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Tachinid flies of the Ussuri area

(Diptera: Tachinidae)¹

Contributions to the knowledge of East Palaearctic insects (5)

With 74 figures

JOACHIM ZIEGLER & HIROSHI SHIMA

Summary

Tachinid flies from the Russian Far East were studied: 448 species are for the first time compiled for the Russian Far East, of which 362 species are recorded from the Ussuri area; 32 species are recorded from Russia for the first time; 53 species are new for the Russian Far East and 71 species are reported for Ussuria for the first time. In addition to the faunistic data, brief ecological, morphological and zoogeographical remarks are given. A new synonym is established: *Anameriana albomicans* ZIMIN, 1960 **syn. nov.** of *Bothria japonica* MESNIL, 1957. Redescriptions are given for *Ctenophorinia adiscalis* MESNIL, 1963, *Ctenophorinia grisea* MESNIL, 1967 and *Erythrocer a longicornis* (BRAUER & BERGENSTAMM, 1891). The following seven species are described as new to science: *Ctenophorinia christiana e* sp. n., *Ctenophorinia frontalis* sp. n., *Medina confinis* sp. n., *Oswaldia intermedia* sp. n., *Paratryphera grandis* sp. n., *Campylocheta similis* sp. n. and *Hemyda hertingi* sp. n.

Zusammenfassung

Raupenfliegen aus dem Nordosten der Paläarktis werden mit ihrer Verbreitung genannt. Davon sind 448 Arten erstmals zu einem Verzeichnis der Tachinen des Fernen Ostens Rußlands zusammengefaßt. Dieses Verzeichnis ist gleichzeitig als vorläufige Checklist der Tachinidae des Ussuri-Gebietes nutzbar (362 Arten) und basiert auf der Auswertung von Literaturangaben, der Untersuchung von Sammlungen und dem Material, welches der Erstautor im Zeitraum vom 20. Mai bis 23. Juni 1993 in den Laub- und Mischwäldern von Ussurien (Ferner Osten Rußlands) gesammelt hat. Neben den faunistischen Angaben werden ökologische, morphologische und zoogeographische Anmerkungen gemacht. Insgesamt konnten 71 Raupenfliegenarten erstmals im Ussuri-Gebiet nachgewiesen werden. 53 Tachinidae sind neu für den Fernen Osten Rußlands und 32 konnten erstmals in der Russischen Föderation festgestellt werden. *Anameriana albomicans* ZIMIN, 1960 ist ein neues Synonym von *Bothria japonica* MESNIL, 1957). Für *Ctenophorinia adiscalis* MESNIL, 1963, *Ctenophorinia grisea* MESNIL, 1967 und *Erythrocer a longicornis* (BRAUER & BERGENSTAMM, 1891) werden Redeskriptionen angefertigt. 7 Arten werden als neu für die Wissenschaft beschrieben: *Ctenophorinia christiana e* sp. n., *Ctenophorinia frontalis* sp. n., *Medina confinis* sp. n., *Oswaldia intermedia* sp. n., *Paratryphera grandis* sp. n., *Campylocheta similis* sp. n. und *Hemyda hertingi* sp. n.

Резюме

Публикуется список тахин с северо-востока Палеарктики: 448 видов впервые названы для Дальнего Востока Российской Федерации. Из них 362 найдены в Уссурийском регионе. Кроме того, приводятся фаунистические, экологические, морфологические и зоогеографические данные. 71

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видов тахин впервые найдены в Уссурийском регионе. Из них 53 видов новые для Дальнего Востока России и Из видов были неизвестными для России. *Anameriana albomicans* ZIMIN, 1960 является новым синонимом для *Bothria japonica* MESNIL, 1957. Даются редескрипции для *Ctenophorinia adiscalis* MESNIL, 1963, *Ctenophorinia grisea* MESNIL, 1967 и *Erythrocerca longicornis* (BRAUER & BERGENSTAMM, 1891). Следующие 7 видов тахин описываются как новые: *Ctenophorinia christinae* sp. n., *Ctenophorinia frontalis* sp. n., *Medina confinis* sp. n., *Oswaldia intermedia* sp. n., *Paratrypha grandis* sp. n., *Campylocheta similis* sp. n. и *Hemyda hertingi* sp. n.

