

# Far Eastern Entomologist

Дальневосточный энтомолог

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

# Number 61: 1–8 ISSN 1026–051X July 1998

# HOVER–FLIES (DIPTERA, SYRPHIDAE) COLLECTED IN KURIL ISLANDS IN 1997

# V. A. Mutin

## Department of Zoology, Komsomolsk–on–Amur State Pedagogical Institute, Komsomolsk–on–Amur, 681000, Russia

The list of thirty-seven species of syrphids collected by participants of International Kuril Island Project in 1997 is given. *Melangyna basarukini* **sp. n.** and *Platycheirus perpallidus paramushiricus* **ssp. n.** are described. *Helophilus affinis* and *Xylota sibirica* are newly recorded for the Kuril Islands. The hover-flies are firstly recorded for the Brat Chirpoev, Ushishir, Makanrushi, Antsiferova and Alaid (Atlasova) islands. Five species are new for Iturup, three for Paramushir and eleven for Shumshu. Systematic notes for some species are given.

KEY WORDS. Syrphidae, hover-flies, new species, new subspecies, new records, Kuril Islands.

В.А. Мутин. Мухи-журчалки (Diptera, Syrphidae), собранные на Курильских островах в 1997 г. // Дальневосточный энтомолог. 1998. N 61. C. 1–8.

Приводится список из 37 видов сирфид, собранных участниками Международного Курильского проекта в 1997 г. Описываются Melangyna basarukini **sp. n.** и Platycheirus perpallidus paramushiricus **ssp. n.** Helophilus affinis и Xylota sibirica указываются впервые для Курильских островов. Сирфиды впервые отмечены для островов Брат Чирпоев, Ушишир, Маканруши, Анциферова и Алаид (Атласова). Пять видов впервые указываются

1

для Итурупа, 3 – для Парамушира и 11 – для Шумшу. Даются систематические замечания для некоторых видов.

Комсомольский-на-Амуре педагогический институт, кафедра зоологии, Комсомольск-на-Амуре, 681000, Россия.

# INTRODUCTION

According to the last review (Mutin & Barkalov, 1997) and additions (Kuznetzov, 1992; Mutin, 1997) 141 syrphid species occur in Kuril Islands. The material collected in these islands by A.S. Lelej and S.Yu. Storozhenko, the participants of International Kuril Island Project in 1997, enlarged the range for many species. Among the collected flies the new species and new subspecies are discovered, its description is given below. The holotypes of new species and subspecies are deposited in the collection of the Institute of Biology and Pedology, Vladivostok. Next abbreviations are used in the material for the collectors: AL - A. Lelej, SS - S. Storozhenko

#### **DESCRIPTION OF NEW TAXA**

## *Melangyna basarukini* Mutin, sp. n. Figs 1–3

TYPE MATERIAL. Holotype –  $\sigma$ , Kuril Islands, Shumshu, Pochtareva Cape, 7.VIII 1997 (AL & SS). Paratypes. Kuril Islands:  $5\sigma$ ,  $1\varphi$ , with the same data as holotype;  $3\sigma$ , Shumshu, Yaugich Cape, 8.VIII 1997 (AL & SS);  $1\sigma$ ,  $2\varphi$ , Shumshu, Bol'shoe Lake, 9.VIII 1997 (AL & SS);  $1\varphi$ , Shumshu, Yuzhanka River, 10.VIII 1997 (AL & SS);  $1\varphi$ , Makanrushi, 18.VIII 1997 (AL & SS);  $1\sigma$ ,  $4\varphi$ , Shiashkotan, 11–12.VIII 1996 (AL);  $1\varphi$ , Ushishir, Yankicha II., 1.VIII 1997 (AL & SS);  $1\sigma$ , Kunashir, Kislyi Stream, 9.VIII 1983 (A. Basarukin). Magadan region:  $1\sigma$ , the mouth of Kegali River, 1.VI 1968 (Levina);  $1\varphi$ , the upper reaches of Myakit River, 23. VII 1997 (V. Mutin);  $1\sigma$ , the environs of Magadan, Snezhnaya Valley, 27.VII 1997 (V. Mutin).

