

# The genus *Homalocolpura* Breddin and description of five new species (Hemiptera: Heteroptera: Coreidae: Colpurini)

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Key words.— Insecta; Heteroptera; Coreidae; Colpurini; *Homalocolpura*; new species; Philippine Islands; Borneo.

The genus *Homalocolpura* Breddin, 1900 (Coreidae: Colpurini) is revised and five new species from Philippine Islands (3) and Borneo (2) are described and illustrated; Breddin's species *H. edax* is transferred from *Homalocolpura* Breddin to *Typhlocolpura* Breddin with the binomial *T. edax* (Breddin) comb. nov.; dorsal habitus, antennal segments, head, pronotum, female genital plates and male genital capsule of most of the species are illustrated; a checklist and a key to the fourteen known species are provided.

## Introduction

The tribe Colpurini contains about 20 genera (including the genus *Hygia* Uhler, 1861 with nine subgenera) and 142 species, with several genera and many species awaiting description. Members of the tribe are distributed from Fiji and Australia, to India and the eastern Palearctic region, reaching their greatest diversity in Malaysia, Indonesia and Papua New Guinea. The species are usually black or dark coloured, with a striking diversity of structure in the male genital capsule and in the female genital plate (Brailovsky et al., 1992).

Breddin (1900a) described the genus *Homalocolpura* and included two species *H. bibax* collected in Sulawesi and *H. edax* from Java and years later *H. sugax* from Kangean Island (Breddin, 1907). The fourth known species was *H. sorbax* (Bergroth, 1918) from Philippine Islands. The last group of species was described by Blöte (1936) from Sumatra, Timor and Sarawak (Borneo) under the binomial names *H. annulata*, *H. binotata*, *H. borneana*, *H. nitida*, *H. subopaca* and *H. vorax*.

The *Homalocolpura* members are usually shining red brown to shining chestnut orange, with all femora ventrally armed with two rows of short and acute spines.

In this revision five new species collected in Philippine Islands (3) and Borneo (2) are described and the species *Homalocolpura edax* Breddin, 1900, is transferred to the genus *Typhlocolpura* Breddin, 1900, with the binomial *T. edax* (Breddin) comb. nov.

The following abbreviations identify the institutions where types are deposited, and specimens were loaned: American Museum of Natural History, New York (AMNH); The Natural History Museum, London (BMNH); Bernice P. Bishop Museum, Honolulu, Hawaii (BPBM); Deutsches Entomologisches Institut, DDR, Germany (DEI); Field Museum Natural History, Chicago, Illinois (FMNH); Colección Entomológica del Instituto de Biología, Universidad Nacional Autónoma de México (IBU-NAM); National Naturhistorisch Museum (RMNH); United States National Museum, Smithsonian Institution, Washington D.C. (USNM).

All measurements are in millimeters.

**Key to species of the genus *Homalocolpura***

1. Pronotal disc with two large discoidal yellow spots ..... *H. binotata* Blöte
- Pronotal disc without yellow discoidal spots ..... 2
2. Antennal segments II and III yellow ..... 3
- Antennal segments II and III bright red brown to chestnut orange ..... 5
3. Femora bright red brown to chestnut orange, with or without basal third yellow .  
..... *H. sugax* Breddin
- Femora yellow with distal joint red brown to chestnut orange ..... 4
4. Antennal segment II shorter than III; hemelytral membrane entirely pale brown ..  
..... *H. leyteana* spec. nov.
- Antennal segment II longer than III; hemelytral membrane pale brown with basal  
angle and anterior margin pale yellow ..... *H. parrilloi* spec. nov.
5. Body longer than 16 mm.; bucculae with sharp mesial projection .. *H. vorax* Blöte
- Body shorter than 13 mm.; bucculae entirely without spine or sharp projection ... 6
6. Anterior and posterior lobe of metathoracic scent gland bright black; postocular  
tubercle bicolourous, with superior area yellow and inferior area black; gonocoxae I with dorsal third closed and ventral third opened (fig. 32) .....  
..... *H. sabah* spec. nov.
- Anterior and posterior lobe of metathoracic scent gland yellow to orange; postoc-  
ular tubercle unicolourous; gonocoxae I uniformly opened (fig. 34) ..... 7
7. Hemelytral membrane entirely pale to dark brown ..... 8
- Hemelytral membrane yellow with basal angle and anterior margin pale brown  
or entirely yellow with or without veins pale brown ..... 10
8. Antennal segment II shorter or equal than III (fig. 2) ..... *H. sorbax* Bergroth
- Antennal segment II longer than III ..... 9
9. Vertex in lateral view conspicuously globose (figs. 2, 14); clavus and corium shi-  
ning; frontal angle poorly developed ..... *H. bibax* Breddin
- Vertex in lateral view slightly convex (fig. 16); clavus and corium rather dull; fron-  
tal angle projected as a conical teeth ..... *H. aploa* spec. nov.
10. Hemelytral membrane entirely yellow with or without veins pale brown ..... 11
- Hemelytral membrane yellow with basal angle and anterior margin pale brown . 12
11. Antennal segment III pale chestnut orange with subapical yellow ring; pronotal  
disc and scutellum bright pale orange yellow; antennal segment II shorter than  
III ..... *H. annulata* Blöte
- Antennal segment III entirely pale chestnut orange; pronotal disc and scutellum  
bright dark red brown; antennal segment II longer than III ..... *H. nitida* Blöte
12. Antennal segment II shorter than III ..... *H. borneana* Blöte
- Antennal segment II longer than III ..... 13
13. Antennal segment III robust, shorter than 1.00 mm.; pronotum with posterior  
lobe dull chestnut orange brown; posteroventral border of genital capsule with  
small median plate (fig. 23) ..... *H. sarawak* spec. nov.
- Antennal segment III slender, longer than 1.05 mm.; pronotum with posterior  
lobe bright pale orange yellow; posteroventral border of genital capsule entirely  
without median plate projection (fig. 24) ..... *H. subopaca* Blöte

Table 1. Checklist of the species of the genus *Homalocolpura* Breddin\*.

Name	Distribution
<i>H. annulata</i> Blöte, 1936	Sumatra
<i>H. aploa</i> spec. nov.	Philippine Islands
<i>H. bibax</i> Breddin, 1900	Sulawesi
<i>H. binotata</i> Blöte, 1936	Timor
<i>H. borneana</i> Blöte, 1936	Sarawak (Borneo)
<i>H. leyteana</i> spec. nov.	Philippine Islands
<i>H. nitida</i> Blöte, 1936	Sumatra
<i>H. parrilloi</i> spec. nov.	Philippine Islands
<i>H. sabah</i> spec. nov.	Sabah
<i>H. sarawak</i> spec. nov.	Sarawak
<i>H. sorbax</i> Bergroth, 1918	Philippine Islands
<i>H. subopaca</i> Blöte, 1936	Sumatra
<i>H. sugax</i> Breddin, 1907	Kangean Island
<i>H. vorax</i> Blöte, 1936	Sumatra

\* *Homalocolpura edax* Breddin, 1900, is excluded and transferred to *Typhlocolpura* Breddin, 1900, with the binomial *T. edax* (Breddin, 1900) comb. nov.

#### *Homalocolpura* Breddin, 1900

*Homalocolpura* Breddin, 1900a: 155-156; Breddin 1900b: 195; Bergroth 1913: 142. Type species: *Homalocolpura bibax* Breddin, 1900.

Redescription.— Body oblong-ovate, shining, with an average length from 8.45 to 16.70.

