

GENERIC ASSIGNMENT AND SYNONYMY OF SOME INDO-WEST PACIFIC
APHROPHORIDAE (HEMIPTERA: CERCOPOIDEA) IN THE NATURAL
HISTORY MUSEUM, LONDON

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The type specimens representing most of the Indo-West Pacific species of Aphrophoridae described by Walker, Distant, China, and Lallemand in the Natural History Museum, London, were examined. As a result, four new generic synonymies, eleven new specific synonymies, thirty-seven new combinations, and one reinstated combination are proposed below.

Abdas minutus (Lallemand),
NEW COMBINATION

Peuceptyelus minutus Lallemand, 1927b: 101. S. INDIA.

Abdas Distant, 1916, previously known only from the type species *A. nuncupatus* Distant, 1916, occurs in south India. It is characterized by small size (5.5-6.0 mm), dorsum somewhat smooth and polish and densely and finely punctate, head elongate (slightly shorter than pronotum), and male genital styles broad and strongly forked apically. Examination of the female holotype of *Peuceptyelus minutus* Lallemand shows that it is an *Abdas* species.

Amarusa majuscula (Distant),
NEW COMBINATION

Ptyelus majusculus Distant, 1908g: 90. ?INDIA.

Amarusa Walker, 1857, is a genus of large aphrophorids with seven species known from northern Borneo, Philippines, Indonesia, New Guinea, Solomon Is., New Hebrides, eastern Australia and south Japan (Okinawa). Members of the genus are diagnosed by their large size (length 12-19 mm), elongate, strongly pubescent, predominantly brown, and somewhat robust habitus; head and rostrum short, tylus small; ocelli closer to eyes than to each other; pronotum strongly convex medially and posteriorly; male genital styles with apex laminatedly forked; and aedeagal shaft with apex expanded, curved posteriorly and usually armed with small teeth on hind edge.

Examination of the female holotype confirms that *majusculus* is a member of *Amarusa*. The holotype of *majusculus*, bearing a locality label 'Assam? Margharata', supposedly from NE India, was apparently mislabeled. Until now, no authentic *Amarusa* species have been recorded from the Indian subcontinent or from continental Southeast Asia.

Clovia affinis (Distant),
NEW COMBINATION

Ptyelus affinis Distant, 1908g: 88. INDIA, BURMA.

Ptyelus LePeletier & Serville, 1825, is an Afro-tropical genus of large aphrophorids. Unfortunately many Asian *Clovia* species were previously described under *Ptyelus*. Members of *Clovia* can be recognized by their relatively smooth dorsum, elongate head and tylus, head, pronotum and postclypeus lacking median carina, head, pronotum and scutellum usually with longitudinal yellow striae, head and thorax beneath laterally usually decorated with a yellow, inverted V-shaped fascia extending backward from apex of face, and aedeagal shaft usually vertical with spinous processes at apex.

Clovia exclamans (Walker),
REINSTATED COMBINATION

Perinoia exclamans Walker, 1857b: 166. BORNEO, SUMATRA.

Originally described in *Perinoia*, *exclamans* was later correctly transferred to *Clovia* by several students (e.g., Kirby 1891a; Lallemand 1932b). Nevertheless, this species was included in *Perinoia* in Metcalf's (1962) world catalogue of the Aphrophoridae. My examination of the female holotype of *exclamans* showed that it belongs to *Clovia*.

Clovia punctifascia (Walker),
NEW COMBINATION

Cercopis punctifascia Walker, 1870b: 288. INDONESIA (BATJAN).

Phymatostetha punctifascia (Walker); Butler, 1874b: 266.

Originally described in *Cercopis*, *punctifascia* was transferred to *Phymatostetha* in Cercopidae by Butler (1874b) with no justification. This was accepted by Metcalf (1961) in his world catalogue of Cercopidae. Distant (1900a: 686) and Lallemand & Synave (1961: 9) stated that *punctifascia* belongs to Aphrophorinae (= Aphrophoridae in this paper), but they gave no generic placement. I found that *punctifascia* is a member of the Aphrophoridae and tentatively place the species in the genus *Clovia*.

