

***Melangyna soszynskii* sp. n. (Diptera: Syrphidae)  
from the Sayan Mountains**

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**ABSTRACT.** A new species *Melangyna soszynskii* is described and illustrated from males. The characters separating it from similar species are given. The species is reported only from the eastern Sayan Mountains in southern Siberia (Russia).

**KEY WORDS:** hoverflies, taxonomy, new species, Russia, Sayan Mountains.

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INTRODUCTION

*Melangyna* VERRALL, 1901 are small and medium sized hoverflies distributed all over the world. Nearly 20 species are known from the Palaearctic region (PECK 1988). Up to now 13 species of *Melangyna* s. str. are known from the Russian Far East (MUTIN & BARKALOV 1999). Known *Melangyna* larvae are predators of aphids. Adults, like most Syrphidae, feed on pollen and nectar of various plants.

**Acknowledgments**

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RESULTS

***Melangyna soszynskii* sp. n.**

**Diagnosis**

*Melangyna soszynskii* sp. n. is similar to those species of *Melangyna* s. str. which have an entirely black face: *M. barbifrons* (FALLEN, 1817), *M. pavlovskiyi* VIOLOVITSH, 1956,

*M. quadrimaculata* (VERRALL, 1873). *M. soszynskii* in contrast to *M. pavlovskiyi* and *M. quadrimaculata* has bare eyes. From *M. barbifrons* it differs by the approximation of the eye angle, which is about 90° in *M. soszynskii* and around 130° in *M. barbifrons*. Male genitalia of *M. soszynskii* resemble those of the Eastern Palearctic *M. motodomariensis* (MATSUMURA, 1917) and *M. tsherepanovi* (VIOLOVITSH, 1965).

#### **Description**

Male (Fig. 1d). Body length 6.5-8 mm.

Head (Fig. 1a-b). Eyes bare. The angle of approximation of the eyes is 90-92°. The eyes are holoptic. The length of the line along which the eyes meet is equal to that of the ocellar triangle. Frons black, heavily dusted. Ocellar triangle covered in black hairs. Hairs on frons black, wavy at the ends. Antennae completely black. Hairs on arista no longer than half the diameter of the arista at base. Antennal fossa orange to orange brown. Lunula shining black. Face broad, about 1.9x of eye width measured at the base of lunula (Fig. 1b). Face black, dusted. Hairs on face black, except for white hairs on the mouth-edge. Occiput covered in short and strong white hairs; some longer black hairs present at the occiput tip.

Thorax. Mesonotum and pleurae shining black with bluish reflections. Hairs on mesonotum wavy at the ends, black on most of its surface but with many yellow hairs in the middle. Pleurae with intermixed black and white wavy hairs. Scutellum predominantly yellowish, black in the front corners. Most of the hairs on the scutellum are as long as the scutellum. Hairs black, only a few white hairs present in the corners and at the very margin of the scutellum. Legs black; only knees of legs 1 and 2 are narrowly yellowish. Most of the long hairs on femora 1-2 black, except for white hairs at the base. Hairs on femur 3 mostly white. Wings dark, entirely covered with microtrichia; pterostigma only slightly darker. Calypters yellowish, dark at upper margin. Hairs on calypters mostly yellow, but with many short black hairs on the upper margin. Halteres brown.

Abdomen. Tergites black, very thinly dusted. Tergites 2-4 with pairs of yellow spots which do not reach the tergite margins. Spots on tergite 2 very small and more rounded than those on tergites 3 and 4. Tergite 5 black. Hind margin of tergites 4 and 5 yellow. Tergites covered with short black hairs. Very long white hairs are present at sides of tergite 1-2 and at the front corners of tergites 3-4. Sternites black, dull; only the hind margin of sternite 4 yellow. Sternites covered in short black and longer white hairs. Hairs on sternites 5-8 long and black, only a few white hairs present.

