

SHORT COMMUNICATION

V. A. Trjapitzin. ON *BOTHTIOTHORAX PALIJI* (KHLOPUNOV, 1979), COMB. N. (HYMENOPTERA: ENCYRTIDAE) FROM THE RUSSIAN FAR EAST, WITH DESCRIPTION OF NEW SUBGENUS. – *Far Eastern Entomologist*. 2012. N 246: 8-11.

Summary. New subgenus *Palijus* **subgen. n.** (type species *Pentelicus paliji* Khlopunov, 1979) of the genus *Bothriothorax* is established. New combination is proposed for *Bothriothorax paliji* (Khlopunov, 1979), **comb. n.** (from *Pentelicus*). Some data on the genera *Bothriothorax* Ratzeburg, 1844 and *Pentelicus* Howard, 1895 are provided.

Key words: *Bothriothorax paliji*, *Pentelicus*, *Palijus*, taxonomy, new subgenus, Russian Far East.

В. А. Тряпицын. О *Bothriothorax paliji* (Khlopunov, 1979), **comb. n.** (Hymenoptera: Encyrtidae) с Дальнего Востока России с описанием нового подрода // *Дальневосточный энтомолог*. 2012. N 246. С. 8-11.

Резюме. Описывается новый подрод *Palijus* **subgen. n.** (типовой вид *Pentelicus paliji* Khlopunov, 1979) в роде *Bothriothorax*. Предложена новая комбинация для *Bothriothorax paliji* (Khlopunov, 1979), **comb. n.** (из *Pentelicus*). Приведены некоторые данные о родах *Bothriothorax* Ratzeburg, 1844 и *Pentelicus* Howard, 1895.

INTRODUCTION

Pentelicus paliji Khlopunov, 1979 has been described from Khabarovsk (holotype, ♀) and Primorskii krai (paratype, ♂) (Khlopunov (1979)). This species possesses a rather unusual structure, not common in the family Encyrtidae, viz. a distinct median keel on the scutellum running its full length. A somewhat similar longitudinal scutellar keel has been known for the genus *Pentelicus* Howard, 1895 (see: Kerrich, 1963). Taking into consideration this character, I advised to E.N. Khlopunov (1931–1992), my colleague from Kaluga, to describe a new species in the genus *Pentelicus*. Later I included this species into the subtribe Bothriothoracina Howard, 1895 of the tribe Bothriothoracini Howard, 1895 (Trjapitzin, 1989). Unfortunately, I omitted an important and unique character of fore wing venation of true *Pentelicus* (a triangular process of broadened apical part of the stigmal vein). This process has not been mentioned by Kerrich (1963) in his diagnosis of *Pentelicus*, but it is present on his figure (l.c.: 366, Fig. 14).

Noyes & Hayat (1984) criticized reasonably my misunderstanding of the genus *Pentelicus*. They synonymized with *Pentelicus* the genera *Hemaenasius* Ashmead, 1900, *Epaenasomyia* Girault, 1917, and *Cowperella* Girault, 1935 as junior subjective synonyms. The revision of *Hemaenasius* (including *Epaenasomyia*, as a synonym) was published (Trjapitzin & Gordh, 1979); these genera have the mentioned process of stigmal vein, and their synonymy with *Pentelicus* is correct. However, in *Cowperella* (from Australia) such process is absent (Dahms & Gordh, 1997: 423, fig. E), that is why *Cowperella* might not be a synonym of *Pentelicus*. This process lacks in all described species of the genus *Bothriothorax* Ratzeburg, 1844, including "*Pentelicus*" *paliji*, which I am including now into *Bothriothorax*. "*Pentelicus*" *paliji* shares with *Bothriothorax* a robust habitus of the body, and a pit-like sculpture of head and dorsal side of thorax. Hence the new combination *Bothriothorax paliji* (Khlopunov, 1979), **comb. n.** is suggested here.

TAXONOMY

Genus *Bothriothorax* Ratzeburg, 1844

Bothriothorax Ratzeburg, 1844: 208–209. Type species *Bothriothorax altensteinii* Ratzeburg, 1844, by monotypy.

Trimorphocerus Dahlbom, 1857: 292. Type species *Bothriothorax altensteinii* Ratzeburg, 1844, by designation of Gahan & Fagan (1923: 149). Synonymized with *Bothriothorax* by Ashmead (1900: 371).

SYSTEMATIC POSITION. The genus belongs to the subfamily Encyrtinae, tribe Bothriothoracini, subtribe Bothriothoracina.

DISTRIBUTION. Holarctic region (30 species), India (1 species). Besides, undescribed species were recorded from Taiwan and Trinidad.