DESCRIPTION. MALE. Body length 7,5–9 mm. Face yellow, black pilose, with black median stripe from 1/3 to 1/2 of facial width at level of tubercule and with broad black epistome. Facial tubercule massive and gentle. Cheek pale pilose. Frons bronze–black, rather dull, with black pile. Eye angle about 110–120°. Antennae black. Scutum dull black, rather with greenish–grey tint and, at least laterally, with black erect pile. Pleura more grey dusted, mainly with pale pile, except posterior anepisternum black pilose. Scutellum yellow, with black wedge shaped spots either side and with black pile. Wing membrane entirely trichose. Legs mainly black; apex of fore and mid femora and basal 1/3 or rarely 1/2 of fore and mid tibiae brownish–yellow. Tergum 2 with pair of small rounded yellow spots not reaching margins. Terga 3 and 4 with enough large yellow subrectangular spots slightly narrowed outside and extending to



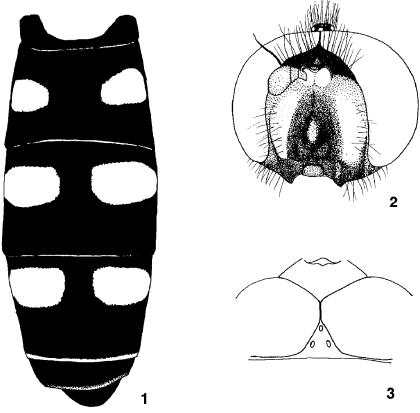
lateral margins or sometimes reaching lateral margins in their full length. Tergum 5 with weak yellow anterior angles. Sintergosternum black, with black pile.

FEMALE. Similar to male except for the normal sexual dimorphism and the following characteristics: face yellow, grey pollinose, with shinning back median stripe from one-quarter to one-third width of face at level of tubercule; frons widely shinning black above antennae, with brownish-grey pollinose rather triangular spots above; vertex sinning black; pile of frons and vertex black.; scutum pile pilose; yellow spot of tergum 2 subquadrangle.

DISTRIBUTION. Russia: Magadan region, Kuril Islands (Shumshu, Makanrushi, Shiashkotan, Ushishir, Kunashir).

DIAGNOSIS. The new species is similar to *M. motodomariensis* Matsumura, 1917 (= *M. arsenjevi* Mutin, 1986), but differs by spots on tergum 2 not reaching the lateral margins and having the black pile on male scutum; the spots on tergum 3 usually not reaching the lateral margins also.

ETYMOLOGY. The specific name is dedicated to A.M. Basarukin who devoted himself to collecting and study of insects of Sakhalin and Kuril Islands.



Figs 1–3. *Melangyna basarukini* sp. n., male. 1) abdomen, dorsal view; 2) head, frontal view, 3) head, dorsal view.

## Platycheirus perpallidus paramushiricus Mutin, ssp. n.

TYPE MATERIAL. Holotype  $-\sigma$ , Kuril Islands, Paramushir, Vasil'eva Bay, 15.VIII 1997 (AL & SS). Paratype  $-\sigma$ , with the same data as holotype.

MALE. Posterior anepisternum with pressed, long, very dense, reddish or partly black pile. Hind legs mainly black; base and apex of femur, basal one-quarter and apical part of tibia and second tarsomere reddish-yellow. Fore and mid legs yellow except black posterior or posterodorsal surface of femora. Membrane of wing darken, especially along veins. Tergum 2 with small rounded reddish-yellow spots in posterior half, well separated from margins. Terga 3 and 4 with elongate rather quadrangular reddish-yellow spots, well separated from lateral and posterior margins. Tergum 5 reddish-yellow with wide median stripe. FEMALE unknown.

DISTRIBUTION. Russia: Kuril Islands (Paramushir). The nominative subspecies widely distributed in the temperate zone of Palaearctic from Great Britain (type locality) to Sakhalin, Kurils (Kunashir) and Japan (Hokkaido) as in North America.

DIAGNOSIS. The specimens of new subspecies differs from nominative one by unusually dark coloration and pattern of longer abdomen. Macrotrichia of legs and pattern of lateral surface of basitarsomere of fore leg are typical for this species. These characteristics allow to distinguish these specimens as new subspecies. The description is given for males only because the females of this genus are not identifying in many cases.

REMARKS. Probably specimens from Shumshu identified by Barkalov (Mutin, Barkalov, 1997) as *P. perpallidus* (not seen by me) belong to new subspecies also.

