

## SHORT COMMUNICATION

V. A. Trjapitzin. ON THE GENUS *METABLASTOTHRIX* SUGONJAEV, 1964 AND ITS FAR EASTERN REPRESENTATIVE *M. ISOMORPHA ISOMORPHA* SUGONJAEV, 1964 (HYMENOPTERA: ENCYRTIDAE). – *Far Eastern Entomologist*. 2012. N 250: 7-10.

**Summary.** Complicated and confused history of investigation of the Holarctic genus *Metablastothrix* is discussed. The data on *M. isomorpha* Sugonjaev, 1964 (Palearctic) and *M. claripennis* (Compere, 1928) (Nearctic) are given. First species includes subspecies *M. isomorpha isomorpha* Sugonjaev, 1964 and *M. isomorpha trichomasthoides* (Hoffer, 1965). New synonymy is proposed for *Apterencyrtus trichomasthoides* Hoffer, 1965 = *Metablastothrix isomorpha occidentalis* Voinovich, Trjapitzin et Sugonyaev, 1996, **syn. n.** *Metablastothrix claripennis* includes subspecies *M. claripennis claripennis* (Compere, 1928) and *M. claripennis claricoxa* Sugonjaev, 1988. The larvae of *Metablastothrix* develop in larvae of other encyrtids, endoparasitoids of Coccidae. Only *M. isomorpha isomorpha* is known from the Russian Far East.

**Key words:** Encyrtidae, *Metablastothrix*, Russian Far East.

В. А. Тряпицын. О роде *Metablastothrix* Sugonjaev, 1964 и его дальневосточном представителе *M. isomorpha isomorpha* Sugonjaev, 1964 (Hymenoptera: Encyrtidae) // *Дальневосточный энтомолог*. 2012. N 250. С. 7-10.

**Резюме.** Обсуждается сложная и запутанная история исследования голарктического рода *Metablastothrix*. Даются сведения о *M. isomorpha* Sugonjaev, 1964 (Палеарктика) и *M. claripennis* (Compere, 1928) (Неарктика). Первый вид включает подвиды *M. isomorpha isomorpha* Sugonjaev, 1964 и *M. isomorpha trichomasthoides* (Hoffer, 1965). Предложена новая синонимия для *Apterencyrtus trichomasthoides* Hoffer, 1965 = *Metablastothrix isomorpha occidentalis* Voinovich, Trjapitzin et Sugonyaev, 1996, **syn. n.** *Metablastothrix claripennis* включает подвиды *M. claripennis claripennis* (Compere, 1928) и *M. claripennis claricoxa* Sugonjaev, 1988. Личинки *Metablastothrix* развиваются на личинках других энциртид, внутренних паразитов ложнощитовок (Coccidae). На Дальнем Востоке России известен только *M. isomorpha isomorpha*.

### TAXONOMY

#### Genus *Metablastothrix* Sugonjaev, 1964

Type species: *Blastothrix isomorpha* Sugonjaev, 1964, designated by ICZN, 1996 (Opinion 1857).

Sugonjaev (1964) established the subgenus *Metablastothrix* of the genus *Blastothrix* Mayr, 1876 in the key to Palearctic species of *Blastothrix*. As the type species of this subgenus he designated (Sugonjaev, 1964: 371) *Microterys truncatipennis* Ferrière, 1955 described from Germany, where it has been reared from *Eulecanium franconicum* (Lindinger, 1912) (Homoptera: Coccidae) on heather *Calluna vulgaris* (Ericaceae) (Ferrière, 1955). In the same publication, Sugonjaev (1964: 371, 377, 388, 389) described a new species *Blastothrix (Metablastothrix) isomorpha* Sugonjaev, 1964 reared in mountains of East Kazakhstan from *Eulecanium douglasi* (Šulc, 1895), *E. caraganae* (Borchsenius, 1953), and *Rhodococcus spiraeae* (Borchsenius, 1949). Sugonjaev & Babaev (1978: 65-66) raised *Metablastothrix* to

the generic rank. Sugonjaev & Trjapitzin (1988: 182-187) revised the genus *Metablastothrix* and treated it as a member of the subtribe Syrphophagina Trjapitzin, 1973 of the tribe Microteriyini Hoffer, 1955 (now Discodini Hoffer, 1953). They stated that *Metablastothrix* is closely related to the American genus *Gahaniella* Timberlake, 1926 (see also: Trjapitzin, 2010: 246).

