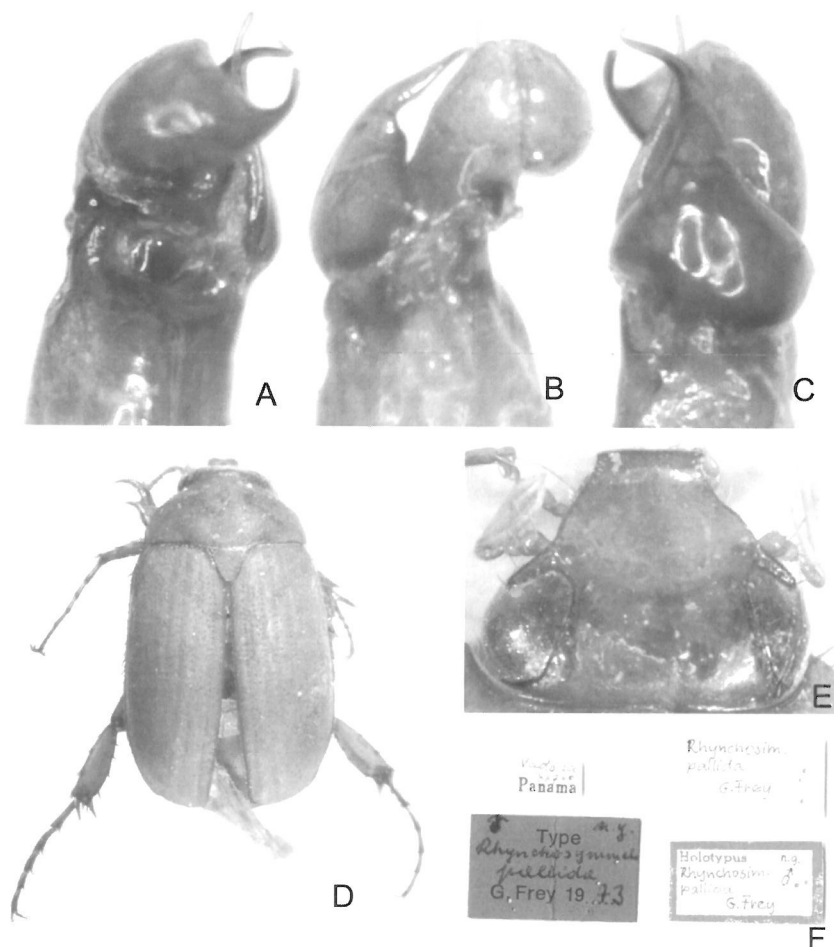
*Rhynchosymmela pallida* FREY, 1974: 120, **syn. n.**

**Locus typicus.** Saidabad Kashmir [Northern India].

**Type-Material.** Syntype (*Hemiserica nasuta*): 1 ♂ „Saidabad Kashmir / *Hemiserica nasuta* type Brenske / Typus“ (Zoological Museum of Humboldt University, Berlin). Holotype (*Rhynchosymmela pallida*): ♂ “Vandom 1887 Panama / Type ♂ *Rhynchosymmela pallida* G. Frey 1972 / Holotypus *Rhynchosim. n.g. pallida* G. Frey” (Hungarian Natural History Museum, Budapest). Paratypes (*Rhynchosymmela pallida*): 1 ♀ “Vandom 1887 Panama / Paratype ♀ *Rhynchosymmela pallida* G. Frey 1972 / Paratypus *Rhynchosim. n.g. pallida* G. Frey” (Hungarian Natural History Museum, Budapest).

**Remarks.** AHRENS (in press a) redescribed *Hemiserica nasuta* and discussed its taxonomy and synonymy. The holotype of *Rhynchosymmela pallida* and the syntype of *Hemiserica nasuta* are virtually identical in shape of parameres (Fig. 1A-C) and in most external diagnostic features (Fig. 1D-E), consequently I consider them to be synonymous. Labels on holotype: Fig. 1F.