# LIST OF THE SPECIES

The list of the species is given below (Table 1). Total 299 specimens of syrphids (37 species) have been collected in Kurils by A. S. Lelej and S. Yu. Storozhenko in 1997: Kunashir (27-28.VII), Iturup (29-31.VII, 22.VIII), Brat Chirpoev (20.VIII), Ushishir (1-2.VIII), Makanrushi (18.VIII), Antsiferova (15.VIII), Alaid (12.VIII), Paramushir (4-5, 11, 13-17.VIII), Shumshu (7-10. VIII).

## **TAXONOMIC NOTES**

#### Epistrophe cryptica Doczkal et Schmid, 1994

Epistrophe melanostoma (Zetterstedt, 1843): Mutin & Barkalov, 1997: 187.

REMARKS. *E. cryptica* was recorded from Kurils by Mutin & Barkalov (1997) as *E. melanostoma*.

## Epistrophe flava Doczkal et Schmid, 1994

*Epistrophe melanostomoides* (Strobl, 1880): Mutin & Barkalov, 1997: 187. REMARKS. *E. flava* was recorded from Kurils by Mutin & Barkalov (1997) as *E. melanostomoides*. Table 1

List of the species collected in Kuril Islands in 1997

۶.	Species	КU	ΤŢ	BC	HSU	MA	AN	AL		PA	THS
	Dasysyrphus tricinctus Fll.	I	¢[*		1	.	.	.			
_	Didea alneti Fll.	,	•	₀ [*	,	,		•			
	Epsyrphus balteatus Deg.	•	1 \$		ı	•	,	,			• •
_	Eupeodes sp.		•	•	↔ [*		,		-	0	
	E. lundbecki SR.	ı	•	•		•		,	•	+ ,	
	Melangyna basarukini sp.n.	*1¢	,	ı	ð [ <b>*</b>	¢ [¥	ı	•			102.40
	M. coei Niel.		•	¢[*	•	•		•			+ +
	M. motodomariensis Mats.		ţ	•	•				•		
_	Parasyrphus tarsatus Ztt.	ı	•	•	*19¢	•	,	ð [*	01	109	001*
	Sphaerophoria philanthus Mg.	ı	•		ı	•	•			÷ ,	*2 * 20
	Syrphus ribesii L.	ł	2đ	•	ı		\$ <b>I</b> ∗	₽6 <b>*</b>	9 d	9ď 49	+ 7 07
	S. torvus OS.	,	•	<b>*</b> 29		ð [*	•	,	*	٥l ۴l*	, o <del>,</del>
	Melanostoma mellinum L.	ı	28			ı		ı	2 –	12	* 00 *
	M. scalare F.	1 \$	4 I	,		•			•	• •	+ 1
	Platycheirus angustatus Ztt.	•	۶I*	,	ı	•			- '	۰.	•
	P. clypeatus Mg.	•	l ď	•	•		•		•		1 1
	P. perpallidus paramushiricus	,		•			,	,	¢ *	* ) ~	
	ssp. n.								1	2	
	P. urakawensis Mats.		,	•	1		,	ð [#	4	40	07#
	Platycheirus sp. (peltatus group)		·	,	•			•	t č	++ 00	<u>+</u> _
	Platycheirus sp.	,	,	,	1	c -*			1	•	+ 1

4

Table 1 (continued)

SULT	OUC:	*19& 10\$		1/6 244	• :	۴] م		*2ď 39			•	•	•	•	1	1	•	,	- 127
		ł	-	•															-
ÞΔ		JG J¥		00.004	•	•	•	1	•	•	•		* + -	* <b>1</b>	•	•	•		03
┢																			$\left  \right $
AL		ı	1		•	•	•	•	•										=
AN					, ,			1	• •	1				1		,		,	
MA				,	0  *	+	•			,		,	,	•		,	,	,	4
BC USH MA			•				•	ı			1							,	21
BC	۳ 		•				•	,		,	,	,		•	,	,			5
LI			,			JA 19	- - 	<del>تر</del>	*1°	1 3 1 9	ت 	•		5   1		۰ م		*2ď	22
KU	.			1 \$	r	,	•			,		·			10		ð -	۰	5
Species	Cheilosia illustrata magnifica	Hellén	Ch. impressa Lw.	Ch. japonica H.–B.	Ch. melanopa Ztt.	Ch. motodomariensis Mats.	Volucella bombylans L.	V. pellucens L.	Sphegina violovitshi Stack.	Sericomyia sachalinica Stack.	Eristalis interrupta Poda	Helophilus affinis Wahlb.	H. pendulus L.	H. sapporensis Mats.	Matsumyia nigrofacies Shir.	Syritta pipiens L.	<i>Xylota amamiensis</i> Shir.	X. sibirica Lw.	Total specimens
Ŝ.	51								28									-	