Interpretation of *Microterys truncatipennis* Ferrière, 1955 as the type species of *Metablastothrix*, suggested by Sugonjaev (1964) was followed by Trjapitzin (1989) and Sharkov & Trjapitzin (1995). However, Voinovich et al. (1996) studied the type series of *Microterys truncatipennis* from the Museum of Natural History, Geneva and discovered that this species belongs to the genus *Blastothrix*, a member of another tribe of Encyrtidae, but has nothing in common with *Metablastothrix*. In this connection, Voinovich et al. (1995) sent application to the International Commission on Zoological Nomenclature with request to use its plenary power for rejecting all previous fixations of the type species of *Metablastothrix* Sugonjaev, 1964 and designate *Blastothrix (Metablastothrix) isomorpha* Sugonjaev, 1964 as the type of the genus *Metablastothrix*. The decision of the ICZN was positive (Opinion 1857, 1996).

### Structure of the genus *Metablastothrix*

*Metablastothrix isomorpha* Sugonjaev, 1964 has been divided by Voinovich et al. (1996) into *M. isomorpha isomorpha* Sugonjaev, 1964 (Asiatic subspecies) and *M. isomorpha occidentalis* Voinovich, Trjapitzin et Sugonjaev, 1996 (European subspecies). However, earlier V.A. Trjapitzin (in litt.) has studied a paratype female of *Apterecyrtus trichomasthoides* (Hoffer, 1965a) in the private collection of Dr. A. Hoffer (Prague) and came to conclusion that it belongs to the genus *Metablastothrix*. Formally this new combination was fixed by Gordh & Trjapitzin (1979). This species had been collected in Czechia in the Borkovice peatbogs as a characteristic representative of the fauna of moist turf bogs (Hoffer, 1965b). In such biotopes may exist European subspecies of *M. isomorpha* only. It should be named as *Metablastothrix isomorpha trichomasthoides* (Hoffer, 1965), **comb. n.** et **stat. n.**, and European subspecies *M. isomorpha occidentalis* Voinovich, Trjapitzin et Sugonjaev, 1996 is being synonymized here with *M. isomorpha trichomasthoides*, **syn. n.**

*Metablastothrix claripennis* (Compere, 1928) has been divided by Sugonjaev & Trjapitzin (1988) into two subspecies: *M. claripennis claripennis* (Compere, 1928) and *M. claripennis claricoxa* Sugonjaev, 1988.

### Distribution and biology of *Metablastothrix* species and subspecies

1. *Metablastothrix isomorpha isomorpha*. East Kazakhstan (hosts see above). Russia: Irkutsk and Amur Provinces, Primorskii krai. Pilipjuk (1972) indicated it (as *Blastothrix isomorpha*) to be reared from *Eulecanium eoum* Danzig, 1967 [synonym of *E. douglasi* (Šulc, 1895)] on Kunashir (Kuril Islands) and Sakhalin.

2. *Metablastothrix isomorpha trichomasthoides*. Russia: 1) Karelia, endoparasitoid of *Encyrtus infidus* (Rossi, 1790) in *Eulecanium douglasi* on birches (*Betula*); 2) Leningrad Province, ex *E. franconicum* f. *vaccinicola* on bilberry *Vaccinium uliginosum* (Vacciniaceae); 3) Kaluga Province. Finland (new data, in Museum of the University of Helsinki). Poland, ex *E. douglasi* on *Ribes* (Grossulariaceae). Czech Republic. Biology of this subspecies has been studied by Voinovich (1989, as *M. truncatipennis*) in North Karelia and summarized later by Sugonjaev & Voinovich (2006, as *M. isomorpha*). According to these original data, *M. isomorpha trichomasthoides* is a specialized gregarious endoparasitoid of the fourth instar larvae of *Encyrtus infidus*. Its ovarial egg is double-bodied and unbanded, i.e. without aeroscopic plate. Larvae of the first and the second instars are apneustic, but the larva of last instar has open tracheal system.

