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THE TYPES OF DESCRIBED BY EDUARD EVERSMANN TIPHIIDAE AND SIEROLOMORPHIDAE (HYMENOPTERA) WITH TAXONOMIC NOTES

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Summary. A review of type specimens of three nominal taxa, described by E. Eversmann in the genera *Tiphia* Fabricius, 1775 and *Meria* Illiger, 1807 is given. The lectotypes are designated for *Tiphia abnormis* Eversmann, 1849 and *T. formicula* Eversmann, 1849. New synonymy is proposed for *Tiphia minuta* Vander Linden, 1827 = *T. formicula* Eversmann, 1849, **syn. n.** A new combination is proposed for *Sierolomorpha abnormis* (Eversmann, 1849), **comb. n.** from genus *Tiphia*.

Key words: Tiphiidae, Sierolomorphidae, taxonomy, types, E. Eversmann, new synonymy, fauna, Russia.

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Резюме. Дан обзор типовых экземпляров трех номинальных таксонов, описанных Э. Эверсманном в родах *Tiphia* Fabricius, 1775 и *Meria* Illiger, 1807. Обозначены лектотипы для *Tiphia abnormis* Eversmann, 1849 и *T. formicula* Eversmann, 1849. Предложена новая синонимия для *Tiphia minuta* Vander Linden, 1827 = *T. formicula* Eversmann, 1849, **syn. n.** Предложена новая комбинация для *Sierolomorpha abnormis* (Eversmann, 1849), **comb. n.** из рода *Tiphia*.

INTRODUCTION

E.A. Eversmann was the first who studied the "tiphiid" wasps in the Russian Empire. In his paper (Eversmann, 1949) he described three new species (one of them currently is valid) from Russia and gave the first list of "Tiphiidae" (4 species). Here we give the type material of described taxa in the genera *Tiphia* Fabricius, 1775 and *Meria* Illiger, 1807.

MATERIAL AND METHODS

The type material of Tiphiidae and Sierolomorphidae, described by E. Eversmann are deposited in the Zoological Institute, St. Petersburg, Russia. Comparative and additional material of these families from the collection of this institute, M.V. Mokrousov' personal collection, Nizhni Novgorod, collection of Institute of Systematics and Ecology of Animals, Siberian Branch of Russian Academy of Sciences, Novosibirsk [ISE] and collection of Federal Scientific Center of the East Asia Terrestrial Biodiversity, Vladivostok [FSC] were studied also.

Photographs of the labels were taken by a digital camera Canon EOS 50D with objective Canon Macro Lens EF 100 mm. Images of the specimens were processed with a digital camera Magnüs MagCam MIPS 5MP attached to a Carl Zeiss Stemi 508 stereomicroscope and stacked with Helicon Focus® software. The final illustrations were post-processed for sharpness, contrast and brightness using Adobe® Photoshop® software.

Abbreviations used in the description as follows: F1, F2, F3… = flagellomeres; OOL = oculo-ocellar line, the shortest distance between lateral ocellus and compound eye; POL = the shortest distance between posterior ocelli; T1, T2, T3… = metasomal terga; S1, S2, S3… = metasomal sterna.

LIST OF THE TYPES

***Meria sexpunctata* Eversmann, 1849**

Meria sexpunctata Eversmann, 1849: 436, ♀, "*Cepi in promontoriis Uralensibus*" [spurs of the Ural Mountains].

TYPE LOCALITY. Russia: Orenburg Prov.

TYPES. The syntypes of this taxon were not found in the Eversmann's collection in Zoological Institute (St. Petersburg).

CURRENT STATUS. Possibly this species is a synonym of *Meria dorsalis* (Fabricius, 1804).

***Tiphia abnormis* Eversmann, 1849**

Figs 1–2

Tiphia abnormis Eversmann, 1849: 436, "♂", actually ♀, "*Cepi in prov[inciae] Orenburgensi boreali*" [Russia, Orenburg Prov.].

TYPE LOCALITY. Russia: Orenburg Prov., Orenburg.

