

Review of the Asian species of *Chyliza* Fallén (Diptera, Psilidae)Обзор азиатских видов рода *Chyliza* Fallén (Diptera, Psilidae)

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КЛЮЧЕВЫЕ СЛОВА: Psilidae, систематика, таблица для определения азиатских видов, новые виды, восточная палеарктика и ориентальная область.

ABSTRACT: Asian fauna of *Chyliza* contains 61 species including new. The following 23 species are described: *Ch. ammoni* (India), *Ch. angustifrons* (India), *Ch. caudata* (Java), *Ch. callosa* (Sarawak), *Ch. coxachaeta* (Java), *Ch. cryptica* (India), *Ch. freyi* (Burma), *Ch. inopinata* (China), *Ch. javana* (Java), *Ch. kaplanae* (Thailand), *Ch. maculifrons* (Borneo), *Ch. maculipleura* (Nepal), *Ch. oreophila* (China), *Ch. palpibasis* (India), *Ch. panfilovi* (China), *Ch. pictipennis* (Java), *Ch. prominens* (Malaysia), *Ch. pseudomunda* (Sri Lanka), *Ch. sasophila* (Sakhalin, Kuriles), *Ch. sauteri* (Taiwan), *Ch. sergii* (Viet Nam), *Ch. stigmatica* (India), *Ch. trilineata* (India) spp.n. *Chyliza nigriapex* Frey, 1955 is a junior synonym of *Elassogaster anteapicalis* Hendel, 1914 (Platystomatidae). The key to the Asian *Chyliza* is given.

РЕЗЮМЕ: Азиатская фауна *Chyliza* включает 61 вид. В работе описаны следующие 23 вида: *Ch. ammoni* (Индия), *Ch. angustifrons* (Индия), *Ch. caudata* (Ява), *Ch. callosa* (Саравак), *Ch. coxachaeta* (Ява), *Ch. cryptica* (Индия), *Ch. freyi* (Бирма), *Ch. inopinata* (Китай), *Ch. javana* (Ява), *Ch. kaplanae* (Тайланд), *Ch. maculifrons* (Борнео), *Ch. maculipleura* (Непал), *Ch. oreophila* (Китай), *Ch. palpibasis* (Индия), *Ch. panfilovi* (Китай), *Ch. pictipennis* (Ява), *Ch. prominens* (Малайзия), *Ch. pseudomunda* (Шри Ланка), *Ch. sasophila* (Сахалин, Курильские о-ва), *Ch. sauteri* (Тайвань), *Ch. sergii* (Вьетнам), *Ch. stigmatica* (Индия), *Ch. trilineata* (Индия). *Chyliza nigriapex* Frey, 1955 является младшим синонимом *Elassogaster anteapicalis* Hendel, 1914 (Platystomatidae). Дана таблица для определения азиатских видов *Chyliza*.

plated as a review only of the Oriental species. It soon became clear that many East Palaearctic species are of Oriental origin and have their closest fellow species there. For lack of data on China it is not known whether certain species occur in only the one area or in both. As a result it is impossible to separate keys to East Palaearctic and Oriental species and to avoid incidentally mistakes in identification of the close species from these areas. This was, in fact, one of the principal reasons why the present study was extended to include together with the Oriental as well as the East Palaearctic fauna. Major revisionary post-war works and keys on the Asian fauna include the followings: Frey, 1955; Iwasa, 1989; Iwasa, Kozánek, 1995; Shatalkin, 1989; Wang, 1995; Yang, Wang, 1987; Yang, Wang, 1988.

**Systematic notes.** The genus *Chyliza* Fallén, 1820 contains 107 species including those described below and the two undescribed species from Australia. It has a world-wide distribution with most species in Afrotropical (27: many African species which apparently are undescribed have been examined during the course of present study so that the above figure has little meaning) and Oriental (36) regions, as distinct from *Psila* s.l. being mainly Holarctic. 26 species are known from Palaearctic, all of them except for *Ch. extenuata* Rd. occur in Far East of Russia, China, and Japan. Europe exhibits a rather depauperate fauna with regard to this genus. Soós [1984] reported only 6 European species one of which, *Ch. gracilis* Loew, probably does not belong to this genus (see Nomenclatural notes).

*Chyliza* is a distinct monophyletic genus, based on an unique combination of characters: enlarged (callus-like) anatergal area of laterotergite, concave occiput, face nearly perpendicular, not retreating, head not triangular in profile, as a rule 3 pairs of scutellar bristles, developed postcoxal bridge, anal cell shorter than 2nd basal, surstyli present and parameres absent (except for the *Chyliza cylindrica* group). It occupies the detached taxonomic status and

## Introduction

The present review is part of an ongoing series of papers on the family Psilidae. The paper was contem-

of the hind inner angle of eyes and from third species by the spotted face and by the absence of two spinules on the fore trochanter. *Ch. orientalis* and the following species, *Ch. palpibasis* sp.n., are undoubtedly closely allied and can be said to form a species group as evidenced particularly by the very similar male genitalia which provide excellent character complex for distinguishing these two species from all other species with which they are externally similar.

*Chyliza palpibasis* Shatalkin, sp.n.

Fig. 30.

MATERIAL. Holotype: ♂, India, Meghalaya, Nongpoh Forest; 25-28.IV.1980 (Freidberg) (USNM). Paratypes: ♂, ♀, same locality as holotype; 1 ♂, 2 ♀♀, S.India, Yercaud, Shevaroy Hills, 4500 m, II.1955 (P.S.Nathan) (USNM).