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1. Introduction

The southern part of the Russian Far East and adjacent areas are one of the most interesting areas in the Palaearctic Region from the zoological point of view. This northeastern part of the Manchurian Subregion comprising the Ussuri area is characterized by a very diverse insect fauna which is composed of a mixture of Palaearctic, Oriental and stenochorous species. The Ussuri area is characteristically rich in natural environment and well preserved in comparison with neighbouring areas. Knowledge about the insect fauna of this area is very important for conducting analyses of the European and East Palearctic faunas. Tachinid flies are mostly endoparasites of other insects, so it is expected that the tachinid fauna reflects the insect diversity of this area at least in part.

In this paper we compile the records of tachinid species from the Russian Far East based on the material directly examined by ourselves as well as on records published earlier. We update old records in accordance with recent tachinid systematics. Apart from the collections carried out in Russia there is not sufficient material from this area. At the end of the last century some of tachinids came from Ussuria to Central Europe. Two of these flies were described by BRAUER & BERGENSTAMM in 1891 and BRAUER in 1898. For more than 100 years the Russian Academy of Sciences and Russian universities have organized scientific expeditions to the Far East again and again where tachinids were collected, too. The material was mainly added to the collections of the Zoological Institute of St. Petersburg. Interesting collections were made by the Siberian Division of the Academy and the Zoological Museum of the Moscow State University, too. The material the revision of which began by ROHDENDORF in 1928 has been continued up to now by BORISOVA-ZINOVJEVA, DRABER-MOŃKO, KOLOMYETZ, MESNIL, RICHTER, ROHDENDORF and ZIMIN. KOLOMYETZ (1975, 1976, 1977) and RICHTER (1986, 1993) in particular published extensive lists of tachinid species comprising the Ussuri area. In the last years material was

collected by SAIGUSA (see SHIMA, 1992) and by the expeditions of the Deutsches Entomologisches Institut in 1993, too. However, field investigations in particular were hardly conducted by experts of tachinids. As it was sometimes difficult to refer all of these literature, we did not have critical summary of data on the Far East Russian tachinid scattered in many literature. We have opportunities to conduct field surveys in the Ussuri area supported by the Russian Academy of Sciences and the Institute of Biology and Pedology Vladivostok. In the course of this project we were able to compile a large-scale list of species and gain new knowledge. Thus, making it possible for us to discuss about the zoological distribution of Ussurian tachinids.

2. Material and methods

A large part of the material treated in this paper was collected by the first author during the first expedition organized by the Deutsches Entomologisches Institut Eberswalde (DEI) to the Russian Far East between May 20 and June 23, 1993². Additional material was collected by Mrs CHRISTIANE LANGE (Berlin). A small number of tachinid flies was collected by Mr CHRISTIAN KUTZSCHER (Eberswalde) during the second expedition of the DEI between July 26 and August 19, 1993. Material collected by the Institute of Biology and Pedology in Vladivostok was also studied by the first author. The flies were mainly collected by net. We used a small Malaise trap and sprayed a sugar solution on leaves as artificial "honey dew" at some localities. Nearly all hill tops are covered with trees, so hilltopping Tachinidae were uncollectable. Electricity for a light trap was only available in Anisimovka. Two species were reared from hosts. Data were entered into a database concerning the systematic, faunistic and ecological records of Palaearctic Tachinidae. The collected specimens are mainly housed in the collection of the Deutsches Entomologisches Institut, Eberswalde, Germany, (DEI). Specimens collected by those other than the first author are housed in the collection of the Biosystematic Laboratory of Kyushu University (Fukuoka, Japan), the Zoological Institute (St. Petersburg, Russia), Institute of Biology and Pedology (Vladivostok, Russia), Museum für Naturkunde (Stuttgart, Germany) and in the private collection of J. ZIEGLER (Eberswalde, Germany).

