

Introduction to the Micronectidae (Nepomorpha) of Thailand

by Nico Nieser

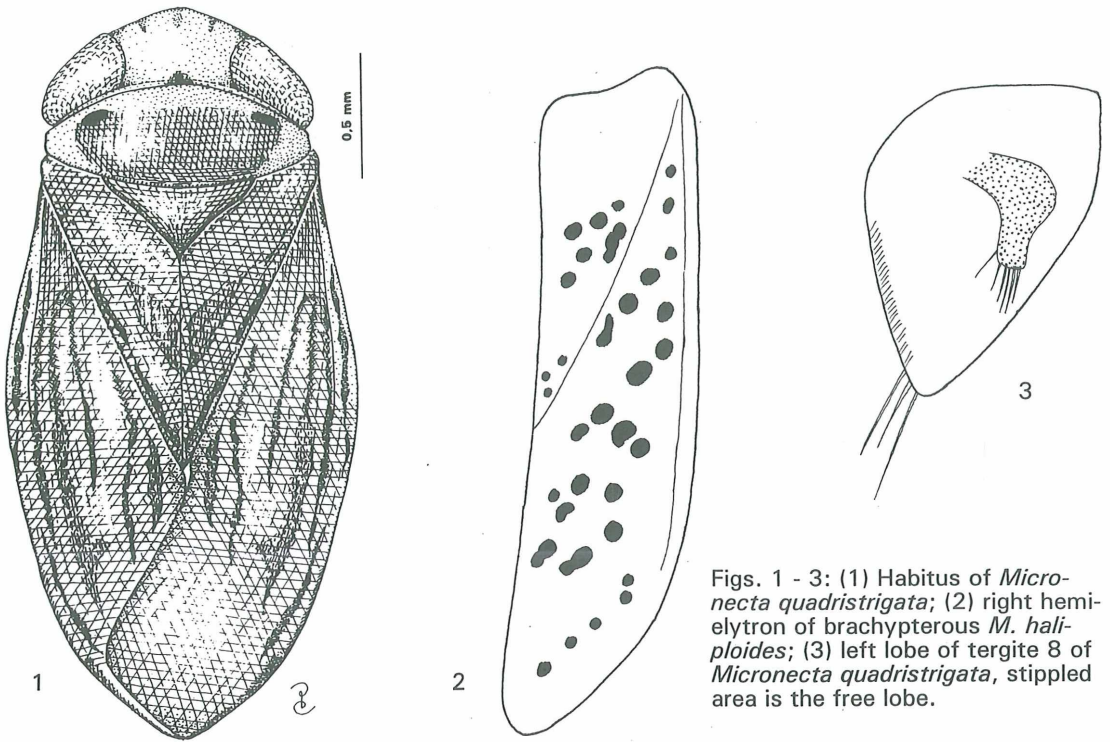
Abstract: An introduction to the Micronectidae (formerly subfamily Micronectinae of the Corixidae) of Thailand and adjacent countries is given. A key to the two genera and some subgenera of *Micronecta* is presented. A preliminary list includes records of eleven species and one subspecies from Thailand, of which the following eight records (seven species and one subspecies) are new: *Micronecta grisea* (FIEBER), *M. guttatosriata* LUNDBLAD, *M. jaczewskii* WROBLEWSKI, *M. ludibunda langkana* WROBLEWSKI, *M. quadristrigata* BREDDIN, *M. scutellaris* (STÅL), *M. siva* (KIRKALDY), and *Synaptonecta issa* LUNDBLAD.

The Micronectidae were formerly usually included as subfamily Micronectinae in the family Corixidae. The cladistic analysis of MAHNER (1993) gives a base to regard them as a separate family. There are two genera in the area: *Micronecta* KIRKALDY (Fig. 1) and *Synaptonecta* LUNDBLAD. In his checklist of Oriental Micronectinae, WROBLEWSKI (1968) synonymized *Synaptonecta* with *Micronecta*, but later the same author treated them as separate genera (WROBLEWSKI 1972). Although there are quite a number of common and well known species in the area, most collections are from light catches; so the specific ecology of most species is poorly known. As a rule representatives of the family live along the shallow edges of stagnant or sluggish waters. Especially in warmer regions they tend to migrate to deeper parts of the habitat during the day when the water temperature rises (NIESER 1975). They can occur in high densities and thus constitute an important link in the food chain, but so far this has not been studied in more detail.

The genus *Micronecta* is divided into nine subgenera of which eight occur in Thailand and adjacent countries. Of these, two are quite easily recognized and each is represented by a single common and widespread species. The other subgenera are somewhat more difficult to separate. So a key to the genera and these two subgenera is presented for preliminary purposes.

Key to genera and some subgenera of Thai Micronectidae (based on males)

- 1 Vertex with an impression; hemielytra with a punctate pattern, the spots tend to fuse to larger blotches; tibia and tarsus of male foreleg fused; small species, body length 1.9 – 2.4 mm [new record from Thailand but occurring in India, Sri Lanka, Myanmar, Vietnam, W. Malaysia and Jawa].....
Synaptonecta issa (DISTANT)
- Vertex convex (rarely flattened); tibia and tarsus of male foreleg separate; size variable..... 2
- 2 Dark pattern of hemelytra consisting of uniformly scattered distinct dark spots on a pale background (Fig. 2); body length 2.4 - 2.8 (females 2.6 - 3.3) [recorded from Thailand, distributed from India to Sumatra and Jawa].....
Micronecta (Pardanecta) haliploides HORVATH



Figs. 1 - 3: (1) Habitus of *Micronecta quadristrigata*; (2) right hemelytron of brachypterous *M. haliploides*; (3) left lobe of tergite 8 of *Micronecta quadristrigata*, stippled area is the free lobe.

