

# A key to the genera of Southeast Asian and Malesian Largidae (Hemiptera: Pyrrhocoroidea)

by Carl W. Schaefer & Imtiaz Ahmad

**Abstract:** Keys to the families of Pyrrhocoroidea, higher taxa of Largidae, and the genera occurring in Southeast Asia and Malesia are presented. A list with distribution data of these genera is added. So far there are no records of Largidae from Thailand.

As part of a larger study on the genera of Pyrrhocoroidea, we present here a key to the largid genera of southeast Asia and Malesia. Largidae consists of two subfamilies, Larginae and Physopeltinae; the former is entirely New World, and the latter entirely Old World. We emphasize that this key is provisional, and certain to be modified. In some cases it is based not on specimens but descriptions, and in other cases not all species of a given genus have been examined; the work is continuing. We welcome suggestions, corrections, and additions, and we welcome also information on specimens of these genera in public or private collections.

Unfortunately there are no published records of Largidae from Thailand so far, although the family is present in the whole area.

## Key to families of Pyrrhocoroidea

- 1 Forefemora not or only slightly swollen, terete, distinctly sulcate (Physopeltinae) or not (Larginae); metathoracic scent gland complex auriculate (Physopeltinae) or not (Larginae); seventh abdominal sternite in female cleft medially, ovipositor laciniate; in male, aedeagus without thecal appendages, vesica always with distinct coils..... **Largidae**

Forefemora usually distinctly swollen, not terete, never sulcate; metathoracic scent gland complex never auriculate; seventh abdominal sternite in female entire, ovipositor plate-like; aedeagus with or without thecal appendages, vesica straight or slightly coiled. **Pyrrhocoridae**

Note: Pyrrhocoridae will be treated in a forthcoming publication.

## Key to subfamilies of Largidae

- 1 Eyes pedunculate or sessile, occipital suture often present, head never sulcate behind bucculae; labium never reaching metacoxae, usually short of or just reaching mesocoxae; anterior disc of pronotum never continuous with anterior pronotal margin; forefemora never distinctly sulcate; metathoracic scent gland complex never auriculate; paramere never with lateral lobes; New World..... [Larginae]

Eyes sessile, occipital suture always present, head always sulcate behind bucculae; labium at least reaching metacoxae; anterior disc of pronotum usually continuous with anterior pronotal margin; forefemora always distinctly sulcate; metathoracic scent gland complex auriculate; paramere always with lateral or outer lobes; Old World..... **Physopeltinae**

### Key to tribes of Physopeltinae

- 1 Sexually dimorphic (males elongate); antennae very long, first segment longer than head and pronotum together, in male about three times as long as head and pronotum together; first labial segment distinctly reaching posterior margin of head; pygophore with posterior margin slightly lobed.....

**Lohitini: *Lohita grandis* (GRAY)**

Not sexually dimorphic; antennae never as above; first labial segment usually short of, just reaching, or reaching beyond posterior margin of head; pygophore with posterior margin unlobed.

**Physopeltini**

### Key to Southeast Asian and Malesian genera of Physopeltini

- 1 Anterior disc of pronotum semicircular and swollen, globose, more prominent than posterior disc, rounded and not depressed laterally; first antennal segment a little longer than second, second and fourth equal, third half as long as second; labium short or reaching middle of mesosternum, first segment not reaching posterior margin of head..... ***Taeuberella* SCHMIDT**

Anterior disc of pronotum not as above; first antennal segment usually subequal to or a little shorter than second; labium usually long, reaching at least to metasternum, first segment not reaching or extending beyond posterior margin of head. .... 2

- 2 Pronotum behind anterior angles with distinctly forwardly directed projections, sometimes extending to posterior edge of eyes; bucculae elevated, forming distinct angles; labium long, reaching at least to just beyond posterior margin of third abdominal sternite; brachypterous. ***Pajanja* BLÖTE**

Pronotum not as above; bucculae not as above; labium not as above, never reaching beyond middle of third abdominal sternite; usually macropterous but sometimes brachypterous. .... 3

- 3 Labium reaching about middle of third abdominal sternite, first segment surpassing posterior margin of head; anterior disc of pronotum not continuous with anterior pronotal margin, lateral margins of pronotum and corial margins markedly reflexed. ***Iphita* STÅL**

Labium not as above, reaching at most slightly beyond metasternum, first segment never reaching posterior margin of head; anterior disc of pronotum continuous with anterior margin..... 4

- 4 First antennal segment shorter than second; underside of forefemora distinctly sulcate; labium just reaching posterior margin of metasternum.....

