

Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology,
Institute of Biology and Soil Sciences,
Vladivostok

Number 52: 1-6

ISSN 1026-051X

January 1998

A REVIEW OF THE GENUS *SPINIPHORA* MALLOCH (DIPTERA, PHORIDAE) FROM THE RUSSIAN FAR EAST

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Two new species *Spiniphora dichotoma* **sp.n.** (Primorskii krai) and *S. leleji* **sp.n.** (Kuril Islands) are described. A key to the males of the 3 recorded from Russian Far East species of *Spiniphora* is given.

KEY WORDS: Diptera, Phoridae, new species, Far East.

М.В.Михайловская. Обзор рода *Spiniphora* Malloch (Diptera, Phoridae) с Дальнего Востока России // Дальневосточный энтомолог. 1998. N 52. С. 1-6.

Описаны два новых вида: *S. dichotoma* **sp.n.** (Приморский край) и *S. leleji* **sp.n.** (Курильские острова). Дана определительная таблица самцов трех известных с Дальнего Востока России видов рода *Spiniphora*.

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INTRODUCTION

Twenty species of the genus *Spiniphora* have been reported from Nearctic (5), Palaearctic (12) and Oriental (5) Regions (Borgmeier 1968; Disney 1991). Two species – *S. bergenstammi* (Mik) and *S. excisa* (Becker) are Holarctic. Three

species (*S. atricostata* Schmitz, *S. nipponensis* Beyer and *S. okinawa* Borgmeier) are known from Japan (Schmitz 1941; Beyer 1958; Borgmeier 1962). During study of the phorid flies fauna of the Russian Far East three species of this genus were recognized. In my paper (Michailovskaya, 1986) *S. excisa* Becker was erroneously identified as *S. bergenstammi* (Mik). Two new species are described below. Holotypes and paratypes of new species are deposited in the collection of the Institute of Biology and Pedology, Vladivostok, Russia.

KEY TO THE MALES OF THE FAR EASTERN SPECIES OF SPINIPHORA

- 1 Hind tibia with 4 bristles: 1 dorsal near middle, 2 anterodorsals and 1 anteroventral (Fig. 1) Palps large and with short bristles. Hypopygium as Figs 5-7 ***S. excisa* (Becker)**
- Hind tibia with 3 bristles: 2 anterodorsals (the upper one at basal third, other subapical) and 1 anteroventral at middle (Fig. 2) 2
- 2. Yellow species: antennae, thorax, abdomen, legs yellow or brownish yellow. Four dorsocentrals bristles. Scutellum with four bristles of equal length. Costal ratios 7.1:3.3:1. Costal cilia short - 0,06 mm (Fig. 3). Hypopygium as Figs 8, 9. The right side of epandrium with elongate surstylus and with membranose bifurcated process. Hypandrium as Fig. 10 ***S. dichotoma* sp.n.**
- Species largely dark in color: antennae, thorax, abdomen, legs black or dark brown. Six dorsocentrals bristles. Scutellum with four bristles of unequal length. Costal ratios 2.9:1.1:1 (Fig. 4). Costal cilia 0,13 mm. Hypopygium as Figs 11, 12. The right side of epandrium with short broad surstylus, inner margins which deeply incised. Hypandrium as Fig. 13 ***S. leleji* sp.n.**

***Spiniphora excisa* (Becker, 1901)**

Figs 1, 5-7

MATERIAL. 15♂, 8♀, Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 14-17.VI 1996 (M.Michailovskaya); 25♂, 10♀, from the same locality, 15-20.VIII 1996 (M.Michailovskaya).

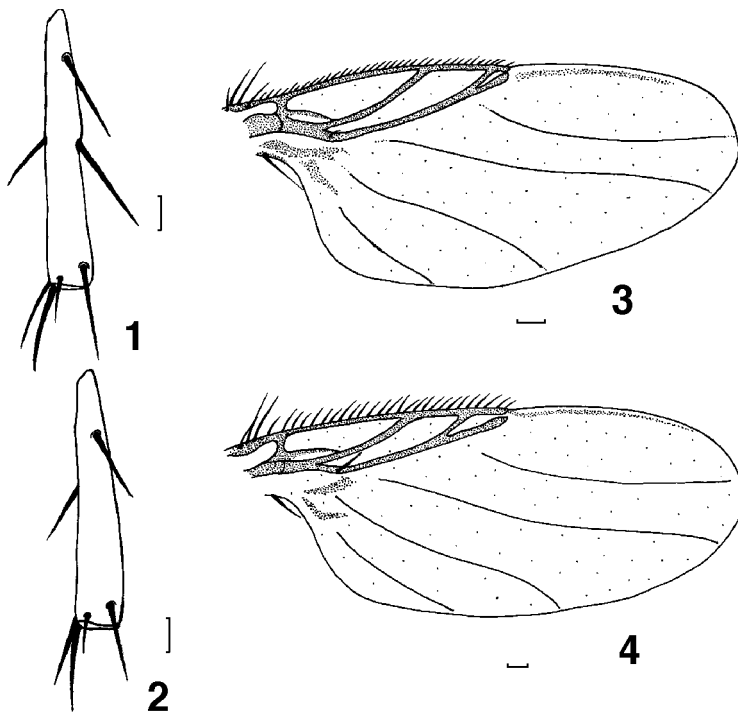
DISTRIBUTION. Russia: Primorskii krai. Europe, USA.