Head.— Longer than wide across eyes, pentagonal, slightly or conspicuously convex dorsally (figs. 11-17); tylus unarmed, apically globose, extending anteriorly to the jugae and more raised in lateral view; jugae unarmed, narrowed and shorter than tylus; antenniferous tubercles unarmed; sides of head in front of eyes unarmed and straight; antennal segment I robust, thickest, slightly curved outwards shorter than maximum length of head and extending beyond apex of head by less than half of its length; segments II and III cylindrical and moderately robust to slender; segment IV fusiform; antennal segment I the shortest, IV longest of all and II and III subequal (figs. 1-10); ocelli moderately elevated and situated on a line where the upper margin hardly or not reach the lower margin of eyes; preocellar pit small and deep; eyes longer than wide or as longer as wide, protuberant, reniform to spherical or globular; postocular tubercles conspicuously protuberant, globose; bucculae rounded, short, elevated, not projecting beyond antenniferous tubercles with or without sharp mesial projection and with the external edges thickened; rostrum extraordinary long, reaching the apex of the last abdominal sternite or extending beyond the abdomen; rostral segment I cylindrical, stout and reaching the posterior gular region or beyond the prosternal border; segment II slightly curved and laterally flattened; segments III and IV cylindrical and slender; vertex convex to globose.

Thorax.— Pronotum. Wider than long, trapeziform, non declivent; anterior collar narrowed to wide; frontal angles produced forward as conical teeth; anterolateral

border emarginate and obliquely straight; humeral angles rounded, not exposed; posterolateral border straight; posterior border slightly concave; callar region transversely elevated, almost reaching the lateral margins and at the middle line with or without a slightly longitudinal depression. Anterior lobe of metathoracic scent gland reniform, posterior lobe sharp, small.

Legs.— Femora with two rows of spines along ventral surface; tibiae with lateral shallow sulcus and two rows of spines along ventral surface.

Scutellum.— Triangular, flat, longer than wide or wider than long or subequal; apex short, acute.

Hemelytra.— Macropterous, reaching posterior margin of abdominal segment VII or extending beyond apex of abdomen; claval suture evident; corium with costal margin emarginated and apical margin straight; hemelytral membrane with few bifurcate veins.

Abdomen.— Connexival segments higher than body; posterior angle of connexival complete; abdominal sternites with medial sternal furrow projecting to posterior border of sternites V or VI.

Male genitalia.— Genital capsule: Posteroventral edge laterally produced into short blunt lobes and between them entirely (figs. 21, 25) or with a median plate (figs. 18-19).

Female genitalia.— Abdominal sternite VII with plica and fissure; plica usually noticeable elevated, apically acute and leaving only a short fissure uncovered; gonocoxae I enlarged dorso-ventrally, in frontal view entirely opened (fig. 28) or with dorsal third closed and ventral third opened (fig. 32) and in lateral view slightly triangular, with superior half broad and inferior half slender; paratergite VIII small, quadrate, with visible spiracle; paratergite IX squarish (figs. 26-35).

Integument.— Body surface shining; pronotum, scutellum, clavus, corium and thorax strongly punctate; head, abdominal sternites and exposed parts of genital segments of both sexes minutely to moderately punctate. Head, pronotum, scutellum, clavus, corium, thorax, legs and abdominal sterna clothed with a very short upright bristle-like hairs visible if the insect is viewed in profile; bristle-like hairs of postocular tubercles and anterolateral margin of pronotum visible also from above; venter with bristle-like hairs longer.

Diagnosis.— *Hygia* Uhler, 1861, *Lygaeopharus* Stål, 1870, *Tachycolpura* Breddin, 1900, *Typhlocolpura* Breddin, 1900 as well as *Homalocolpura* Breddin, 1900, has the abdominal sterna VII of female with plica and fissure. *Homalocolpura* is easily separated by having the body mostly shining, the ventral surface of femora and tibiae with two rows of spines, the rostrum remarkably long, extending until the apex of the last abdominal segment or beyond the abdomen, the tylus longer and apically globose and the head conspicuously longer than wide. On the other genera the body surface are rather dull, the femora and tibiae unarmed, the rostrum shorter, the tylus not globose and the head never conspicuously longer than wide.

In *Tachycolpura* recently revised by Brailovsky et al. (1992) the ventral surface of the femora are armed and the rostrum reaching almost the apex of abdominal sterna VII, but the body is narrowly, moderately elongated, with humeral angles projected into conical tooth, directed upwards and slightly backwards. In *Homalocolpura* the body are oblong-ovate with humeral angles rounded.

Distribution.— Fourteen species are known from Philippine Islands, Sumatra, Borneo, Sulawesi, Kangean Island and Timor.

Biology.— Apparently a very scarce genus restricted to forested areas.

*Homalocolpura aploa* spec.nov.  
(figs. 16, 26-27, 37)

Type material.— Holotype, ♀ (BPBM), Philippine Islands, Albay Province, Mt. Mayon (volc.) 16 km., NW of Lagaspi, 900-1000 m, 7.v.1962, H.M. Torrevillas. Paratypes: 1 ♀ (IBUNAM), Philippine Islands, Luzon, Camarines Sur, Mt Isarog Pili, 600-800 m, 10.iv.1965, H.M. Torrevillas; 1 ♀ (FMNH), Philippine Islands, Mindanao, Davao Province, E slope Mt. McKinley, 3000', viii.1946, H. Hoogstraal.

Description.— Female (holotype). Dorsal colour. Head, anterior lobe of pronotum and scutellum bright to dull red brown with chestnut orange reflections; posterior lobe of pronotum and antennal segments I to III bright chestnut orange; antennal segment IV yellow with its basal third chestnut orange; clavus and corium dull chestnut orange; following areas yellow: apex of scutellum and a small dot near the middle of the apical margin of the corium; hemelytral membrane pale brown with basal angle and anterior margin darker; connexival segments III to VII red brown with posterior margin yellow; abdominal segments red brown with pale orange reflections. Ventral colour. Bright red brown with chestnut orange reflections; following areas yellow: anterior angle of bucculae, rostral segments I to IV, anterior and posterior lobe of metathoracic scent gland and posterior pleural margin of abdominal sternites III to VII; legs bright chestnut orange with following areas yellow with chestnut reflections: trochanters, basal third of mesofemora and metafemora and tarsal segments I to III.

Structure.— Rostrum reaching the apex of the last abdominal sternite; antennal segment II longer than III and both moderately robust; eyes reniform, longer than wide; vertex convex (fig. 16); hemelytral membrane reaching the apex of the last abdominal segment. Genital plates. Plica triangular and raised; gonocoxae I entirely opened. (figs. 26-27).

Measurements female.— Head length: 1.56; width across eyes: 1.32; interocular space: 0.80; interocellar space: 0.42; preocular distance: 1.08; length antennal segments: I, 1.20; II, 1.64; III, 1.28; IV, 1.80. Pronotum: Total length: 1.80; width across frontal angles: 1.40; width across humeral angles: 3.24. Scutellar length: 1.48; width: 1.66. Total body length: 9.71.

Male.— Unknown.

Etymology.— From "aploos" (Greek adjective meaning "simple") refers to the lack of striking characters in this species.

Remarks.— This species is very closely related to *H. sorbax* Bergroth, having the antennal segments I to III and the legs mostly bright red brown to bright chestnut orange. In *H. aploa* spec. nov. the preocular distance is shorter, less than 1.10 mm., the antennal segment II is longer than III, the hemelytral membrane reaching the apex of abdomen and the tibiae is entirely bright chestnut orange. In *H. sorbax*, the preocular distance is longer than 1.20 mm., the antennal segment II is shorter or equal than III, the hemelytral membrane reaching the middle third of abdominal segment VII and the tibiae is yellow and only with basal and apical third bright brown. Apart from

the average dimensions, the scutellum, clavus and corium of *H. aploa* are rather dull and not shining and bright characteristic of *H. sorbax*.