***Physopelta* AMYOT & SERVILLE**

First antennal segment equal or subequal to second; underside of forefemora not distinctly sulcate; labium extending at least slightly beyond metasternum..... 5

- 5 Long (14.0 mm); anterior disc of pronotum markedly roundly convex, impunctate; posterior disc flat, densely punctate; forefemora with two conspicuous spines in addition to denticles; first antennal segment clavate.....

***Wachsiella* SCHMIDT**

Short (6.5 mm); anterior and posterior discs of pronotum not as above; forefemora with minute uniform denticles, without spines; first antennal segment not markedly thicker than second..... ***Delacampius* DISTANT**

Note. BLÖTE (1931) transferred this genus from Pyrrhocoridae (where it is listed by HUSSEY [1929]) to Largidae.

### **Distribution (by country) of genera of southeast Asian and Malesian Largidae**

(from HUSSEY 1929, unless otherwise noted)

<i>Lohita</i> AMYOT & SERVILLE, 1843	Bangladesh (AHMAD & ABBAS 1985), Nepal (Schaefer, unpubl.), India, Philippines, Malaysia
<i>Taeuberella</i> SCHMIDT, 1932	Papua New Guinea (SCHMIDT 1932)
<i>Pajanja</i> BLÖTE, 1932	Indonesia (BLÖTE 1932)
<i>Iphita</i> STÅL, 1870	Papua New Guinea, Sri Lanka, India, Malaysia, Philippines
<i>Physopelta</i> AMYOT & SERVILLE, 1843	P.R. China, Taiwan, India, Malaysia, Philippines, Japan, Laos, Viet-Nam (also Africa, Australia)
<i>Wachsiella</i> SCHMIDT, 1931	Indonesia (SCHMIDT 1931)
<i>Delacampius</i> DISTANT, 1903	Papua New Guinea (AHMAD & ZAIDI 1987), Malaysia (also Africa [DISTANT 1919])

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#### Short Notes:

#### Additions to the species lists of Thai Gerromorpha published by HECHER (1998) and CHEN & ZETTEL (1998) in Amemboa 2:

##### Veliidae:

*Microvelia leveillei* (LETHIERRY, 1877): This species is listed for Thailand by HECHER (1998) under the name *Microvelia diluta* DISTANT, 1909. After type studies, the correct name is, however, *Microvelia leveillei*, a species described from the Philippine Islands (ZETTEL & GAPUD, in press).

*Pseudovelina pusilla* HECHER, 1997: This species was recently described from Vietnam (HECHER 1997). A sampling of this species from Chiang Mai Province, Thailand, was brought to our attention by Dr. Wolfgang Ullrich (Lübeck, Germany).

##### Gerridae:

*Halobates proavus* WHITE, 1883: The first record from Thailand was published in a small note by ANDERSEN (1991: 50): "since *H. hayanus* and *proavus* often are found near the margin of coral reefs (personal observation in Phuket, Thailand), ...", which was overlooked by CHEN & ZETTEL (1998) in their check-list. Further material of this species (2 males, 2 females, Phuket, 17.2.1998, leg. E. Heiss, coll. Zettel) was recently sent to us for identification. *Halobates proavus* is a species widespread in the Pacific Ocean; the population from Phuket is the only one so far known from the Indian Ocean.

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Artikel/Article: [A key to the genera of Southeast Asian and Malesian Largidae \(Pyrrhocoroidea\). 3-5](#)