Table 1: Abbreviations used in the text

BLKU	- Biosystematics Laboratory, Kyushu University, Fukuoka (Japan)	Mt., Mts.	- Mount, mountains
CZE	- collection ZIEGLER, Eberswalde (Germany)	N	- North, northern
DEI	- Deutsches Entomologisches Institut, Eberswalde (Germany)	nr.	- near
Distr.	- distribution	prb.	- probably
E	- East, eastern	S	- South, southern
estab.	- established	SMNS	- Staatliches Museum für Naturkunde, Stuttgart (Germany)
IBPV	- Institute of Biology and Pedology, Vladivostok (Russia)	sp. (spp.)	- species (plural)
introd.	- introduced	ssp.	- subspecies
Is.	- Island, Islands	var.	- variety
leg.	- collected by	Vall.	- valley
		W	- West, western
		ZMAS	- Zoological Institute, St. Petersburg (Russia)

There are different transliterations for the name of the author КОЛОМЬЕЦ. Even he used different spellings: KOLOMIETZ, KOLOMYIETZ, KOLOMIEC, KOLOMIETS and KOLOMYETZ. We follow KERZHNER & NARTSHUK (1992) and used the spelling "KOLOMYETZ" irrespective of the various forms of spelling we found. In descriptions terminology mainly follows MCALPINE (1981) and measurements were made in a similar manner to SHIMA (1996). In cases where TSCHORSNIG and HERTING (1994) applied other methods in measurements (in particular the width of parafacials and gena) we indicate the results obtained from both methods. The species are listed mainly according to HERTING & DELY-DRASKOVITS (1993).

3. Area

The investigated area and the surrounding large-scale areas are shown in fig. 1. For detailed explanation of figs 1-3 refer to collecting localities in fig. 2 and map of faunal regions in fig. 3. Detailed explanations of these figures are given in Tables 2-4. In most cases the spelling of geographical names follows ANONYMOUS (1992a): "The Times" atlas of the world" and KERZHNER & NARTSHUK (1992). We used the "Topographical map, Primorsky Territory" [ANONYMOUS (1992b)] for the spelling of the geographical names of south Ussuria that are not given in "The Times Atlas".

Table 2: Explanation of the terms related to dispersal areas

[The following concepts are exclusively used in the geographical context for a better understanding of the range of insects and are without any political relevance.]

Amuria: Amur area or Priamuria. Southwestern part of the Russian Far East. Including the Amur Province and a part of the Khabarovsk Territory, south of 56° N and west of the river Amur. The Russian name Priamurie means an area "before" the Amur river.

Central Asia: Turkmenistan, Uzbekistan, Tajikistan and Kyrgyzstan (formerly Soviet Central Asia).

Middle East: The concept is different in the English linguistic area. We interpret the Middle East as follows: Asiatic Turkey, Cyprus, the Lebanon, Syria, Israel, Jordan, Egypt, the Arabian Peninsula, Iraq and Iran. This area is designated as Near East by the National Geographical Society Washington, quoted by "Westermann" Lexikon der Geographie [ANONYMUS (1970: 454)]. Unfortunately, this designation did not gain acceptance.

Russian Far East: In Russian "Dalniy Vostok". The extreme eastern part of the Russian Federation, east of Siberia, comprising the following administrative areas: the Primorsk Territory, the Khabarovsk Territory, the Amur Province, the Sakhalin Province, the Kamchatka Province and the Magadan Province. The corresponding natural areas are: Ussuria, (Pri)Amuria, the Shantarskiye Islands, the Sakhalin Island, the Okhotsk area, the Magadan area enclosing the Wrangel Island, the Kamchatka Peninsula, the Komandorskiy Islands and the Kuril Islands.

Sakhalin: Sakhalin Island, Russian Far East. This is in accordance with the Sakhalin Oblast exclusive of the Kuril Islands.

Transcaucasia: Georgia, Armenia and Azerbaijan.

Ussuria: The Ussuri area or Primorie. The southeastern part of the Russian Far East, including the Primorsk Territory and the southeastern Khabarovsk Territory east of the river Amur. The Russian name Primorie means an area "before the sea". In many Slavic languages coastal regions have the same name or similar names. To prevent any misunderstandings we used the name "Ussuria" for the natural area of the Russian Far East.