REMARKS. The specimens collected by water traps and reared from a dead snails.

***Spiniphora dichotoma* Michailovskaya, sp. n.**

Figs 2, 3, 8-10

MATERIAL. Holotype - ♂, Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 20.VII 1995 (M.Michailovskaya). Paratypes: 6♂, 8♀, the same locality, 20.VII 1995 (M.Michailovskaya); 12♂, 5♀, the same locality, reared from dead snails, 24.VII 1990 (M.Michailovskaya), one of the paratypes was dissected for the study of details.



Figs 1-4. Legs and wings of *Spiniphora*. 1, 2 – hind tibiae; 3, 4 – wings; 1 – *S. excisa*; 2, 3 – *S. dichotoma* sp.n.; 4 – *S. leleji* sp.n. Scale = 0.1 mm

DESCRIPTION. Male. Body length 3.2 mm. Frons dark brown with three reddish-yellow longitudinal striae: one – in middle and two – laterally. The antero-lateral bristles on frons lower than pre-ocellars ones and this row of bristles concave. Third antennal segment light yellow, without darker apex, conical (0.38 mm) and about 2/3 eye length. Apical arista (0.48 mm long), pubescent. Palps yellow with 8-9 unequal bristles. Thorax yellowish-brown. Scutum with two pairs of dorsocentral bristles. Scutellum with four bristles of equal length. Mesopleurae bare. Venter of abdomen light-yellow. Tergites of abdomen black and yellow. II-V tergites yellow with black spots on the middle and laterally. VI tergite black with light hind margin. Tergite II with a cluster of the 8-10 of hairs on each side. Hind margin of the VI tergite with dorsal row of 11-12 equal bristles. Hypopygium as Figs 8, 9 and largely brown with long yellowish anal tube. Right surstylus elongate, rounded at apex, with hairs. Lower it is long, thin faint unsclerotized lateral process which bifurcate posteriorly. Left surstylus short, broad with hairs. Hypandrium with two process, right – forked (Fig. 10). Legs yellow. Fore tibia with dorsal bristle at

basal part and a longitudinal row of 7 spines below the bristles; mid tibia with a pair of bristles at basal fourth and one anterior bristle; hind tibia with three bristles: two anterodorsals (at basal third and subapical) and one anteroventral near middle (Fig. 2). Metatarsus of hind legs shorter than the next two segment together. Wing 2.25 mm long. Costal index 0.52. Costal ratios 7.1 : 3.3 : 1. Costal cilia short 0.06 mm. A single axillary bristles. Wing membrane yellow. One hair is at base of the vein 3. All veins brown. Halteres yellow.

Female. Closely similar to male but has light yellow frons, third antennal segment smaller than in male and globose, tergites I-V of abdomen uniformly yellowish; Costal index 0.53, costal ratios 8.8 : 3.8 : 1. Body length 3.6 mm.

ETYMOLOGY. The specific name refers to the characters of process on the right side of the epandrium.

REMARKS. The new species most closely resembles the Japanese *S. okinawa* Borgmeier. However, the latter has black abdomen, the antero-laterals bristles at same level as the pre-ocellars, metatarsus of the hind legs longer than two next segments together, different costal ratios and anal tube short. The some specimens reared from a dead snails.