HOST. Fifteen species were reared from pupae or larvae of Syrphidae (Diptera). *Bothriothorax wichmani* Ferrière, 1956 was cited to be reared in Germany from a puparium of *Lonchaea* sp. (Diptera: Lonchaeidae), but in the original description of this species by Ferrière (1956) has been indicated that its female only walked on one pupa of *Lonchaea* sp. not infesting it.

IDENTIFICATION. The key to Palaearctic species of *Bothriothorax* was published by Trjapitzin (1989: 322–326).

Subgenus *Palijus* Trjapitzin, subgen. nov.

Type species: *Pentelicus paliji* Khlopunov, 1979, designated here.

New subgenus differs from the nominotypical *Bothriothorax* by having the longitudinal keel on the scutellum of the both sexes, by mandible with acute teeth, the middle tooth being the longest and the upper tooth strongly reduced, vestigial, and by the antennal clava of the male 2-segmented.

ETYMOLOGY. The subgenus is named after Russian entomologist, Prof. V.F. Palij.

Bothriothorax (Palijus) paliji Khlopunov, 1979, comb. n.

Pentelicus paliji Khlopunov, 1979: 394 (holotype – ♀, Russia, Bytshicha [Khabarovsk], 20.VIII 1970, D.R. Kasparian; in Zoological Institute, St. Petersburg); Trjapitzin, 1989: 326; Sharkov & Trjapitzin, 1995: 245.

NOTES. By the reasons given above this species is transferred from genus *Pentelicus* to genus *Bothriothorax*.

Genus *Pentelicus* Howard, 1895

Pentelicus Howard, 1895: 611–612. Type species *Pentelicus aldrichi* Howard, 1895, by monotypy.

Hemaenasius Ashmead, 1900: 374. Type species *Hemaenasius confusus* Ashmead, 1900, by original designation. Synonymized with *Pentelicus* by Noyes & Hayat (1984: 322–323).

Epaenasomyia Girault, 1917: 3. Type species *Epaenasomyia varicornis* Girault, 1917, by original designation. Synonymized with *Hemaenasius* by Trjapitzin & Gordh (1978a: 365) and with *Pentelicus* by Noyes & Hayat (1984: 322–323).

SYSTEMATIC POSITION. Trjapitzin & Gordh (1978b) placed *Pentelicus* (as *Hemaenasius*) in the subtribe Hemaenasiina Trjapitzin et Gordh, 1978 of the tribe Discodini Hoffer, 1954 (subfamily Encyrtinae Walker, 1837). They published also a key to three genera included by them into Hemaenasiina: *Hemaenasius*, *Semen* Hoffer, 1954, and *Globulecyrtus* Hoffer, 1975. Now, however, I do realize that this subtribe is a conglomerate of unrelated genera, but treating this question is beyond the scope of the present contribution. Thus, systematic position of *Pentelicus* is still uncertain.

DISTRIBUTION. Three described species in the USA (*P. confusus* was recorded also from Brazil). Unidentified species of *Pentelicus* were cited from Mexico, Panama, Puerto Rico, India, China (Taiwan), and Australia.

HOSTS. *Pentelicus* sp. was reared in the USA (New York) from pupae of myxomycophagous (slime mold eating) beetle *Sphindus americanus* LeConte, 1899, and another, undescribed, species issued from pupae of *Carinisphindus* sp. (Coleoptera: Sphindidae) collected from the sporocarp of a myxomycete *Stemonitis* sp. in Puerto Rico (McHugh, 1993).

DISCUSSION

Six species of *Bothriothorax* were recorder from the Far East of Russia: *B. clavicornis* (Dalman, 1820) (Chukotka, Magadan Prov., Khabarovskii krai); *B. icelos* Trjapitzin, 1967 (Primorskii krai); *B. kasparyani* Khlopunov, 1979 (Khabarovskii krai); *B. paliji* (Khlopunov, 1979) (Khabarovskii krai, Primorskii krai); *B. phineus* Trjapitzin, 1967 (Primorskii krai); and *B. serratellus* (Dalman, 1820) (Khabarovskii krai, Primorskii krai Kamchatka, Sakhalin Kuril Islands: Paramushir). The finding of *Prntelicus* at least in southern part of the region might be possible, because three species of Sphindidae are known there: *Aspidiphorus japonicus* Reitter, 1879; *A. orbiculatus* (Gyllenhal, 1808), and *Sphindus brevis* Reitter, 1879. The parasitism of *Pentelicus* in pupae (or larvae and pupae?) of myxomycophagous beetles of the family Sphindidae was unexpected and is remarkable, and this phenomenon may be worthy of further study.

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