LECTOTYPE (designated here). ♀, "Orb [Orenburg] / *Tiphia abnormis* Evm / [bottom label] *abnormis* Evm. / Syntypus *Tiphia abnormis* Ev. / *Sierolomorpha* ♀ *abnormis* (Eversmann, 1849) D. Milko exam. 1999 / Lectotype ♀ *Tiphia abnormis* Eversmann, 1849 design. Mokrousov, 2017".

CURRENT STATUS. Valid species *Sierolomorpha abnormis* (Eversmann, 1849), **comb. n.** in the family Sierolomorphidae (Fig. 1).

REMARKS. Because the original description (Eversmann, 1869) was very short and sex of lectotype was mixed by E. Eversmann we give below the redescription of *Sierolomorpha abnormis* (Eversmann, 1849), based on the lectotype and additional material. This species resembles *S. sogdiana* Lelej et Mokrousov, 2015 (Lelej & Mokrousov, 2015) by having similar shape of antennomeres but differs by rudimentary apical band on T1 and denser punctation and setation of clypeus, occipital area and propleuron.

EXAMINED SPECIMENS (additionally to lectotype). Russia: Novosibirsk Prov., Zdvinsk District, Kargat River [55°8'58.94"N, 80°0'11.36"E], 11.V 1992, A. Barkalov 1♀ [FSC], 3♀ [ISE] (studied photos only), 2♀ [Institute of Biology and Soil Science, Bishkek, Kyrgyzstan].

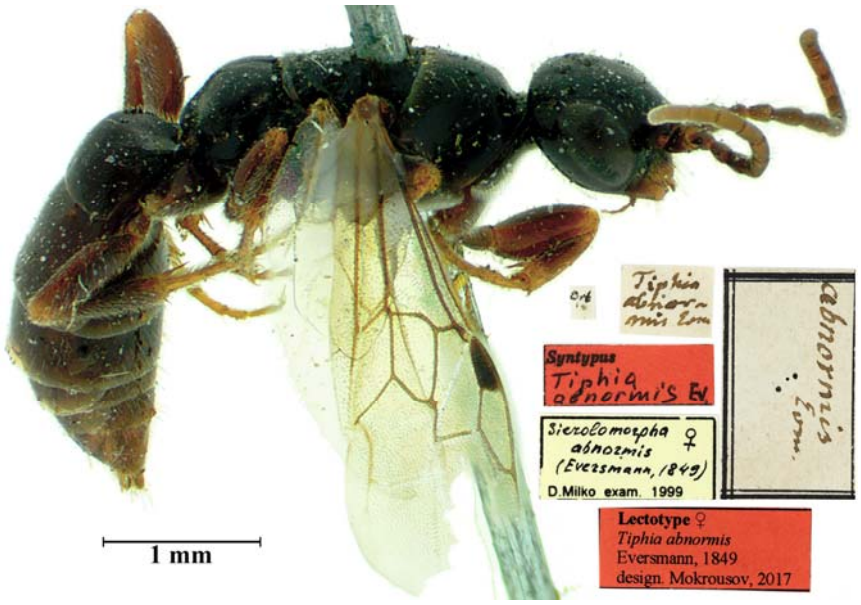

Fig. 1. *Tiphia abnormis* Eversmann, 1849, lectotype, ♀, habitus and labels.

REDESCRIPTION. FEMALE. Body length 5.2–6.9 mm (lectotype 5.2 mm). Black, tibiae, flagellomeres and wing venation castaneous; mandibles, clypeus anteriorly and tarsi yellowish-brown. Body and legs with rare erect pale setae, denser on propleuron, procoxa and S6; setae of wing membrane dark.

Clypeus basally with small dense punctures, which larger medially; clypeus apically shagrened. Front, temples and vertex polished and shiny, punctures small, very rare. Interorbital without row of rather large punctures. Occipital area with dense punctures. Frontal prominence well developed (Figs 3, 4), without median longitudinal keel, occipital carina lacking. Mandibular fossa open. Mandible robust, with small subapical tooth. Palpal formula 6+4. Scape 2.5–2.6 times as long as pedicel; F3–F9 1.48–1.69 times, F10 2.8 times as long as thick (Fig. 6). Head rounded with slightly protruding vertex, height 0.96 times its width; interorbital parallel (Fig. 2). Malar space 0.4 times as long as width of scape. Ocelli small, POL = OOL (Fig. 3).