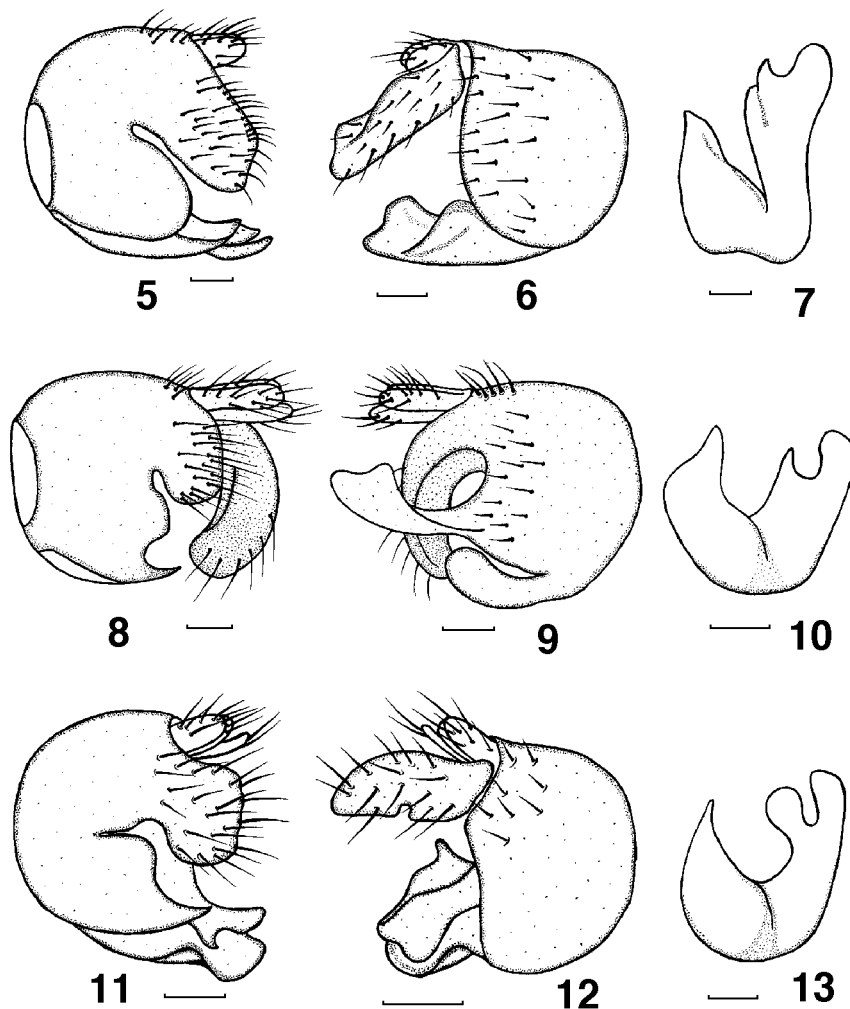
***Spiniphora leleji* Michailovskaya, sp. n.**

Figs 4, 11-13

MATERIAL. Holotype - ♂, Russia: Kuril Islands , Kharimkotan, 8.VIII 1996 (A.Lelej). Paratypes - 2♂, Kuril Islands, Iturup, Uchromnaya bay 20.VIII 1996 (A.Lelej); one of the paratypes was dissected for the study of details.

DESTRIPITION. Male. Body length 2.9 mm. Frons black (broad – 0.48 mm, length side – 0.28 mm). Pre-ocellar bristles on frons are a little higher than antero-laterals ones. The subglobose third antennal segment dark brown (length – 0.23 mm; broad – 0.20 mm). The subapical arista with short pubescence. Palps light brown, with 8-9 strong differentiated bristles. Thorax dark brown. Scutum with three pairs of dorsocentral bristles, anterior pair being a little shorter and thinner than posterior pairs. Scutellum with four unequal bristles. Abdomen with black tergites without light hind band. Venter dark brown. Each side of tergite II with cluster of the 10-12 hairs. Hind margin of the tergite VI with dorsal row of the unequal bristles, which are a longer posterolaterally. Hypopygium largely dark brown and as Figs 11, 12. Right surstylus broad and little longer than left surstylus. The inner margin of the right surstylus with deeply split. Hypandrium (Fig. 13) with 2 very developed lobes, right forked. Anal tube yellow and short. Legs brown. Fore legs light. Fore tibia with 1 dorsal bristle and a longitudinal row of 8 spines below the bristles; mid tibia with a pair of bristles at basal part and one anterior bristle; hind tibia with 2 anterodorsals and 1 anteroventral bristles. Metatarsus of hind legs is longer than the next two segments together. Wing 2.4 mm long. Costal index 0.51. Costal ratios 2.9 : 1.1 : 1. Costal cilia 0.13 mm long. Axillary ridge with 1 bristles. One hair is at base of the vein 3. All veins brown. Membrane tinged brown. Haltere with stem and knob largely brown.

Female unknown.



Figs 5-13. Hypopygium of *Spiniphora*. 5-7 – *S. excisa*; 8-10 – *S. dichotoma* sp.n.; 11-13 – *S. leleji* sp.n.; 5, 8, 11 – hypopygium, left lateral; 6, 9, 12 – hypopygium, right lateral; 7, 10, 13 – hypandrium, ventral. Scale = 0.1mm

ETYMOLOGY. This species dedicated to Dr. A.S. Lelej, who collected the type series on Kuril Islands.

REMARKS. *S. leleji* sp.n. is most closely related to *S. atricostata* Schmitz. The latter has a shorter bristles on the palps, shorter costal cilia, different costal ratios, swollen costal vein, light band on the hind margin of the abdominal tergites, differences of detail in the hypopygium.

ACKNOWLEDGEMENTS

I am grateful to Dr. A. S. Lelej (Institute of Biology and Pedology, Vladivostok) who allow me to examine his specimens collected in Kuril Islands and review this manuscript. I wish to express my thank to Dr. B.V. Brown (County Museum of Natural History, Los Angeles) for sending me necessary papers.

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