Distribution.— Restricted to Philippine Islands.

*Homalocolpura parrilloi* spec. nov.  
(figs. 3, 13, 22, 30-31, 43)

Type material.— Holotype, ♂ (FMNH), Philippine Islands, Mindanao, Davao Province, Sitio Taglawig Maco, Tagum, in original dipterocarp forest, x.1946, H. Hoogstraal (CNHM-Philippine Zool. Exped. 1946-47). Paratypes: 3 ♀♀, same data as holotype (FMNH, IBUNAM); 1 ♀ (FMNH), Philippine Islands, Mindanao, Davao Province, Todaya, E slope Mt Apo, 2800 ft, xi.1946, H. Hoogstraal (CMNH-Philippine Zool. Exped. 1946-47); 1 ♀ (IBUNAM), Philippine Islands, Mindanao, Davao Province, E slope Mt McKinley, 3300 ft, ix.1946, H. Hoogstraal and F.G. Werner (CMNH-Philippine Zool. Exped. 1946-47); 1 ♀ (BPBM), Philippine Islands, Misamis Or., Dinawihan Gingoog, 26 km, E of Gingoog City, 100-300 m, 18.vii.1965, H.M. Torre Villas.

Description.— Male (holotype). Dorsal colour. Head, anterior lobe of pronotum and scutellum bright red brown; anterolateral margin and posterior lobe of pronotum, clavus and corium bright chestnut orange; antennal segment I bright red brown with its basal third yellow; antennal segments II to IV yellow with apical join of segments II and III and basal third of IV chestnut orange; following areas yellow: apex of scutellum and a small dot near the middle of the apical margin of the corium; hemelytral membrane pale brown, with veins darker and basal angle and anterior margin pale yellow; connexival segments III to VII red brown with posterior half yellow; abdominal segments red brown. Ventral colour. Bright red brown with following areas yellow: anterior angle of bucculae, rostral segments I to IV and posterior pleural margin of abdominal sternites III to VII; anterior and posterior lobe of the metathoracic scent gland dirty ochre; legs yellow with following areas bright red brown to dark chestnut orange: the greater part of coxae, apical third and spines of femora, basal, apical third and spines of tibiae and tarsal segment III.

Structure.— Rostrum extending beyond apex of abdomen; antennal segment II longer than III and both robust (fig. 3); eyes reniform and longer than wide; vertex slightly convex; hemelytral membrane reaching apex of abdomen. Genital capsule. Posteroventral border with a small median plate enclosed by two lateral projections (figs. 22).

Female.— Colouration: similar to male. Bucculae pale chestnut orange with anterior angle pale yellow; anterolateral margins and posterior lobe of pronotum paler; anterolateral margins and posterior angle of prothorax bright chestnut yellow; tarsal segment III pale chestnut orange with yellow reflections; anterior and posterior lobe of the metathoracic scent gland dark orange; connexival segments VIII and IX bright brown with posterior angle dirty yellow; abdominal segments VIII and IX bright red brown; genital plates bright red brown with upper and internal angle of gonocoxae I dirty yellow.

Structure.— Plica triangular and raised; gonocoxae I entirely opened (figs. 30-31).

Measurements.— Male first, then female: head length: 1.76, 1.96; width across eyes: 1.44, 1.60; interocular space: 0.96, 1.06; interocellar space: 0.52, 0.66; preocular distance: 1.24, 1.32; length antennal segments: I, 1.08, 1.28; II, 1.76, 1.96; III, 1.48, 1.68;

IV, 1.70, 1.76. Pronotum: Total length: 1.96, 2.16; width across frontal angles: 1.80, 2.16; width across humeral angles: 3.64, 4.16. Scutellar length: 1.88, 2.04; width: 1.84, 2.00. Total body length: 11.10, 12.90.

Etymology.— Named for Dr Phil Parrillo (FMNH).

Remarks.— *Homalocolpura parrilloi* spec. nov., is distinguished from *H. sorbax* Bergröth the only known previously species described from Philippine Islands by the colour pattern. In *H. parrilloi* the antennal segments II and III and femora are mostly yellow and the hemelytral membrane is pale brown with basal angle and anterior margin pale yellow, whereas in *H. sorbax* the antennal segments II and III and femora are bright chestnut orange to red brown and hemelytral membrane entirely pale brown.

Distribution.— Known only from Philippine Islands.

*Homalocolpura leyteana* spec. nov.  
(figs. 5, 11, 20, 28-29, 41)

Type material.— Holotype, ♀ (AMNH), Philippine Islands, Leyte, Dagami, 14 mi. SW Tacloban, 2-11.viii.1961 (P.I. Natl. Mus. and Am. Mus. Nat. Hist. Exped.). Paratypes: 1♂ + 1♀, same data as holotype, 23.vii.1961 and 17.viii.1961 (AMNH, IBUNAM); 1♀ (AMNH), Philippine Islands, Leyte, Abuyog, 35 mi., S Tacloban, 9.vii.1961 (P.I. Natl. Mus. and Am. Mus. Nat. Hist. Exped.).

Description.— Female (Holotype). Dorsal colour. Head, anterior lobe of pronotum, scutellum, clavus and corium bright to dull orange brown; posterior lobe of pronotum bright chestnut yellow; antennal segment I pale orange with its basal third yellow; antennal segments II to IV yellow, with apical join of segments II and III chestnut orange; following areas yellow: apex of scutellum and a small dot near the middle of the apical margin of the corium; hemelytral membrane pale brown; connexival segments III to VI chestnut orange brown with posterior margin yellow; connexival segment VII chestnut orange brown with posterior angle yellow; abdominal segments orange brown. Ventral colour. Bright orange brown with following areas yellow: anterior angle of bucculae, rostral segments I to IV, anterior and posterior lobe of metathoracic scent gland and posterior pleural margin of abdominal sternites III to VII; legs yellow with following areas bright orange brown: the greater part of coxae, apical third and spines of femora, basal, apical third and spines of tibiae and tarsal segment III.

Structure.— Rostrum extending beyond apex of abdomen; antennal segment II shorter than III and both slender (fig. 5); eyes reniform, longer than wide; vertex slightly convex; hemelytral membrane reaching posterior border of abdominal segment VII. Genital plates. Plica triangular and raised; gonocoxae I entirely opened (figs. 28-29).

Male colouration.— Similar to female. Coxae, trochanters, tibiae and tarsal segments I and II yellow with following areas pale orange brown: a great portion of coxae, basal and apical third of tibiae and tarsal segment III; femora pale orange brown with basal third and irregular reflections through the middle third yellow.

Structure.— Genital capsule. Posteroventral border with a small median plate, enclosed by two lateral expansions (fig. 20)

Measurements.— Male first, then female: head length: 1.88, 1.88; width across

eyes: 1.48, 1.52; interocular space: 0.98, 1.00; interocellar space: 0.56, 0.58; preocular distance: 1.24, 1.28; length antennal segments: I, 1.16, 1.06; II, 1.40, 1.40; III, 1.64, 1.54; IV, 1.76, 1.56. Pronotum: Total length: 1.88, 1.88; width across frontal angles: 1.80, 1.80; width across humeral angles: 3.52, 3.56. Scutellar length: 1.76, 1.88; width: 1.82, 1.88. Total body length: 11.40, 11.42.

Etymology.— Named for the Island of Leyte, Philippine Islands.

Remarks.— Like *H. parrilloi* described in last paragraphs the antennal segments II and III and femora are mostly yellow. In *H. leyteana* spec. nov., the antennal segment II is shorter than III and both slender (fig. 5) and the hemelytral membrane is entirely pale brown. In *H. parrilloi* the antennal segment II is longer than III and both robust (fig. 3) and the hemelytral membrane is pale brown with basal angle and anterior margin pale yellow.