DESCRIPTION. MALE. Head yellow. Ocellar triangle black, frontal triangle brownish. Upper occiput with black spot below posterior orbits and vertex. Face yellow or (paratype from Yercaud) with black spot. Antenna yellow; its first segment entirely, second one on each side dark brown; 3rd segment about 1.5 times as long as its width. Arista brown, its thickened basal part yellow. Width of feathering of arista equal to half of width of 3rd antennal segment. Frons narrow, its height about 1.4 times as long as its width; frontal index equal to 3.3. Palpi bicolor, black apically and yellow basally. Thorax black. Prosternum, propleuron, humeral calli, upper part of sternopleuron, postsutural sides of mesonotum and scutellum yellow. Legs entirely yellow. Fore femur with only short yellow bristles from below; fore tibia with comb of black spinules. Spur on middle tibia golden yellow. Wings smoky brownish in apical half with darkening enveloping apical one third of marginal cell, apical half of submarginal and the most part of first posterior cells.  $M_{1+2}$  practically straight. Section of  $M_{1+2}$  between  $r-m$  and  $dm-cu$  about 1.7 times more than previous one and about 1.3 times less than ultimate one. Halteres whitish. Abdomen black with light hairs except for last tergites. Central plate of sternite VI with 7 spinules (in paratype from Yercaud with 9 spinules centrally and 2 ones on each side), its wings without spinules, only with long light hairs (Fig. 30). Posterior margin of surstylus slightly concave (straight in paratype from Yercaud) near its tip.

Body length 5.1 mm; wing length 3.9 mm.

FEMALE very similar to male. Body length 5.0-5.9 mm.

DIAGNOSIS. *Ch. palpibasis* sp.n. is characterized by its coloration of palpi black apically and yellow basally. In external appearance it is closely associated with *Ch. angustifrons* which has the palpi entirely yellow and the wings with costal darkening. The male genitalia suggest a relationship with *Ch. orientalis* Frey which is distinguished from *Ch. palpibasis* by the broadly black frons, less longer hairs of arista, black humeri. The male of *Ch. palpibasis* collected from Yercaud is characterized by its facial spot. I did not find the differences in the structure of genitalia except for ones noted above. Whether they are essential from the taxonomic point of view cannot be decided from the limited material.

*Chyliza panfilovi* Shatalkin sp.n.

Fig. 25.

MATERIAL. Holotype: ♂, China, Yunnan, Nanno Shan,

1250 m, 24.IV.1957, (D. Panfilov) [Китай, Юньнань, Нанношань (Д. Панфилов)] (ZMUM).

DESCRIPTION. MALE. Head yellow. Frons on each side along eyes with brownish stripe extending from its anterior to posterior margin; these stripes broad, widened to frontal vitta and joined on middle line in front of black ocellar triangle; frontal vitta above antennae yellow, behind ocellar triangle yellowish brown. Against a brown background of these frontal stripes there are black fronto-orbital spots similar to those of *Ch. cylindrica*. Occiput black. Face with black spot. Antenna yellow; its first segment entirely, second one on each side dark brown; 3rd segment darkened above and moderate short, about 1.3 times as long as its width. Frons broad, its height about 1.2 times more than its width; frontal index equal to 2.7. Arista brown, its thickened basal part yellow. Width of feathering of arista slightly less than half of width of 3rd antennal segment. Palpi black. Thorax black. Prosternum, humeral calli dorsally, upper part of sternopleuron, postalar calli and scutellum yellowish brown. Legs yellow. Fore and middle tibiae darkened. Fore femur with short yellow bristles from below; fore tibia with comb of black spinules. Middle femur with black bristles in basal third. Wings smoky brownish in apical half.  $M_{1+2}$  slightly curving towards  $R_{4+5}$  on level of mouth of  $R_{2+3}$ . Section of  $M_{1+2}$  between  $r-m$  and  $dm-cu$  about 1.8 times more than previous one and about 1.2 times less than ultimate one. Halteres whitish. Abdomen black; 2nd segment with erect white hairs interspersed with black hairs on each side, following segments with black appressed hairs. Cercus (Fig. 25) with long bristle apically.

Body length 5.7 mm; wing length 4.8 mm.

FEMALE unknown.

DIAGNOSIS. The species is similar to *Ch. limpidipennis* and *Ch. tibialis* in having the darkened fore tibia. It is distinguished from both these species in possessing the middle tibia also darkened. This darkening is slight and the character can not be considered as reliable one. The presence of the long brown fronto-orbital stripes along eyes separates *Ch. panfilovi* from *Ch. limpidipennis* and associates it with females of second species having however black frontal stripes. The males of *Ch. tibialis* are characterized by the yellow antennae and the short fronto-orbital stripes occupying posterior two thirds of frons. Except for the characters of the middle tibia darkened, the frontal coloration pattern, and the presence of illegible facial spot I have been unable to find other external characters separating *Ch. panfilovi* from *Ch. tibialis*. The only characters of value are those of the genitalia. Surstyli of *Ch. panfilovi* are narrow and long in contrast to short and broad ones of another species.

This species is named to honor the known hymenopterigist D.V. Panphilov.

*Chyliza pictipennis* Shatalkin sp.n.

Fig. 14

MATERIAL. Holotype: ♀, E. Java, Mt. Ardjoeno, 6000 ft., I.1936 (Purch. from E. Le Moul't) (BMNH). Paratype: ♀, Java, Tjibodas, 4000 ft., I.1936 (L.E. Cheesman) (BMNH); ♀, Java, Tjibodas, II.1916 (E. Jacobson) (ZMUA).

DESCRIPTION. FEMALE. Head yellow. Frons (Fig. 14) on each side along eyes with black brown stripe, extending from its anterior margin to level of hind ocelli; this stripe consists of two portions, dark brown fronto-orbital spot posteriorly and black patch with brush of