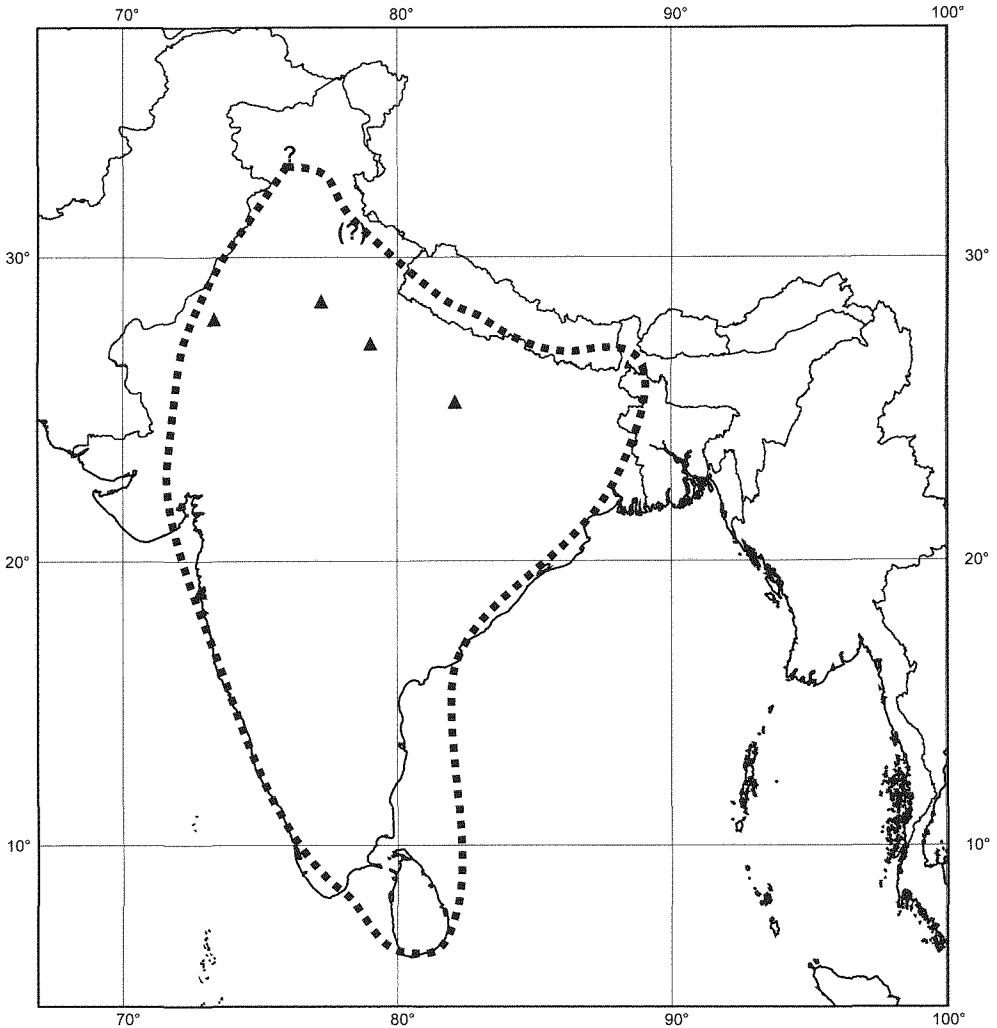
**Aedeagus.** AHRENS (in press a), Aedeagus of Holotype of *Rhynchosymmela pallida*: Fig. 1A-C.



**Fig. 1:** Holotype of *Rhynchosymela pallida*: **A-C:** Male genitalia, parameres, **A:** lateral view, left side, **B:** dorsal view, **C:** lateral view, right side; **D:** Habitus; **E:** Head; **F:** Labels.

**Distribution.** The species is restricted to Northern India (Fig. 2).

**Discussion.** Instances of the importation of Sericini species have been reported several times (AHRENS 2000a, 2003a, AHRENS & KLESS 2001). Generally speaking, imported species must have survived in their new locality for an extended period of time, otherwise the probability of detecting such an importation would be rather low. Conversely, detection of a very short-term survival following importation, especially in regions where collecting activity is rare, would be nearly impossible. Consequently, in instances where species are found well outside their normal range and have not subsequently been reported from the new area, the accuracy of the locality labels comes into question. Cases such as this, erroneous label data, are rather frequently encountered among the Sericini (AHRENS 2000b, 2003b, AHRENS in press a, b). Since most specialists work regionally, this problem was often not recognized and has led to synonymies of both species and generic names.



**Fig. 2:** Distribution of the genus *Hemiserica* BRENSEKE, 1894 (dotted line) and of *Hemiserica nasuta* BRENSEKE, 1894 (triangle, “?”- not precisely located records).

All species of *Hemiserica* are rather restricted geographically, the representatives occurring on Indian subcontinent only. Although little is known about the Sericine fauna of Panama, the facts seems to favour the hypothesis that in case of *Rhynchosymmela pallida*, the specimens were erroneously labelled.

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