Distribution.— Known only from Philippine Islands.

*Homalocolpura sabah* spec. nov.  
(figs. 10, 15, 32-33, 45)

Type material.— Holotype, ♀ (RMNH), Malaysia, SW Sabah, nr. Long Pa Sia (West), 1010 m, 25.xi-8.xii.1987, C. van Achterberg (Mal. trap. lb).

Description.— Female (holotype). Dorsal colour. Head, pronotum and scutellum bright to dull black with dark chestnut orange reflections on posterior lobe of pronotum; antennal segments I to III bright orange brown and IV yellow with its basal third bright orange brown; clavus and corium dark chestnut orange with apical margin black; following areas yellow to dirty yellow: superior area of the postocular tubercle, apex of scutellum and a elongate dot near the middle of the apical margin of the corium; hemelytral membrane yellow with veins pale brown; connexival segments III to IX black, with posterior margin yellow; abdominal segments black and most of the surface with red brown reflections. Ventral colour. Black with dark orange reflections; following areas yellow to dirty yellow: anterior angle and superior area of bucculae, rostral segments I to IV, posterior pleural margin of abdominal sternites III to VII, a line of irregular spots running on the middle of abdominal sternites III to VI and posterior edge of sternites V-VI; gonocoxae I bright dark chestnut orange; paratergite VIII and XI black with posterior margin yellow; legs bright orange brown with following areas yellow: trochanters, basal third and a incomplete subdistal ring on femora, a incomplete subbasal ring on tibiae and tarsal segments I and II; tarsal segment III pale chestnut orange with yellow reflections; anterior and posterior lobe of metathoracic scent gland bright black with the area neighbouring the lobes dirty orange.

Structure.— Rostrum reaching apex of abdomen; antennal segment II longer than III and both slender; eyes small and globular; vertex moderately convex (fig. 15); hemelytral membrane extending beyond apex of abdomen. Genital plates. Plica elongate, slightly raised; gonocoxae I with dorsal third closed and ventral third opened (figs. 32-33).

Measurements.— Head length: 1.52; width across eyes: 1.20; interocular space: 0.78; interocellar space: 0.38; preocular distance: 0.98; length antennal segments: I, 0.76; II, 1.20; III, 0.94; IV, 1.44. Pronotum: Total length: 1.60; width across frontal ang-



les: 1.36; width across humeral angles: 2.24. Scutellar length: 1.16; width: 1.36. Total body length: 8.45.

Male.— Unknown.

Etymology.— Named for its occurrence in Sabah State, East Malaysia; a noun in apposition.

Remarks.— This handsome species is easily recognisable due to the smaller and globular eyes (fig. 15). On the other known species the eyes are reniform and longer than wide (fig. 16). Additional characters to recognized *H. sabah* spec. nov., are: superior area of the postocular tubercle yellow, hemelytral membrane entirely yellow with veins pale brown, anterior and posterior lobes of the metathoracic scent glands bright black and the yellow rings of femora and tibiae incomplete. The plica elongate and slightly raised and the gonocoxae I with dorsal third closed and ventral third opened (fig. 32) are other good character to separate this species, because on the other taxa the plica is triangular and raised and gonococae I entirely opened (fig. 30).

Distribution.— Restricted to Sabah State.

*Homalocolpura sarawak* spec. nov.  
(figs. 9, 23, 34-35, 44)

Type material.— Holotype, ♂ (AMNH), Sarawak, Kuching, collected 4.iv.1978, K. Krishna. Paratypes: 6 ♀, same data as holotype (AMNH, IBUNAM, RMNH).

Description.— Male (holotype). Dorsal colour. Head, antennal segments I to III and anterior lobe of pronotum bright red brown; antennal segment IV yellow with its basal third red brown and the apex pale brown; posterior lobe of pronotum, scutellum, clavus and corium dull chestnut orange brown; following areas yellow: apex of scutellum and a small dot near the middle of the apical margin of the corium; hemelytral membrane ambarine, with basal angle and anterior margin dark brown; connexival segments III to VI black, with red brown reflections and with posterior margin yellow; connexival segment VII entirely black with red brown reflections; abdominal segments red brown. Ventral colour. Bright red brown with following areas yellow: anterior angle of bucculae, rostral segments I and II, posterior pleural margin of abdominal sternites III to VI and irregular spots scattered on abdominal sternites IV to VI; rostral segments III and IV and posterior angle of prothorax bright chestnut orange; anterior and posterior lobe of metathoracic scent gland dull orange; legs bright red brown to bright chestnut orange with following areas yellow: trochanters, basal third of femora and tarsal segments I and II.

Structure.— Rostrum reaching the middle third of abdominal sternite VII; antennal segment II longer than III and both moderately slender; eyes reniform, longer than wide; vertex convex; hemelytral membrane reaching posterior third of abdominal sternite VII. Genital capsule. Posteroventral border with small median plate, enclosed by two lateral projections (fig. 23).

Female colouration.— Similar to male. Connexival segment VII with posterior angle yellow; connexival segments VIII and IX, abdominal segments VIII and IX and genital plates bright red brown to bright chestnut orange; posterior pleural margin of abdominal sternites III to VII yellow; tarsal segment III yellow with bright orange hazel reflections.

Structure.— Plica triangular and raised; gonocoxae I entirely opened (figs. 34-35).

Measurements.— male first, then female: head length: 1.40, 1.52; width across eyes: 1.28, 1.40; interocular space: 0.84, 0.88; interocellar space: 0.46, 0.46; preocular distance: 0.92, 0.94; length antennal segments: I, 0.88, 0.88; II, 1.32, 1.36; III, 0.92, 0.90; IV, 1.44, 1.40, Pronotum: Total length: 1.80, 1.88; width across frontal angles: 1.56, 1.44; width across humeral angles: 3.00, 3.28. Scutellar length: 1.48, 1.62; width: 1.58, 1.68. Total body length: 8.80, 9.40.

Etymology.— Named for its occurrence in Sarawak State, East Malaysia; a noun in apposition.

Remarks.— Similar to *H. borneana* Blöte (also from Borneo) is, however bigger (greater than 10.20 mm) with the antennal segment II shorter than III and posterior lobe of pronotum shining. In *H. sarawak* spec. nov., the antennal segment II is conspicuously longer than III and posterior lobe rather dull.

Distribution.— Restricted to Sarawak State.