Ussuria is dominated by the mountain range Sikhote Alin which extends from the lower Amur in the north to the neighbourhood of Vladivostok parallel to the coast of the Japanese Sea. The mountain range is mostly from 1000 to 1500 m in elevation, however, a few areas rise up from

1,500 to about 2,000 m. A small region in the extreme southwest is close to the low mountains of Chernye Gory ("Black Mountains" - a part of the Chinese Changbai Shan Mountains). In the south and in the valleys of Ussuria there are broadleaf forests of deciduous trees. Mixed forests of conifers and broadleaf deciduous trees are found in central areas and in low parts of mountain areas, and northern coniferous forests (taiga) in the mountains and in the northeast. The area of the highest elevation is represented by alpine vegetation. Open grassland mainly surrounds the Khanka lake area. The climate is dry and cold in the winter and warm and humid in the summer. Temperature in lowlands ranges from -43 to $+40^{\circ}\text{C}$ (Khabarovsk). In January the average temperature is from -15 to -25°C and in July from 18 to 22°C .

Table 3: The collecting localities of the southern Russian Far East

[All places investigated by LANGE and ZIEGLER are provided with coordinate data. In the case of other collectors, their names are given in chapter 4.1. (in the list of species after "leg."). In those cases we also mentioned the depositories of the material.]

"AMURIA"

Amur Province [= Amurskaya Oblast]:

1. Selemdzhinsk 270 km NE Belogorsk
- 2.a. Svobodnyy
- 2.b. Shimanovsk 80 km NW of Svobodnyy
- 2.c. Simonovo 75 km W of Svobodnyy
- 2.d. Klimoutsy 40 km W of Svobodnyy
3. Arkhara SE Blagoveshchensk

Khabarovsk Territory

[=south-western part of Khabarovskiy Kray "before" Amur river including Yevreysk Autonomous Region]:

4. Khrebet Bureiskiy 200 km NW of Khabarovsk and Komsomolsk-na-Amure
5. Gornyy 55 km NW of Komsomolsk-na-Amure, Khrebet Myaotshan
(= Khrebet Dzhaki-Unakhta-Yakbyyana)
6. Komsomolsk-na-Amure, Zilinskiy Park
- 7.a. Pashkovo, Khrebet Mal. Khingan
- 7.b. Bashurovo N of Radde
- 7.c. Dizhun Vall. E of Radde
8. Londoko
- 9.a. Amurzet (=Oktyabrskoye)
- 9.b. Samara Vall. 15 km NE of Amurzet
- 9.c. Stolovoye N of Amurzet

"SAKHALIN"

Sakhalin Island [= Sakhalin Province without Kuril Islands]

10. Sobolevo S of Uglegorsk
11. Novoaleksandrovsk N of Yushno-Sakhalinsk

"USSURIA"

Khabarovsk Territory [=south-eastern part of Khabarovskiy Kray "after" Amur river]:

12. Tsimmermanovka
13. Khabarovsk, Dendraryi
- 14.a. Khekhzir Mts. SW of Khabarovsk
- 14.b. Korfovskiy 30 km S of Khabarovsk, Khekhzir Mts.
- 15.a. Sita 50 km SE of Khabarovsk
- 15.b. Obor 70 km SE of Khabarovsk
- 15.c. Durmin 80 km SE of Khabarovsk

- 16.a. Vyazemskiy 110 km S of Khabarovsk
- 16.b. Sobolevo 20 km S of Vyazemskiy
- 17.a. Shivki Vall. N of Boitsovo, 26 km N of Bikin, 200m 47°08'N 134°18'E
- 17.b. Shivki Mtn. NE of Boitsovo, 24 km N Bikin, 300m 47°07'N 134°18'E
- 17.c. Kamenistaya Griva Hill W of Boitsovo, 19 km N of Bikin, 300m 47°05'N 134°15'E
- 17.d. Bolshoi Solntsepyok Hill SE of Boitsovo, 18 km NE of Bikin, 250m 47°02'N 134°21'E
- 18. Pokrovka 20 km SW of Bikin

Primorsk Territory [=Primorskiy Kray]:

- 19. Mezhdurechje 37 km SE of Dalnerechensk, 150m 45°45'N 134°07'E
- 20. Tamga 17 km NE of Lesozavodsk, 130m 45°37'N 133°36'E
- 21. Gorniy Klyuchi 25 km S of Lesozavodsk, Ussuri River banks, 100m 45°15'N 133°30'E
- 21.1 Sikhote Alin Zapovednik (=Sikhote Alin Nature Reserve) W of Terney
- 22. Novoselische 18 km SW of Kamen-Rybolov
- 23. Khankaisky Zapovednik (=Khanka Nature Reserve) 25 km WSW of Spassk-Dalniy
- 24. Novoselskoye 22 km NNW of Spassk-Dalniy
- 25.a. Yakovlevka 55 km ESE of Spassk-Dalniy
- 25.b. Forest 10 km SE of Chernigovka, 60 km SE of Spassk-Dalniy
- 26.a. Samarka 70 km N of Chuguyevka, Gordeyevskaya Mtn., 200-300m 44°46'N 134°13'E
- 26.b. Samarka 70 km N of Chuguyevka, Zhuravlyevka River banks, 200m 44°43'N 134°12'E
- 27. Krounovka 40 km SW of Ussuriysk, Medveditsa Vall., 250m
- 28. Tikhoye near Razdolnoye 36 km S of Ussuriysk, 100m 43°36'N 131°52'E
- 29.a. Banevurovo S of Ussuriysk, 150m 43°42'N 132°01'E
- 29.b. Partizan 13 km S of Ussuriysk, 100m 43°42'N 132°00'E
- 29.c. Partizan 15 km S of Ussuriysk, 100m 43°40'N 131°52'E
- 29.d. Yakonovka 20 km S of Ussuriysk
- 30.a. Kremovo 25 km SW of Sibirtsevo, 120m 43°59'N 132°18'E
- 30.b. Nikolayevka 20 km ENE of Ussuriysk, Ilistaya Vall.
- 31.a. Ussuriysky Zapovednik (=Ussuriysk Nature Reserve) 33 km SE of Ussuriysk, Komarovka Vall., 200m 43°37'N 132°18'E
- 31.b. Kamenushka 30 km SE of Ussuriysk, Komarovka Vall.
- 31.c. Gornotayozhnoye (=GTS) 19 km SE of Ussuriysk, Dendraryi
- 32.a. Vinogradovka 80 km E of Ussuriysk
- 32.b. Przhevalski Mts. 53 km SE of Ussuriysk, 250m 43°37'N 132°35'E
- 33.a. Biological station 30 km SE of Chuguyevka (Sikhote Alin), 650m 44°05'N 134°12'E
- 33.b. Meteorological station 28 km SE of Chuguyevka (Sikhote Alin), 900m 43°59'N 134°08'E
- 34.a. Sikhote Alin (nr. Oblachnaya Mtn.) 50 km SE of Chuguyevka
- 34.b. Zhurovka Vall. (nr. Oblachnaya Mtn.) 56 km SE of Chuguyevka, 850m 43°45'N 134°15'E
- 35.a. Vladivostok-Sedanka, 100m 43°09'N 131°53'E
- 35.b. Vladivostok, Mandkur Inlet
- 36. Shtykovo N of Shkotovo 45 km NE of Vladivostok.
- 37.a. Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 200-400m 43°11'N 132°41'E
- 37.b. Anisimovka 70 km E of Vladivostok, Litovka Mtn., 700-1000m 43°07'N 132°41'E
- 37.c. Tigrovoi W of Partizansk (=Suchan) 80 km E of Vladivostok, Tigrovaya Vall.
- 38.a. Sergeyevka 30 km N of Partizansk, Sergeyevka River banks, 300m 43°22'N 133°23'E
- 38.b. "Suchanskiy Rudnik" (=Suchan pit) near Partizansk (=Suchan)
- 39. Zapovednik (=Nature Reserve) "Kedrovaya Pad" near Barabash W of Vladivostok
- 40. Ryazanovka 14 km SW of Slavyanka, 0-50m 42°48'N 131°12'E
- 41. Posyet NE of Khasan
- 42. Askold Is. SE of Vladivostok (Zaliv Petra Velikogo)