Clovia sarawakana Lallemand

Clovia sarawakana Lallemand, 1939d: 57. SARAWAK; S CHINA, SE ASIA.

Nagaclovia formosana Matsumura, 1940a: 48, pl. 3, fig. 5. NEW SYNONYMY.

Clovia sulcata (Distant),
NEW COMBINATION

Ptyelus sulcatus Distant, 1908g: 90. NEPAL.

Interocrea Walker

Interocrea Walker, 1870b: 328. Type species: *I. nigripes* Walker, 1870b, by monotypy.

Pareurycercopis Lallemand & Synave, 1953b: 197. Type species: *P. boharti* Lallemand & Synave, 1953b, by original designation. NEW SYNONYMY.

Species of *Interocrea* occur in the Pacific islands and northeastern Australia and are characterized by their small size, elongate head and tylus, and the pronotum and forewings usually covered with numerous small brown spots. A direct comparison of type material of the type species of *Interocrea* and *Pareurycercopis* shows that the two genera are congeneric.

Interocrea boharti (Lallemand & Synave),
NEW COMBINATION

Pareurycercopis boharti Lallemand & Synave, 1953b: 197, figs. 13-15. NEW GUINEA, PHILIPPINES.

Jembra brevistriga (Walker),
NEW COMBINATION

Ptyelus brevistriga Walker, 1858: 348. S. CHINA.

Cercopis (Aphrophora) nigronevosa Lallemand, 1924: 296. NEW SYNONYMY.

Jembra pallida Metcalf & Horton, 1934: 408, pl. 39, fig. 45, pl. 43, figs. 136, 140. [Synonymised with *J. nigronevosa* (Lallemand) by Liang, 1999: 343.] NEW SYNONYMY.

The genus *Jembra* was recently revised by Liang (1999). *J. brevistriga* is a common and widespread species in south China.

Liorhina bifasciata (Lallemand),
NEW COMBINATION

Clovia bifasciata Lallemand, 1940b: 144. INDONESIA (LARAT IS.).

Liorhina Stål, 1870, is a genus of small to moderately large and somewhat robust aphrophorids,

generally brown or blackish brown with yellow striae or markings which are distributed mainly in the Pacific islands. The genus *Clovia* Stål, 1866, has been confused with *Liorhina* and many species have been wrongly assigned to that genus. Externally *Liorhina* is very similar to *Clovia* but can be distinguished from the latter by the head relatively short, vertex and pronotum usually with transverse yellow striae, male pygofer narrow and elongate, and aedeagal shaft directed anterodorsally, usually lacking spinous processes at apex.

Liorhina borneensis (Lallemand),
NEW COMBINATION

Clovia borneensis Lallemand, 1932c: 175. N. BORNEO.

Liorhina chinai (Lallemand),
NEW COMBINATION

Clovia chinai Lallemand, 1927b: 103. PHILIPPINES (LUZON).

Liorhina concolor (Lallemand),
NEW COMBINATION

Clovia vittifrons var. *b* Stål, 1870c: 725. PHILIPPINES.

Clovia vittifrons concolor Lallemand, 1912a: 45. Replacement name for *C. vittifrons* var. *b* Stål.

Clovia concolor Lallemand; Lallemand, 1940b: 138.

Liorhina deflexa (Walker),
NEW COMBINATION

Perinoia deflexa Walker, 1870b: 295. MYSOL, NEW GUINEA.

Liorhina divergens (Lallemand),
NEW COMBINATION

Clovia divergens Lallemand, 1940b: 145. NEW GUINEA.

Liorhina fakarensis (Lallemand),
NEW COMBINATION

Clovia fakarensis Lallemand, 1940b: 146. NEW GUINEA.