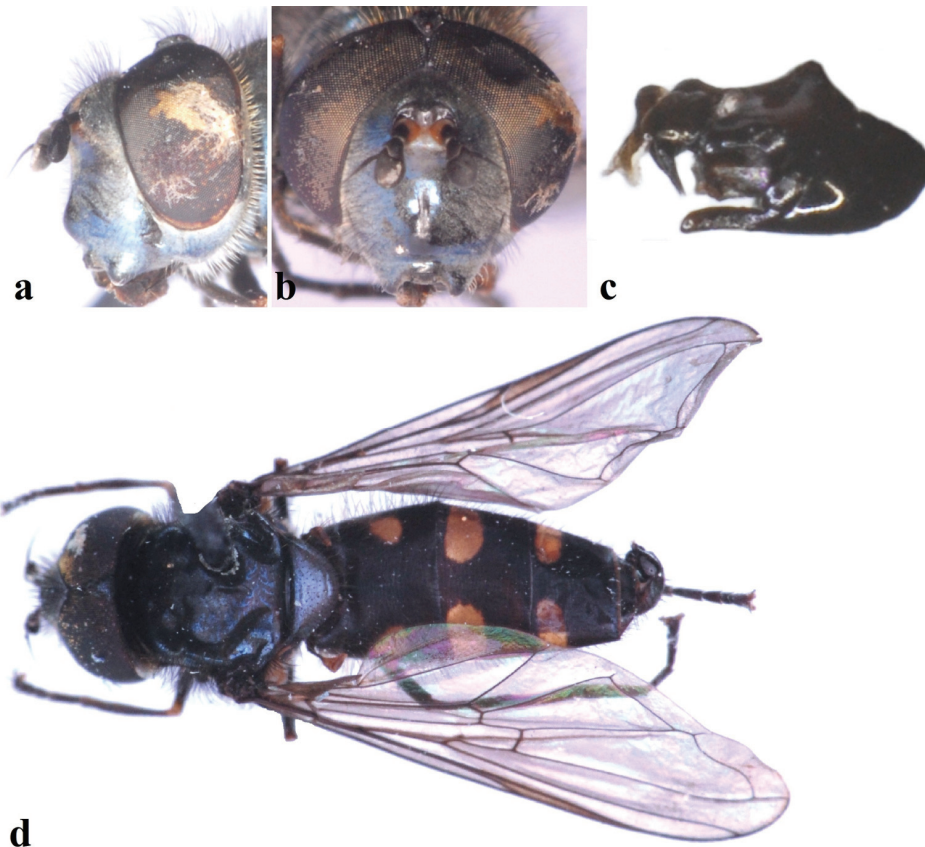
Genitalia. Sternite 9 with long lingula (Fig. 1c).

Female. Unknown.

#### **Material examined**

21 males. Russia, Republic of Buriatya, eastern Sayan Mountains, Volcano Valley 52°43'12.49"N, 99°1'49.37"E. Holotype, male labelled "Rosja, NU03, Rep. Buriacji, Sajany 28 VI 2012, Łukasz Mielczarek leg.". Paratypes, 20 males collected at the same time and

location as the holotype. The holotype and three paratypes are deposited at the Museum of Natural History, Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Kraków. Other paratypes are deposited in the private collection of Łukasz Mielczarek.



**Fig. 1.** *Melangyna soszynskii* sp. n.: a – head, lateral view, b – head, front view, c – genitalia, lateral view, d – habitus, dorsal view.

#### **Etymology**

The species name is dedicated to Dr Bogusław Soszyński, a Syrphidae specialist and teacher of many Polish entomologists.

#### **Habitat**

*M. soszynskii* was collected on an alpine meadow at an altitude of 1700 m. The flies were observed in only one small area at the base of the Kropotkin Volcano. *M. soszynskii*

was hovering about one metre above the ground, which was covered by grasses, Apiaceae, flowering *Anemone* sp. and *Rhodiola* sp. (Fig. 2). The whole area was covered by old lava. In most of the valley there were *Betula nana* and single specimens of *Larix* sp.



Fig. 2. Habitat of *Melangyna soszynskii* sp. n. in Volcano Valley.

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