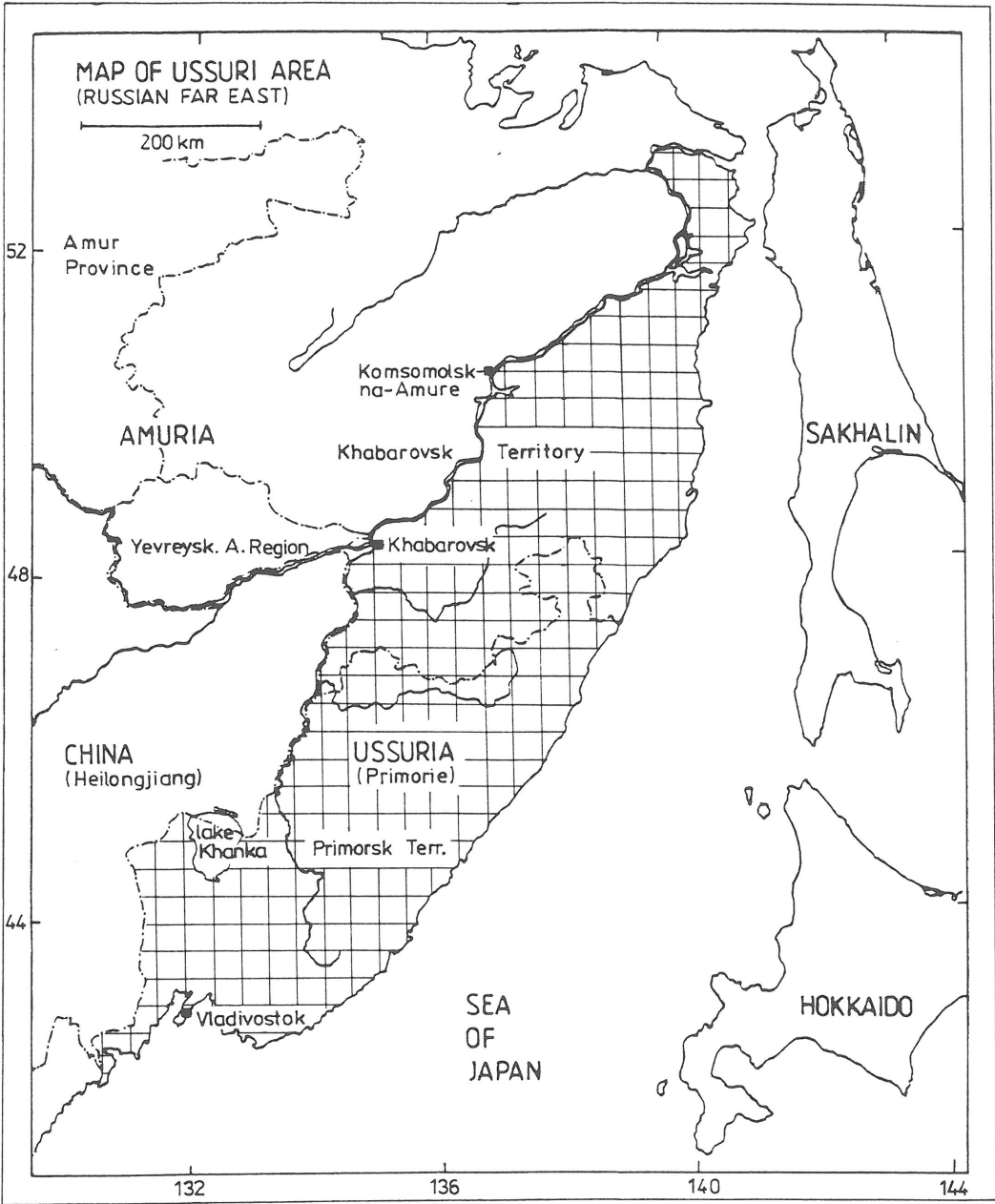


Fig. 1 The Ussuri area and the adjacent territories

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