Liorhina furcata (Walker),
NEW COMBINATION

Perinoia furcata Walker, 1870b: 297. INDONESIA (SULA IS., CERAM).

Liorhina hieroglyphica (Lallemand & Synave),
NEW COMBINATION

Clovia hieroglyphica Lallemand & Synave, 1953a: 234, figs. 3a-d. INDONESIA (SUMBA).

Liorhina humboldtiana (Distant),
NEW COMBINATION

Clovia humboldtiana Distant, 1909j: 175, pl. 10, figs. 7, 7a. NEW GUINEA.

Liorhina kinana (Lallemand),
NEW COMBINATION

Clovia kinana Lallemand, 1932b: 171. BORNEO.

Liorhina laratensis (Lallemand),
NEW COMBINATION

Clovia laratensis Lallemand, 1940b: 143. INDONESIA (LARAT IS.).

Liorhina lineolata (Lallemand),
NEW COMBINATION

Clovia lineolata Lallemand, 1922a: 273. PHILIPPINES (LUZON).

Liorhina matemana (Lallemand & Synave),
NEW COMBINATION

Clovia matemana Lallemand & Synave, 1955b: 4, figs. 4-5. SOLOMON ISLANDS.

Liorhina muiri (Lallemand),
NEW COMBINATION

Clovia muiri Lallemand, 1939e: 106. JAVA.

Liorhina nigra (Lallemand & Synave),
NEW COMBINATION

Iophosa nigra Lallemand & Synave, 1953b: 196, figs. 10-12. NEW GUINEA, SOLOMON ISLANDS.

Liorhina plena (Walker),
NEW COMBINATION

Perinoia plena Walker, 1870b: 298. INDONESIA (SULA IS.).

Liorhina quinquesignata (Lallemand),
NEW COMBINATION

Clovia quinquesignata Lallemand, 1924b: 204. NEW GUINEA.

Liorhina rotundata (Lallemand),
NEW COMBINATION

Clovia rotundata Lallemand, 1940b: 140. JAVA.

Liorhina scutellata (Lallemand),
NEW COMBINATION

Clovia scutellata Lallemand, 1940b: 144. NEW GUINEA.

Liorhina soembana (Lallemand),
NEW COMBINATION

Clovia soembana Lallemand, 1940b: 141. INDONESIA (SOEMBA IS.).

Liorhina subfurcata (Walker),
NEW COMBINATION

Perinoia subfurcata Walker, 1870b: 298. INDONESIA.

Liorhina subjuncta (Walker),
NEW COMBINATION

Perinoia subjuncta Walker, 1870b: 295. NEW GUINEA, INDONESIA, PHILIPPINES.

Clovia geniculata Lallemand, 1924b: 205. NEW SYNONYMY.

Liorhina tenggerana (Lallemand),
NEW COMBINATION

Clovia tenggerana Lallemand, 1940b: 139. JAVA.

Liorhina transversa (Walker),
NEW COMBINATION

Perinoia transversa Walker, 1870b: 299. NEW GUINEA, INDONESIA.

Peuceptyelus sigillifera (Walker)

Aphrophora sigillifera Walker, 1851b: 700. N. INDIA, S. ASIA.

Jembrana bipartita Distant, 1916a: 192. NEW SYNONYMY.

Jembrana costalis Distant, 1916a: 192. NEW SYNONYMY.

Peuceptyelus wagneri Lallemand & Synave, 1953a: 236, fig. 4. NEW SYNONYMY.

Widespread from India to south China and southeastern Asia, this species is highly variable in color and size.

Philagra Stål

Chalepus Walker, 1851b: 731. Type species: *C. hastatus* Walker, 1851b, by subsequent designation of Distant, 1908g: 107. (preoccupied).

Philagra Stål, 1863c: 593. Type species: *P. douglasi* Stål, 1863c, by subsequent designation of Metcalf & Horton, 1934: 400.