3. *Metablastothrix claripennis claripennis*. USA (California), parasitoid of larvae of *Encyrtus fuscus* (Howard, 1881) in coccids of the genus *Parthenolecanium* Šulc, 1908 (Sugonjaev & Trjapitzin, 1988).

4. *Metablastothrix claripennis claricoxa*. USA and Canada, reared from different Coccidae, including *Parthenolecanium corni* (Bouché, 1844) and *P. fletcheri* (Cockerell, 1893) (Sugonjaev & Trjapitzin, 1988).

#### REFERENCES

- Ferrière, Ch. 1955. Encyrtides nouveaux ou peu connus (Hym., Chalcidoidea). *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 28(1): 115–136.
- Gordh, G & Trjapitzin, V.A. 1979. Notes on the genus *Zaomma* Ashmead, with a key to species (Hymenoptera: Encyrtidae). *The Pan-Pacific Entomologist*, 55(1): 34–40.
- Hoffer, A. 1965a. Description of new species of the family Encyrtidae (Hym., Chalcidoidea) from Czechoslovakia III. *Acta Entomologica Musei Nationalis Pragae*, 36: 353–372.
- Hoffer, A. 1965b. Příspěvek k poznání druhů čel. Encyrtidae (Hym., Chalcidoidea), zjištěných v přirozených formacích dřevin podél horního toku Vltavy a na některých Šumavských Rašeliništích. *Referáty Ent. Symp. 22-24 zaří 1964 u příležitosti oslav 150 let trvání Slezského Muzea v Opavě*. Opava: 83–119.
- International Commission on Zoological Nomenclature (ICZN). 1996. Opinion 1857. *Metablastothrix* Sugonjaev, 1964 (Insecta, Hymenoptera): *Blastothrix isomorpha* Sugonjaev, 1964 designated as the type species. *Bulletin of Zoological Nomenclature*, 53(4): 289–290.
- Pilipjuk, V.I. 1972. [Studies of fauna of parasites of coccids of the islands Sakhalin and Kunashir with the aim of ascertaining of species for introduction them into other region of the USSR]. Thesis of dissertation. Leningrad, All Union Institute of Plant Protection. 21 p. (In Russian).
- Sharkov, A.V. & Trjapitzin, V.A. 1995. Fam. Encyrtidae – Encyrtids. In: Kupianskaya, A.N., Lelej, A.S., Storozheva, N.A. (eds). [Key to the insect of Russian Far East. Vol. 4. Neuropteroidea, Mecoptera, Hymenoptera. Pt. 2. Hymenoptera]. Vladivostok: Dalnauka: 178–255. (In Russian).
- Sugonjaev, E.S. 1964 [Palaeartic species of the genus *Blastothrix* Mayr (Hymenoptera, Chalcidoidea) with remarks on their biology and economic importance. Part 1]. *Entomologicheskoe Obozreniye*, 43(2): 386–390. (In Russian).
- Sugonjaev, E.S. & Babaev, T. 1978 [On chalcids (Hymenoptera, Chalcidoidea) – parasites of Coccidae (Homoptera, Coccoidea) in Tadzhikistan]. *Entomologicheskoe Obozreniye*, 57(1): 48–67. (In Russian).
- Sugonjaev, E.S. & Trjapitzin, V.A. 1988 [Chalcids of the genus *Metablastothrix* Sugonjaev (Hymenoptera, Chalcidoidea) and peculiarities of their distribution in North America and Eurasia]. *Entomologicheskoe Obozreniye*, 67(1): 182–187. (In Russian).
- Sugonjaev, E.S. & Voinovich, N.D. 2006. [Adaptations of chalcid wasps (Hymenoptera, Chalcidoidea) for parasitization of sternorrhynchian Hemiptera - soft scale insects (Coccidae) under the different latitude conditions]. Moscow: KMK Scientific Press Ltd. 264 p. (In Russian).
- Trjapitzin, V.A. 1989. [Parasitic Hymenoptera of the family Encyrtidae of Palaeartic]. Leningrad: Nauka. 489 p. (In Russian).
- Trjapitzin, V.A. 2010. A review of the genus *Gahaniella* Timberlake, 1926 (Hymenoptera: Chalcidoidea: Encyrtidae) with description of a new species from Mexico. *Russian Entomological Journal*, 19(3): 245–248.
- Voinovich, N.D. 1989. [Peculiarities of parasitism of chalcids (Hymenoptera, Chalcidoidea), infesting the Small Spruce Coccid and the Birch Coccid (Homoptera, Coccoidea) in the Taiga zone of the European part of the USSR]. Thesis of dissertation. Leningrad, Zoological Institute AN SSSR. 24 p. (In Russian).