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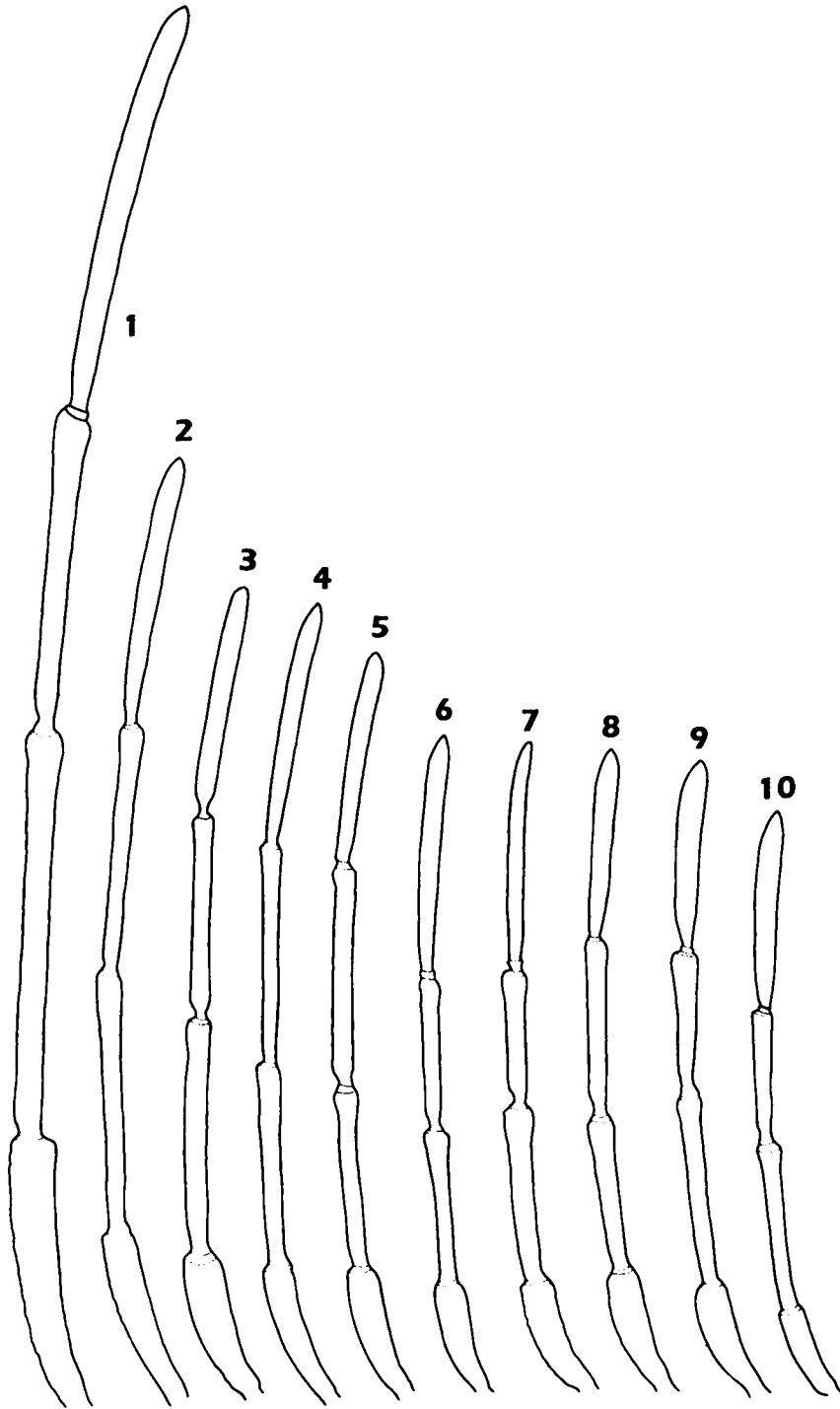
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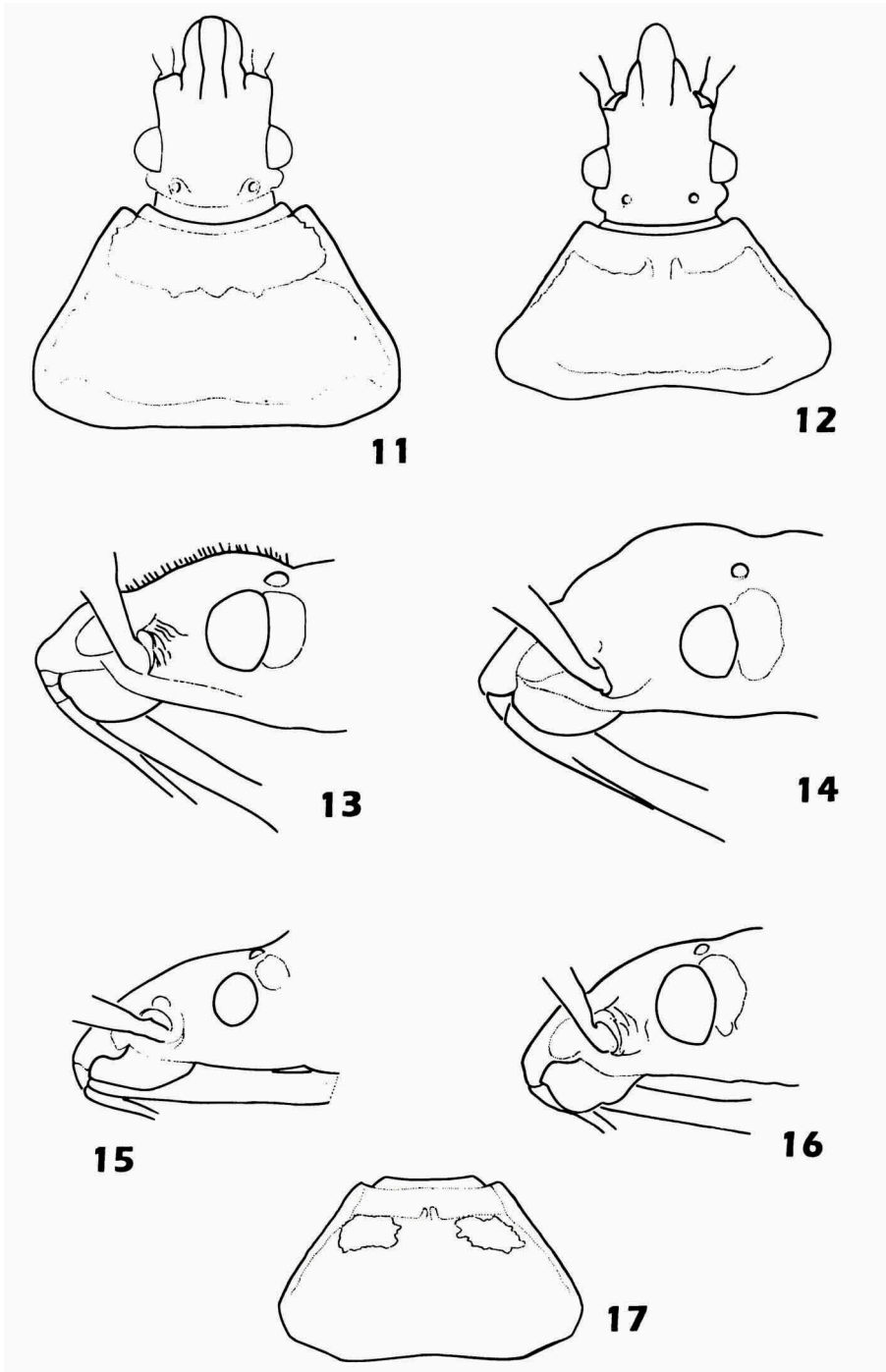
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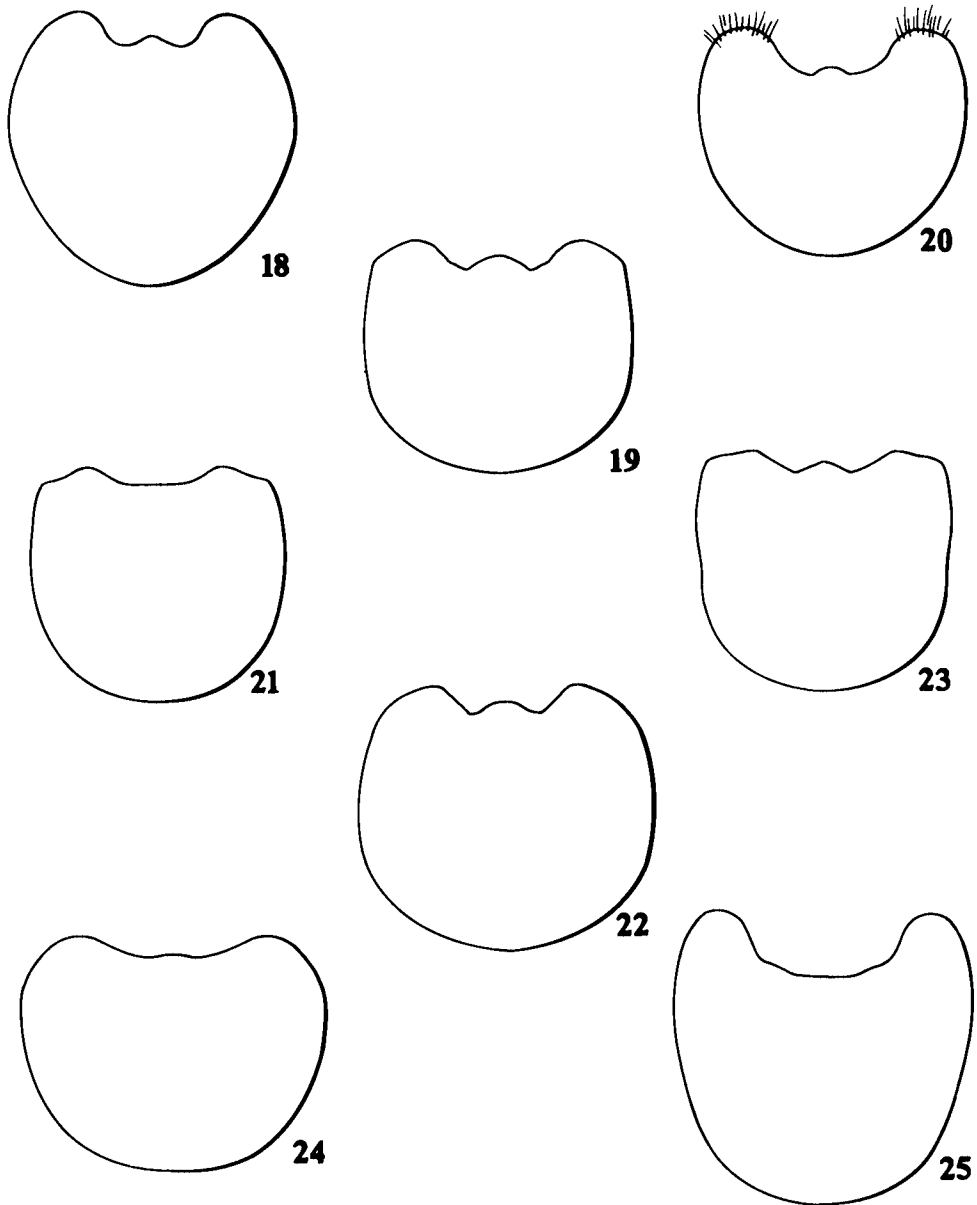
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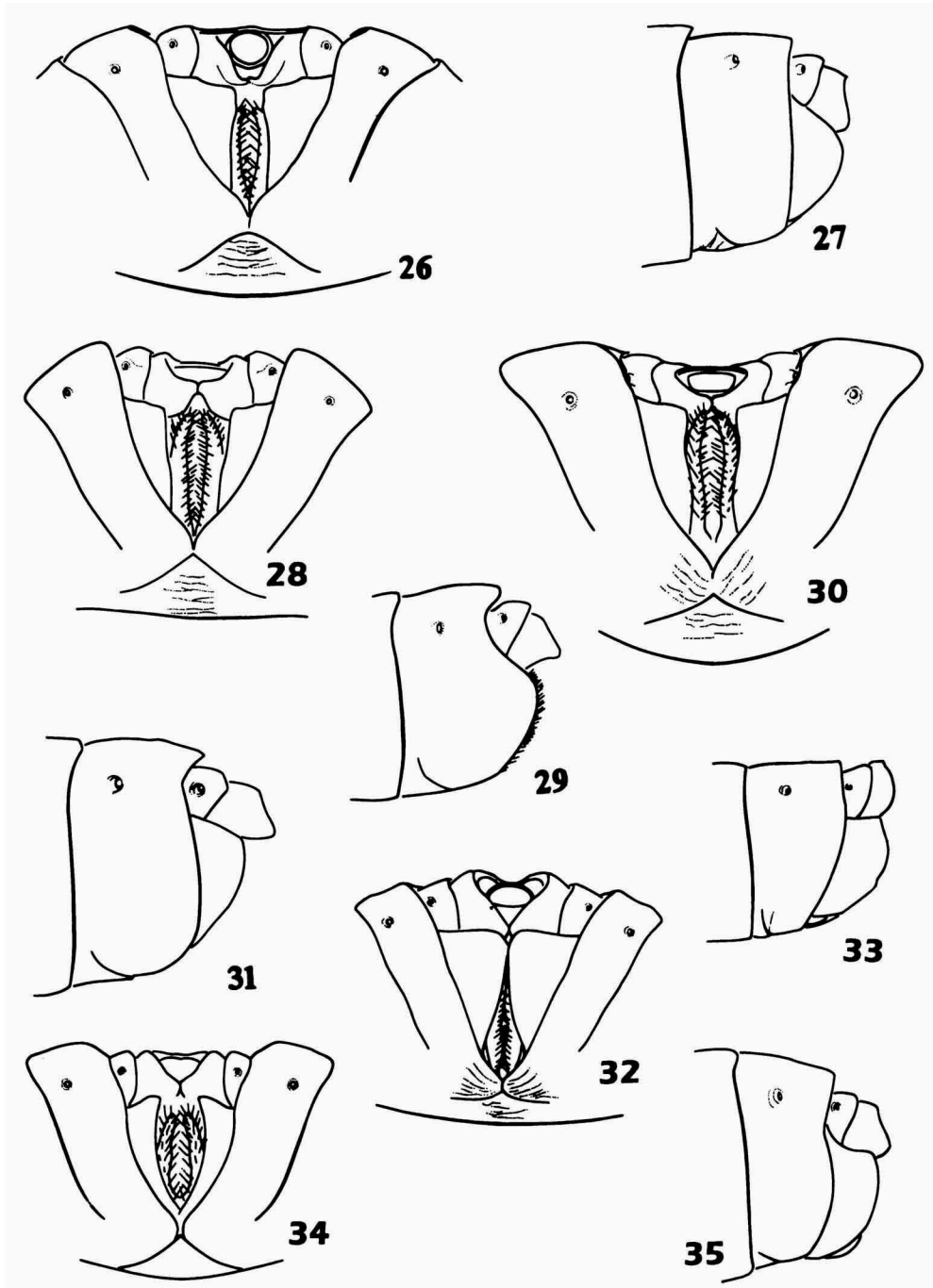
Figs. 1-10. Antennal segments of *Homalocolpura* spp. 1, *H. vorax* Blöte. 2, *H. bibax* Breddin. 3, *H. parrilloi* spec. nov. 4, *H. sorbax* Bergroth. 5, *H. leyteana* spec. nov. 6, *H. subopaca* Blöte. 7, *H. nitida* Blöte. 8, *H. annulata* Blöte. 9, *H. sarawak* spec. nov. 10, *H. sabah* spec. nov.