Philagrina Lallemand, 1946a: 193. Type species: *P. espadon* Lallemand, 1946, by original designation. NEW SYNONYMY.

The Indo-Australian *Philagra* is a very distinctive genus and can be easily recognized by its

head conically produced in front of the eyes into a cephalic process as long as or longer than the pronotum and scutellum combined.

Philagra espadon (Lallemand),
NEW COMBINATION

Philagrina espadon Lallemand, 1946a: 193. INDONESIA (ROON IS.).

Externally this species is very similar to *P. douglasi* Stål from Indonesia (Batjan, Halmahera).

Philagra recurva (Lallemand),
NEW COMBINATION

Philagrina recurva Lallemand, 1946a: 194. NEW BRITAIN.

Externally this species is similar to *P. scotti* Stål from Indonesia (Halmahera, Moluccas).

Poophilus costalis (Walker)

Ptyelus costalis Walker, 1851b: 707. Widespread in AFRICA and ASIA.

Ptyelus jayakari Distant, 1916a: 187. NEW SYNONYMY.

Poophilus Stål, 1866, is an Afro-Asian genus and is diagnosed by hind tarsomeres I and II with long, dense hairs ventrally, and aedeagal shaft usually with broad apical processes. The examination of the holotypes of *Ptyelus costalis*, *P. jayakari*, *P. inconspicuus* and *P. mahei* shows that the former two species are conspecific and that the latter two species are both members of *Poophilus*.

Poophilus inconspicuus (Distant),
NEW COMBINATION

Ptyelus inconspicuus Distant, 1908g: 90. S. INDIA.

Poophilus mahei (Distant),
NEW COMBINATION

Ptyelus mahei Distant, 1909h: 45, pl. 4, figs. 14, 14a. INDIA (MAHE IS.)

Sinophora Melichar

Sinophora Melichar, 1902c: 113. Type species: *S. maculosa* Melichar, 1902c, by monotypy.

Pentacantha Lallemand, 1922b: 64. Type species: *P. brunnea* Lallemand, 1922b, by original designation. NEW SYNONYMY.

Sinophora species can be recognized most easily by their hind tibiae which are armed with 3-6 lateral spurs and the structures of the male genitalia, especially the very small subgenital plates and the large genital styles. Examination of the

holotype of *Pentacantha brunnea* shows that it is clearly a *Sinophora* species.

Yunnan China

Yunnan China, 1925: 482. Type species: *Y. vera* China, 1925, by original designation.

Lepyropsis Metcalf & Horton, 1934: 416. Type species: *L. bipunctata* Metcalf & Horton, 1934, by original designation. NEW SYNONYMY.

The direct comparison of the holotypes of *Y. vera* China and *L. bipunctata* Metcalf & Horton (National Museum of Natural History, Washington, D.C.) shows that the two species are the same, resulting in the generic synonym of *Lepyropsis* with *Yunnanana*.

Yunnanana carixia (Walker),
NEW COMBINATION

Aphrophora carixia Walker, 1851b: 701. SW CHINA. [Incorrectly synonymised with *Peuceptyelus coriaceus* (Fallén) by Stål, 1862b: 493.]

Peuceptyelus dubiosus Melichar, 1902: 111. NEW SYNONYMY.

Yunnanana vera China, 1925: 482, figs. 4A-B. NEW SYNONYMY.

Lepyropsis bipunctata Metcalf & Horton, 1934: 417, pl. 37, figs. 2, 4, 11, 12. NEW SYNONYMY.

Known from Yunnan and Sichuan of southwestern China, this species was inadvertently described as new several times by different workers.

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SUMMARY

Taxonomic changes affecting the Oriental Aphrophoridae are proposed to stabilize the nomenclature. Four new generic synonymies, eleven new specific synonymies, thirty-seven new combinations and one reinstated combination are proposed.

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