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## **NEW DATA ON HOVERFLIES (DIPTERA: SYRPHIDAE) FROM RUSSIAN FAR EAST**

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**Summary.** The genus *Metadon* Reemer, 2013 and three species, namely *Eristalinus aurulans* (Wiedemann, 1824), *Eristalis kyokoae* (Kimura, 1986) and *Metadon bifasciatus* (Matsumura, 1916), are recorded from Russia for the first time. Taxonomic position of the specimens from Primorskii krai mistakenly determined as *Lejogaster nigricans* (Stackelberg, 1922) is clarified. *Pararctophila oberthuri* Herve-Bazin, 1914 is new for Khabarovskii krai as well as *Macrozelima hervei* (Shiraki, 1930) for Amurskaya oblast.

**Key words:** Syrphidae, hoverflies, fauna, new records, Amurskaya oblast, Khabarovskii krai, Primorskii krai, Kuril Islands, Russia.

**В. А. Мутин. Новые находки мух-журчалок (Diptera: Syrpidae) на Дальнем Востоке России // Дальневосточный энтомолог. 2020. N 403. С. 19-24.**

**Резюме.** Впервые для фауны России указывается род *Metadon* Reemer, 2013 и три вида: *Eristalinus aurulans* (Wiedemann, 1824), *Eristalis kyokoae* (Kimura, 1986) и *Metadon bifasciatus* (Matsumura, 1916). Уточняется таксономическая принадлежность экземпляров из Приморья, ошибочно отнесенных ранее к *Ljogaster nigricans* (Stackelberg, 1922). Впервые для Хабаровского края указывается *Pararctophila oberthuri* Herve-Bazin, 1914, а для Амурской области – *Macrozelima hervei* (Shiraki, 1930).

## **INTRODUCTION**

A check-list of the Russian hoverflies (Diptera: Syrpidae) has been published recently (Barkalov & Mutin, 2018). Herein the new data on the fauna and distribution of hover-flies in the south part of Russian Far East are given.

## **MATERIAL AND METHODS**

Examined material is deposited in the collections of the Federal Scientific Center of East Asia Terrestrial Biodiversity, Vladivostok [FCBV], the Zoological Museum of Moscow State University [ZMMU], the Zoological Institute of the Russian Academy of Sciences, St Peterburg [ZISP] and a personal collection of the author [VM]. Photographs were taken with an Olympus OMD-E 10 Mark III digital camera and Olympus ED 30mm f/3.5 Macro object-glass.

## RESULT AND DISCUSSION

### *Eristalinus (Lathyrophthalmus) aurulans* (Wiedemann, 1824)

Fig. 1

MATERIAL. Russia: Primorskii krai, Dalnegorsk [=Terney] District, Rudnaya Pristan, 5.VIII 1984, 1♀, leg. V. Bezkorovainaya [FCBV].

DISTRIBUTION. Russia (**new record**): Primorskii krai. – South India, Singapore, Indonesia, New Guinea, Solomon Islands, East Australia (Mitra *et al.*, 2015; Thompson & Vockeroth, 1989; Thompson *et al.*, 2017).

NOTES. The female from Russia represents the first record of *E. aurulans* in the Palaearctic Region.

### *Eristalis (Eoseristalis) kyokoae* (Kimura, 1986)

Fig. 2

MATERIAL. Russia: Sakhalinskaya oblast, Kunashir Island, Lagunnoe Lake, 26.VII 1955, 1♀, leg. N. Violovitsh [ZISP].

DISTRIBUTION. Russia (**new record**): Kuril Islands. – Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima Is.); Korea (Han *et al.*, 2004; Ohara *et al.*, 2014).

NOTES. Examined specimen has three labels. Two of them were written by Violovich's hand. The white label gives the information about geographic place, date and collector's name. The red one contains a printed word "Holotypus" and handwritten words "Eristalis optatus N. Violovitsh". However there is no any paper published by N.A. Violovitsh where he used this name. On the third specimen label there is the following inscription: "Eristalis cerealis F.A. Barkalov det., 2017". In fact, *Eristalis kyokoae* is like *E. cerealis* (Fabricius, 1805). Males of these species are distinguished by the external characters as well as genitalia characters according to the diagnosis of Kimura (1986). The female of *E. kyokoae* that was studied has yellow basal 1/2 of metafemur, whereas those of *E. cerealis* have entirely black metafemur, this character not being mentioned in the original description.

### *Metadon bifasciatus* (Matsumura, 1916)

Fig. 3

MATERIAL. Russia: Sakhalinskaya oblast, Kunashir Island, Dubovoe Village, 20–22.VII 2011, 1♂, leg. Proshchalykin & Loktionov [VM].