- Voinovich, N.D., Trjapitzin, V.A. & Sugonjaev, E.S. 1995. *Metablastothrix* Sugonjaev, 1964 (Insecta, Hymenoptera): proposed designation of *Blastothrix* (*Metablastothrix*) *isomorpha* Sugonjaev, 1964 as the type species. *Bulletin of Zoological Nomenclature*, 56(1): 54–56.
- Voinovich, N.D., Trjapitzin, V.A. & Sugonyaev, E.S. 1996. Contribution to the knowledge of parasite of *Eulecanium douglasi* Šulc and *E. franconicum* Lindinger (Homoptera: Coccidae): on *Blastothrix truncatipennis* (Ferrière) with notes on the genus *Metablastothrix* Sugonyaev (Hymenoptera: Encyrtidae). *Zoosystematica Rossica*, 4(1): 167–170.

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## SHORT COMMUNICATION

**E. V. Mikhajlova. THE MILLIPEDES (DIPLOPODA) OF THE SHANTAR ISLANDS (KHABAROVSKII KRAI, RUSSIA). – Far Eastern Entomologist. 2012. N 250: 10-12.**

**Summary.** Three species of millipedes, *Angarozonium amurense* (Gerstfeldt, 1859) (Polyzoniidae), *Orinisobates microthylax* Enghoff, 1985 (Nemasomatidae), and *Underwoodia kurtschevae* Golovatch, 1980 (Caseyidae), are firstly recorded from the Shantar Islands.

**Key words:** Diplopoda, fauna, Shantar Islands, Sea of Okhotsk, Russia.

**Е. В. Михалёва. Двупарноногие многоножки (Diplopoda) Шантарских островов (Россия: Хабаровский край) // Дальневосточный энтомолог. 2012. N 250. С. 10-12.**

**Резюме.** Впервые для фауны Шантарских островов отмечены 3 вида двупарноногих многоножек: *Angarozonium amurense* (Gerstfeldt, 1859) (Polyzoniidae), *Orinisobates microthylax* Enghoff, 1985 (Nemasomatidae) и *Underwoodia kurtschevae* Golovatch, 1980 (Caseyidae).

## INTRODUCTION

The Shantar Islands are a group of fifteen islands that lie in Uda Bay, in the southwestern zone of the Sea of Okhotsk. Administratively this island group belongs to the Khabarovskii krai of the Russian Federation. The millipede fauna of the Shantar Islands is hitherto unknown (Mikhajlova, 2004, 2009). The present paper is based on the specimens collected by Dr. V.V. Bogatov in 2010. This material is deposited in the collection of the Institute of Biology and Soil Science, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok, Russia.

## LIST OF THE SPECIES

**Order Polyzoniida**  
Family Polyzoniidae

### *Angarozonium amurense* (Gerstfeldt, 1859)

**MATERIAL. Russia:** Khabarovskii krai: Sea of Okhotsk, Shantar Islands: Feklistova Island, seacoast near Arka rock, rocky slope, Gramineae, *Abies*, *Betula*, litter, 54°54,263'N, 136°46,180'E, 18.VIII 2010, 1 ♂, leg. V.V. Bogatov; Bolshoy Shantar Island, environs of Bolshoe Lake, right bank, approximately 300 m above top of flow, edge of pine forest, litter, 55°02,423'N, 137°59,67'E, 22-23.VIII 2010, 3 ♂, 4 ♀, leg. V.V. Bogatov.