Mesosoma dorsally shiny, finely punctate. Parapsidal furrows thin, complete, near parallel. Notauli incomplete, distinctly divergent anteriorly. Pronotum and mesoscutellum laterally more deeply punctate. Propleuron deeply punctate, somewhat sparser then procoxa (Fig. 5). Tegula shiny, rarely punctate. Propodeal disc without posterior transverse carina, laterally with well defined carinae; median longitudinal impression of disc superficially impressed, carinated laterally by irregular longitudinal folds, median longitudinal carina of declivity lacking. Posterior propodeal surface well carinated laterally, with median irregular

longitudinal folds, laterad of them posterior surface transversely rugose. Propodeal sides rather sparse, but distinctly punctured. Mesopleuron shiny, with scattered punctures. Fore wing slightly evenly infuscated, discolored along longitudinal furrows and cross-veins *2rs-m*, *3rs-m*, and *2m-cu*. Hind wing long, touching apex of marginal cell of fore wing, with three basal and seven apical hamuli. Metacoxa with strong dorsal carina triangularly protruding basally. Meso- and metatibia dorsally with short spines. Femur flattened and widened, profemur curved outside. Protarsus without comb. Protibia with one, meso- and metatibia with two calcaria. T1 with rudimentary, not depressed apical striate band (Fig. 7) and wide triangular lateroterga, each of them overlaps apically one fourth of S1 width. T2 with narrower rectangular lateroterga which are rounded posterad. S1 and S2 with deep constriction. S1 basally roof-like, feebly alutaceous, with median longitudinal carina bifurcated posterad; irregularly longitudinally rugose, posterior border medially widely emarginated and overlapping anterior declivity of S2, which is separated from remaining S2 by deep transverse groove. T2 basally with longitudinally striate band, basolaterally with well developed round reddish delicately aciculate areas ("felt line") (Fig. 7), T1–T6 shiny with rare punctures; S2–S5 denser punctured then terga. S6 conical, surrounding sting and extending beyond last tergum (likes Sapygidae), densely micropunctate, with long pale dense setae.

MALE. Unknown.

DISTRIBUTION. Russia: Orenburg Prov., Novosibirsk Prov.

Figs. 2–7. *Tiphia abnormis* Eversmann, 1849, ♀ (2–4, 7 – female from Novosibirsk Prov.; 5, 6 – lectotype). 2 – head, frontal view; 3 – head, dorsal view; 4 – head, lateral view; 5 – propleuron and procoxa, ventral view; 6 – antenna; 7 – metasomal base, dorsal view. (2–4, 7 – female from Novosibirsk Prov.; 5, 6 – lectotype).

***Tiphia formicula* Eversmann, 1849**
Fig. 8

Tiphia formicula Eversmann, 1849: 435, ♂, ♀, "*Cepi in promont[oriis] Uralensib[us]*" [spurs of the Ural Mountains].

TYPE LOCALITY. Russia: Orenburg Prov., Saraktash Distr., Spasskoe vill.

LECTOTYPE (designated here). ♀, "Spask Jul[io] / *Tiphia formicula* Evm / Syntypus *Tiphia formicula* Ev. / Lectotype ♀ *Tiphia formicula* Eversmann, 1849 design. Mokrousov, 2017". **Paralectotypes**: 2♀, 3♂, "Spask".

CURRENT STATUS. *Tiphia minuta* Vander Linden, 1827 = *T. formicula* Eversmann, 1849, **syn. n.**

REMARK. The specimen with Eversmann's handwritten label "*Tiphia formicula* Evm" was designated as lectotype. The lectotype (♀) and four paralectotypes (2♀, 2♂) belong to *Tiphia minuta* Vander Linden, 1827, one paralectotype (♂) with bottom label "*formicula* Evm." belongs to *Tiphia unicolor* Lepeletier de Saint Fargeau, 1845.

Fig. 8. *Tiphia formicula* Eversmann, 1849, lectotype, ♀, habitus and labels.

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