DISTRIBUTION. Russia (**new record**): Kuril Islands. – Japan (Hokkaido, Honshu, Shikoku), Southern Korea and China (Han & Choi, 2001; Reemer & Stähls, 2013; Ohara *et al.*, 2014).

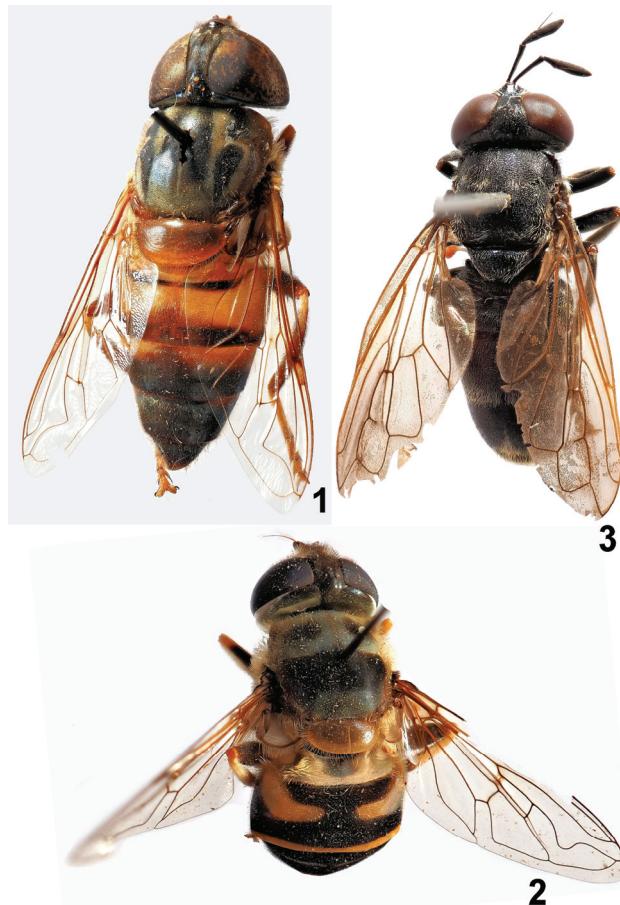
NOTES. The genus *Metadon* Reemer, 2013 is also recorded from Russia for the first time.

### *Melanogaster* aff. *pollinifacies* (Violovitsh, 1956)

MATERIAL. Russia: Primorskii krai, Kamenushka Village, 4.VI 1989, 3♀, leg. A. Shatalkin [ZMMU].

NOTES. The mistaken determination of these females as *Lejogaster nigricans* resulted into this species being included in the Far Eastern hoverfly keys (Mutin & Barkalov, 1999). Later they were redefined by me as the females of *Melanogaster pollinifacies* (Violovitsh,

1956), and this species was found in Primorskii krai (Barkalov & Mutin, 2018). Hereafter thorough study of the above mentioned specimens made possible to reveal their identity with undescribed species from Japan (Mahoro *et al.*, 2005), which differs from *M. pollinifacies* by short pilose eyes.



Figs 1–3. Imago of hoverflies. 1 – *Eristalinus aurulans*, ♀ (Primorskii krai: Rudnaya Pristan); 2 – *Eristalis kyokoae*, ♀ (Kunashir Island: Lagunnoe Lake); 3 – *Metadon bifasciatus*, ♂ (Kunashir Island: Dubovoe Village).

#### *Macrozelima hervei* (Shiraki, 1930)

MATERIAL. Russia: Amurskaya oblast, Khingan Nature Reserve, Arkhara forestry, 12.VIII 1990, 1♀, leg. A. Egorov [FCBV].

DISTRIBUTION. Russia; Amurskaya Oblast (**new record**), Primorskii krai, Kunashir Island. – Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima Is.); Korea (Mutin & Barkalov, 1999; Han & Choi, 2001; Ohara *et al.*, 2014).

NOTES. The genus *Macrozelima* Stackelberg, 1930 consists of two species only, the second one is known from Burma (Hippa, 1978).

***Pararctophila oberthuri* Herve-Bazin, 1914**

MATERIAL. Russia: Khabarovskii krai, Komsomolskii Nature Reserve, 3–10.VIII 2018, 1♀, leg. O. Kuberskaya [VM].

DISTRIBUTION. Russia: Khabarovskii krai (**new record**), Amurskaya oblast, Zabai-kalskii krai. – Mongolia; China; Northern India (Mitra *et al.*, 2015; Mutin & Barkalov, 1999; Peck, 1988).

NOTES. The genus *Pararctophila* Herve-Bazin, 1914 includes two other species, one of them is spread in India, the other is found in China.

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