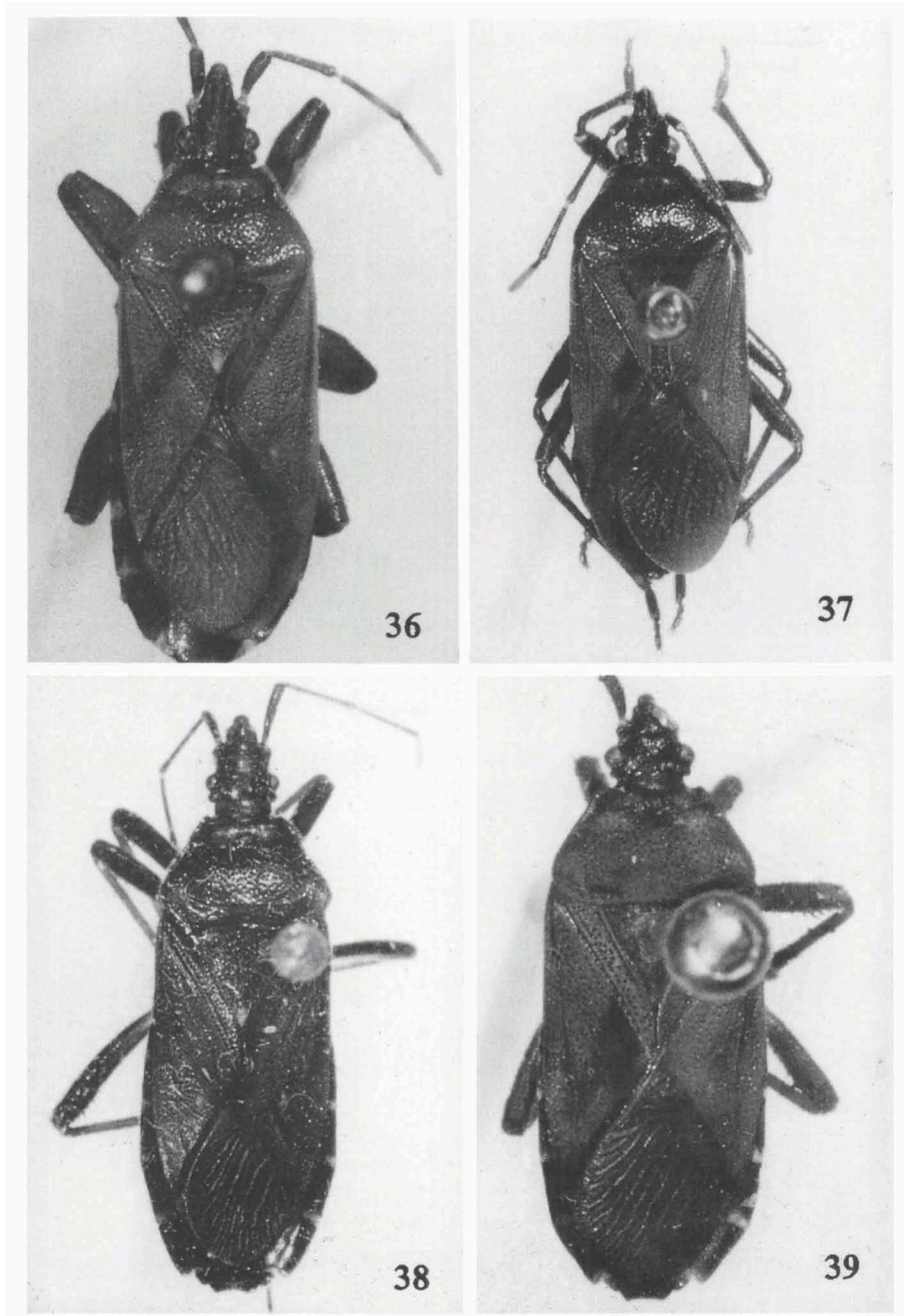
Figs. 11-17. *Homalocolpura* spp. Figs. 11-12, head and pronotum in dorsal view. 11, *H. leyteana* spec. nov. 12, *H. sorbax* Bergroth. Figs. 13-16, head in lateral view. 13, *H. parrilloi* spec. nov. 14, *H. bibax* Breddin. 15, *H. sabah* spec. nov. 16, *H. aploa* spec. nov. 17, pronotum view of *H. binotata* Blöte.