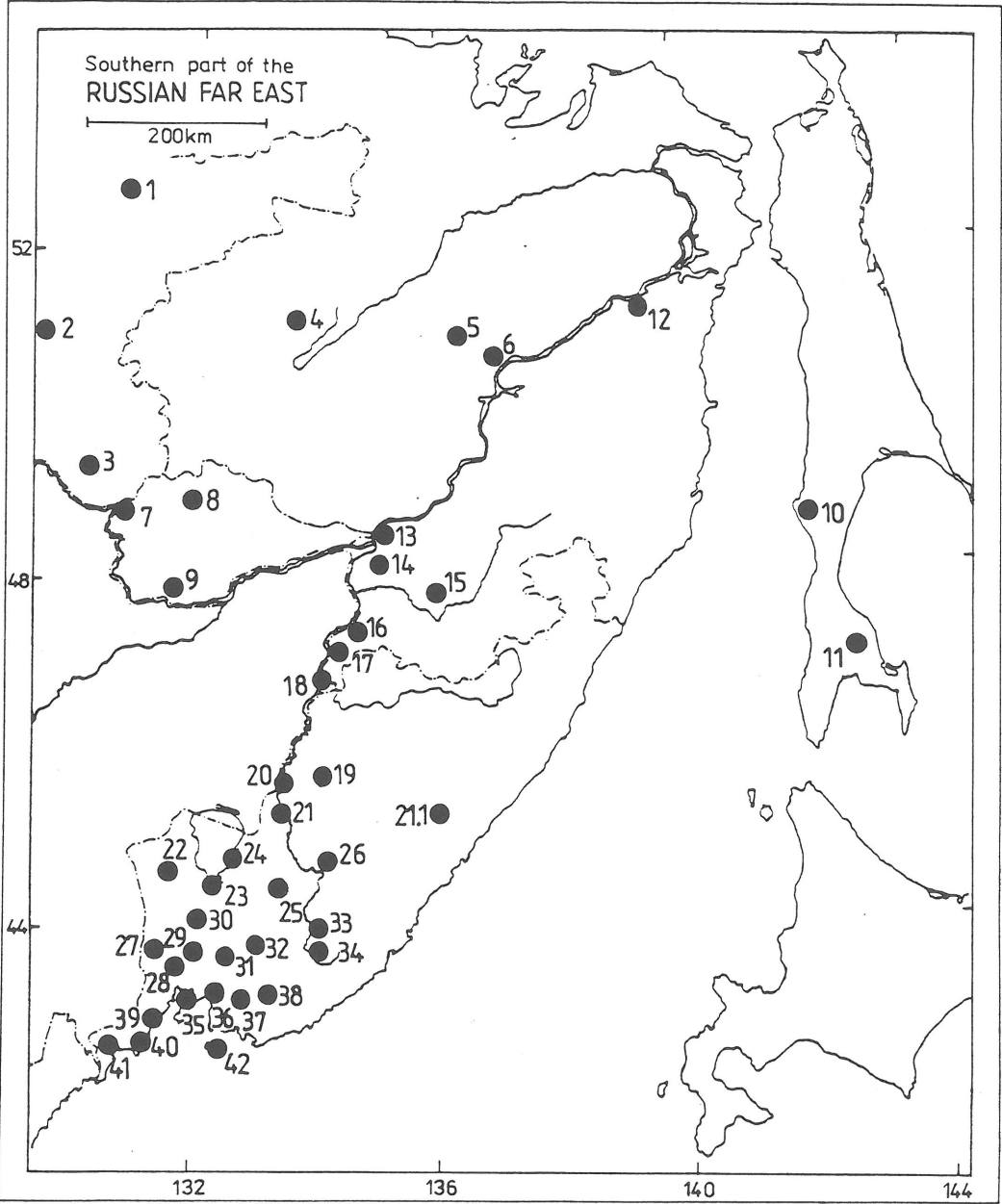


Fig. 2 The collecting localities of the southern part of the Russian Far East.