- Dark pattern of hemelytra usually with more or less distinct longitudinal stripes or hemelytra without distinct pattern, not punctate..... 3
- 3 Free lobe on left half of tergite 8 large and sigmoid (Fig. 3); left paramere with a sickle-shaped apex; hemelytra with four longitudinal stripes which, however, may be split into spots which can form reticulations; body length 2.2 - 2.9 mm [recorded from Thailand, widespread species: India through SE Asia, Indonesia, Philippines to North Australia].....
 *Micronecta (Sigmonecta) quadristrigata* BREDDIN
- Free lobe of left half of tergite 8 of a different form, not sigmoid; apex of left paramere with a different apex other subgenera of *Micronecta*

Preliminary list of Micronectidae occurring in Thailand and adjacent areas

The list is mainly based on literature; in addition material from the Naturhistorisches Museum, Vienna (NHMW) and the Nieser collection, Tiel (NCTN) has been incorporated.

Abbreviations. - Countries: B = Myanmar; C = China (SW); I = India (especially Assam); L = Laos and Cambodia; M = West Malaysia (including Singapore); S = Sumatera; T = Thailand; V = Viêt-Nam; + = recorded; +! = first record, specimens in both NHMW and NCTN; !w = new record specimens in NHMW; + * = endemic.

	I	B	T	L	V	M	S	C
<i>Micronecta</i>								
<i>albifrons</i> (MOTSCHULSKY)	+							+
<i>anatolica</i> LINDBERG	+	+			+			
<i>decorata</i> LUNDBLAD						+	+	
<i>desertana</i> LUNDBLAD	+				+			
<i>fugitans</i> BREDDIN			+			+	+	
<i>fulva</i> PAIVA		+ *						
<i>grisea</i> (FIEBER)	+		+!		+	+	+	+
<i>guttatostrigata</i> LUNDBLAD			+!		+			
<i>haliploides</i> HORVATH	+		+		+	+	+	
<i>hummeli</i> LUNDBLAD								+
<i>jaczewskii</i> WROBLEWSKI			!w		+			
<i>johorensis</i> FERANDO						+ *		
<i>khasiensis</i> HUTCHINSON	+				+			
<i>ludibunda</i>								
<i>ssp. ludibunda</i> BREDDIN	+		+		+	+		
<i>ssp. langkana</i> WROBLEWSKI			!w					
<i>ssp. malayana</i> LEONG						+ *		
<i>orientalis</i> WROBLEWSKI								+
<i>pocsi</i> WROBLEWSKI						+ *		
<i>quadristrigata</i> BREDDIN	+		+!		+	+	+	+
<i>sahlbergi</i> (JAKOVLEV)								+
<i>scutellaris</i> (STÅL)	+	+	+!		+	+		+
<i>sedula</i> HORVATH					+			+
<i>siva</i> (KIRKALDY)	+	+	!w		+		+	+
<i>tarsalis</i> L. CHEN					+			
<i>waltoniana</i> HUTCHINSON	+ *							
<i>Synptonecta</i>								
<i>issa</i> LUNDBLAD	+	+	!w		+	+		

Acknowledgement: Thanks are due to Dr. P.P. Chen for preparation of Figure 1.

References

- MAHNER, M. 1993: Systema Cryptoceratorum Phylogeneticum (Insecta, Heteroptera). *Zoologica* 143: 1-302.
- NIESER, N. 1975: The water bugs (Heteroptera: Nepomorpha) of the Guyana Region. *Studies on the fauna of Suriname and other Guyanas* 16: 1-308.
- WROBLEWSKI, A. 1968: Notes on Oriental Micronectinae (Heteroptera, Corixidae). *Polske Pismo Entomologiczne* 38: 753-779.
- WROBLEWSKI, A. 1972: Further notes on Micronectinae from Ceylon (Heteroptera, Corixidae). *Polske Pismo Entomologiczne* 42: 1-52, pls. 1-3.

Author's address: Dr. Nico Nieser, Htg. Eduardstr. 16, NL-4001 RG Tiel, The Netherlands
e-mail: iftang.01@net.HCC.nl

Communications:

Material requests (Miridae):

For my study on Cylapinae (Miridae) of Thailand I would like to borrow representatives of this subfamily from Oriental Region from any collections.

Jacek Gorczyca
Dept. Zoology, Silesian University
Bankowa 9, 40-007 Katowice, POLAND
(e-mail: gorczyca@us.edu.pl)

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Amemboa](#)

Jahr/Year: 1999

Band/Volume: [3_1999](#)

Autor(en)/Author(s): Nieser Nico

Artikel/Article: [Introduction to the Micronectidae \(Nepomorpha\) of Thailand. 9-12](#)