\_\_\_\_

5

Notes: Islands: KU – Kunashir, IT – Iturup, BC – Brat Chirpoev, USH – Ushishir, MA – Makanrushi, AN – Antsiferova, AL – Alaid (Atlasova), PA – Paramushir, SHU – Shumshu; in the parentheses – number of examined specimens. Asterisk (\*) – new records.

### Melangyna motodomariensis (Matsumura, 1917)

Melangyna arsenjevi Mutin, 1986: 190. Synonymized by Mutin (1998).

REMARKS. Specimens of *M. arsenjevi* Mutin recorded from Shiashkotan (Mutin, 1997) belong to *M. basarukini* sp. n., described above, and ones from Iturup belong to *M. motodomariensis*.

#### Criorhina takaoensis (Shiraki, 1952)

Criorhina brevipila (Loew, 1871): Mutin & Barkalov, 1997: 217.

REMARKS. *C. takaoensis* was recorded from Kurils by Mutin & Barkalov (1997) as *C. brevipila*. Additional data about the synonymy of *C. takaoensis* see: Mutin (1998).

#### Criorhina narumii (Shiraki, 1952)

*Criorhina ussuriana* (Stackelberg, 1955): Mutin & Barkalov, 1997: 218 (female from Kunashir).

REMARKS. I did not find the paratype of *C. ussuriana* from Urup (Stackelberg, 1955) in the Zoological Institute (St. Petersburg) and Institute of Animal Systematic and Ecology (Novosibirsk) where the most of the hoverfly types from Kurils are deposited. Probably this specimen belongs to *C. takaoensis* (Shiraki). Quite possible that *C. ussuriana* (Stack.) and *C. brevipila* (Loew) distributed in the mainland only.

## ACKNOWLEDGEMENTS

The author would like to express his gratitude to Dr. A.S. Lelej and Dr. S.Yu. Storozhenko for possibility to study the interesting syrphids from Kuril Islands. The work described here was supported in part by the International Programs Division and Biological Sciences Directorate (Biotic Surveys and Inventories Program) of the U.S. National Science Foundation, Grant Nos. DEB–9400821 and DEB–9505031, Theodore W. Pietsch, principal investigator; and by the Japan Society for the Promotion of Science, Grant No. BSAR–401, Kunio Amaoka, principal investigator.

#### REFERENCES

Kuznetzov, S.Yu. 1992. A new Palaearctic species and a new female of the genus Eumerus Meigen (Diptera, Syrphidae). – Dipterological research 3: 33–40.

Mutin, V.A. 1986. [New and little–known species of hover–flies (Diptera, Syrphidae) in the USSR fauna]. – Entomologicheskoye obozrenie 65(4): 826–832. (In Russian).

Mutin, V.A. 1997. Hover-flies (Diptera, Syrphidae) collected in Kuril Islands in 1996. – Far Eastern Entomologist 41: 1–4.

Mutin V.A. 1998. New exotic species and new synonyms of hover–flies (Diptera, Syrphidae) from the Russian Far East. – Int. J. Dipterol. Res. 9(1): 9–12.

7

Mutin, V.A. & Barkalov, A.V. 1997. A review of the hoverflies (Diptera: Syrphidae) of Sakhalin and the Kuril Islands, with descriptions of two new species. – Species Diversity 2: 179–230.

Stackelberg, A.A. 1955. [Palaearctic species of the genus Penthesilea Mg. (Diptera, Syrphidae)]. – Entomologicheskoye obozrenie 34: 340–349. (In Russian).

© Far Eastern entomologist (Far East. entomol.) Editor-in-Chief: S. Yu. Storozhenko Editorial Board: A. S. Lelej, Yu. A.Tshistjakov, N. V. Kurzenko Address: Institute of Biology and Pedology, Far East Branch of Russian Academy of Sciences, 690022, Vladivostok-22, Russia. FAX: (4232) 310 193 E-mail: entomol@stv.iasnet.ru