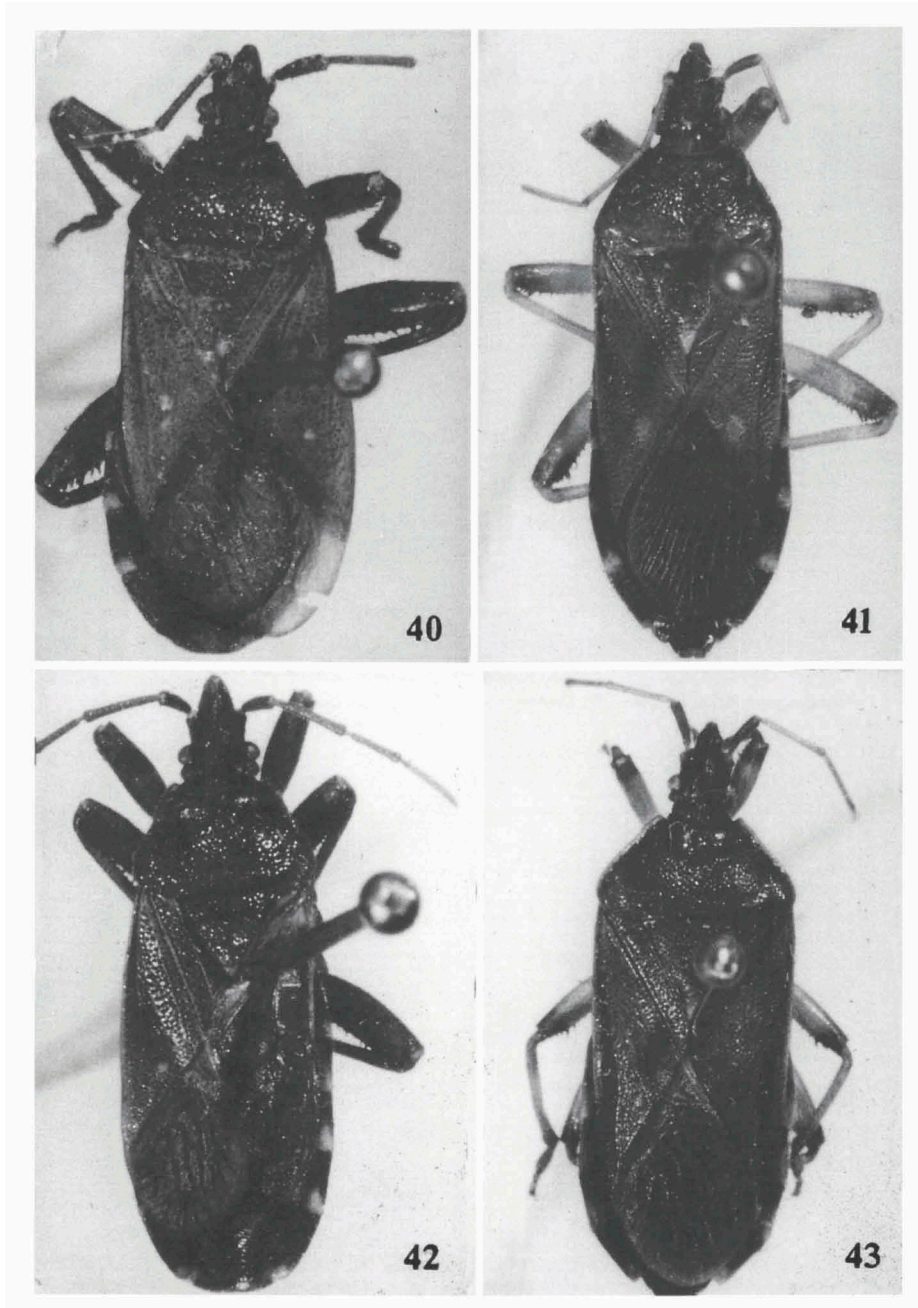
Figs. 18-25. Frontal view of the male genital capsule of *Homalocolpura* spp. 18, *H. annulata* Blöte. 19, *H. borneana* Blöte. 20, *H. leyteana* spec. nov. 21, *H. nitida* Blöte. 22, *H. parrilloi* spec. nov. 23, *H. sarawak* spec. nov. 24, *H. subopaca* Blöte. 25, *H. sorbax* Bergroth.



Figs. 26-35. Female genital plates of *Homalocolpura* spp. Figs. 26-27, *H. aploa* spec. nov. 26, frontal view, 27, lateral view. Figs. 28-29, *H. leyteana* spec. nov. 28, frontal view, 29, lateral view. Figs. 30-31, *H. parilloi* spec. nov. 30, frontal view, 31, lateral view. Figs. 32-33, *H. sarawak* spec. nov. 32, frontal view, 33, lateral view. Figs. 34-35, *H. sarawak* spec. nov. 34, frontal view, 35, lateral view.

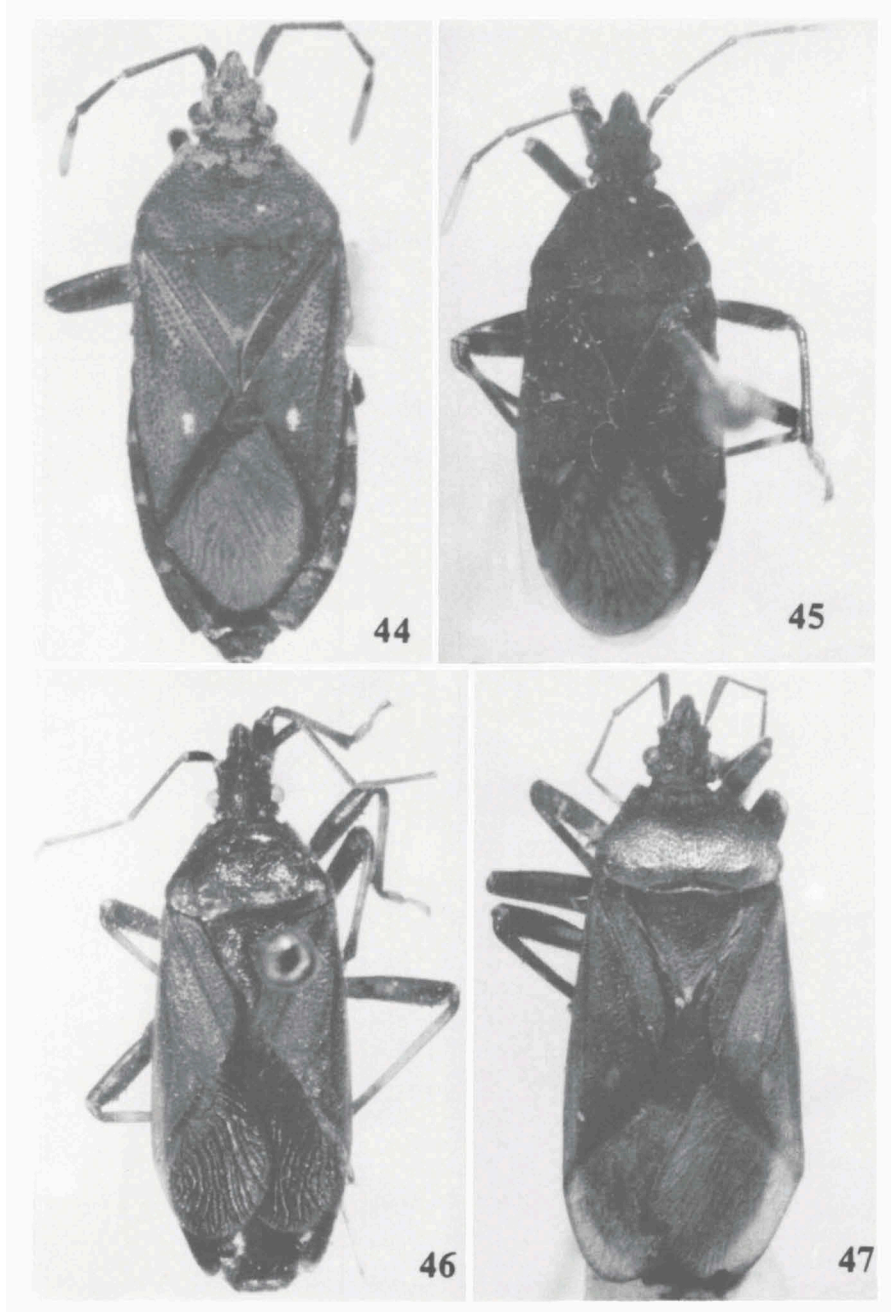


Figs. 36-39. Dorsal view of *Homalocolpura* spp. 36, *H. annulata* Blöte. 37, *H. aploa* spec. nov. 38, *H. bibax* Breddin. 39, *H. binotata* Blöte.

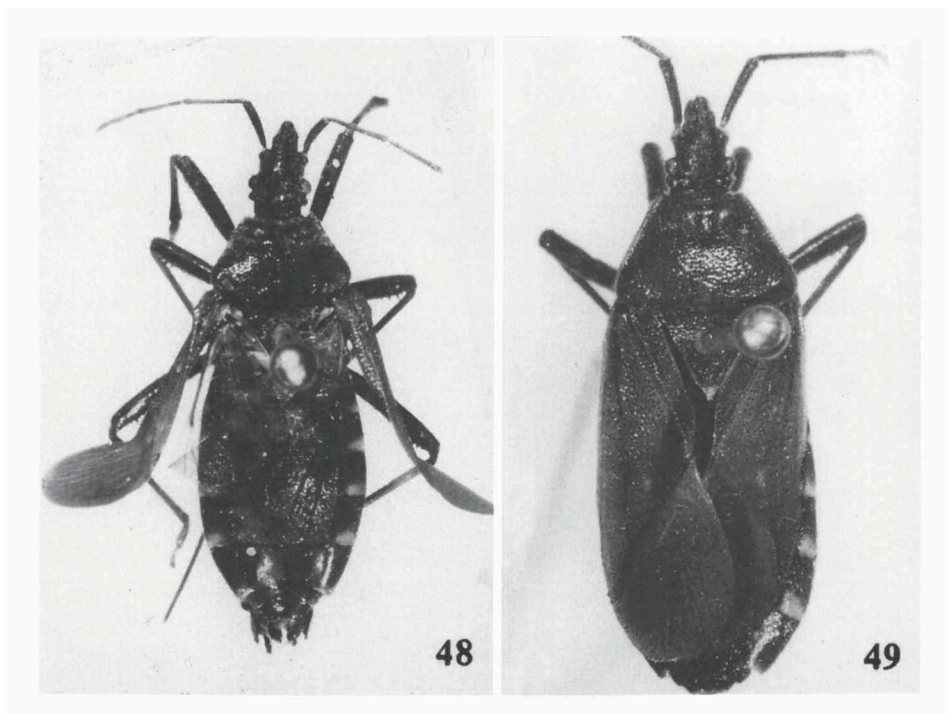


Figs. 40-43. Dorsal view of *Homalocolpura* spp. 40, *H. borneana* Blöte. 41, *H. leyteana* spec. nov. 42, *H. nitida* Blöte. 43, *H. parrilloi* spec. nov.





Figs. 44-47. Dorsal view of *Homalocolpura* spp. 44, *H. sarawak* spec. nov. 45, *H. sabah* spec. nov. 46, *H. sorbax* Bergroth. 47, *H. subopaca* Blöte.



Figs. 48-49. Dorsal view of *Homalocolpura* spp. 48, *H. sugax* Breddin. 49, *H. vorax* Blöte.