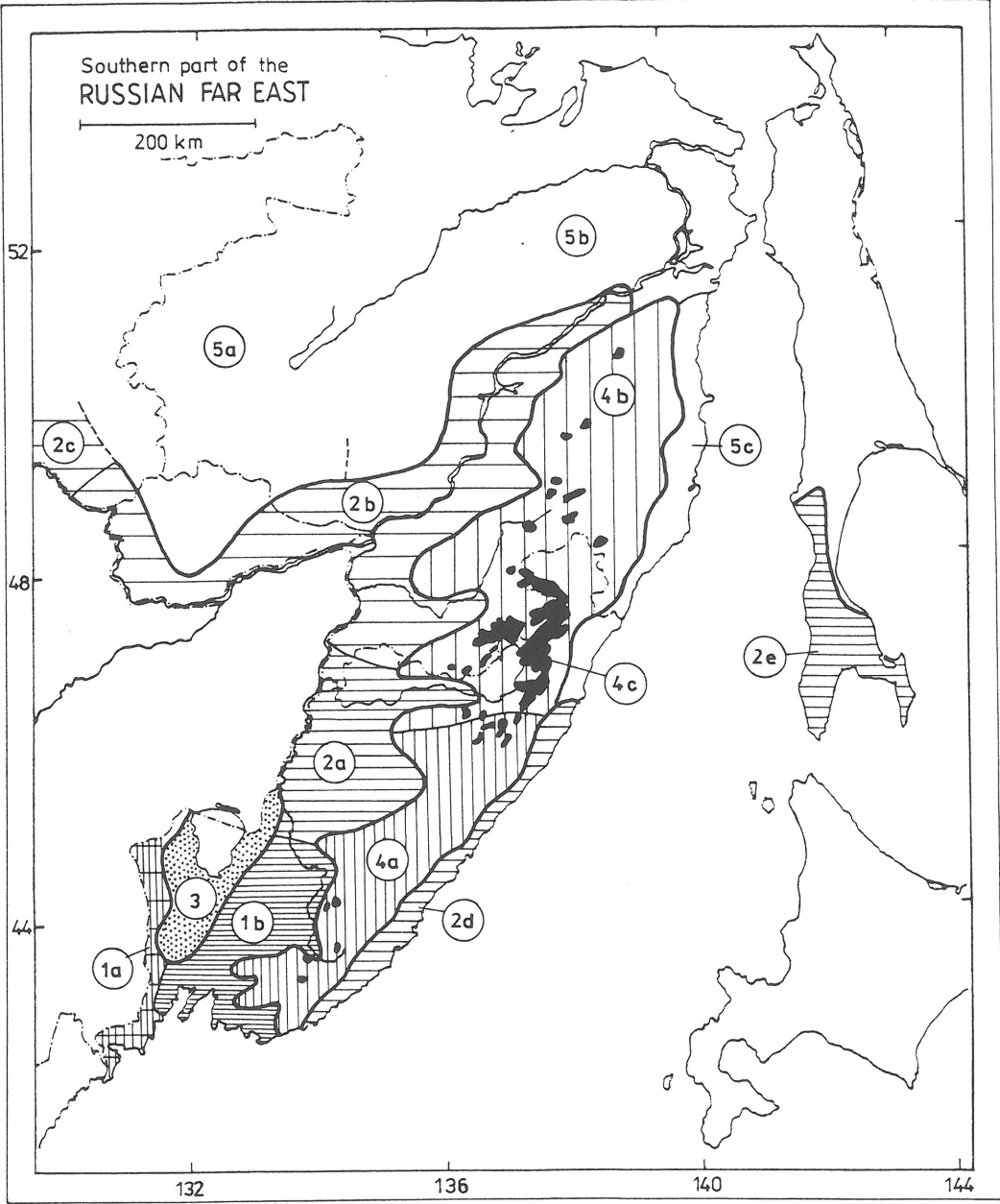


Fig. 3 Faunas in the southern part of the Russian Far East [according to KURENTZOV (1965)]. 1+2 Manchurian fauna, 3 Daurian fauna, 4 Okhotsk-Kamchatkian fauna, 5 East Siberian fauna.

Table 4: Subdivision of the Ussuri fauna and assignment of collecting localities to characteristic faunal districts of the Russian Far East [according to KURENTZOV (1965); numbers in brackets are in accordance with the collecting areas shown in table 2]

<u>Manchurian faunal subregion</u>		
1.	Primorian-Manchurian fauna	
1.a.	South-Primorian faunal area	(27,28,39,40,41)
1.b.	Transussurian faunal area	(25,26,29,31,32,35,36,37a,37c,38)
2.	Ussurian-Amurian fauna	
2.a.	Ussurian faunal area	(18,19,20,21)
2.b.	Middle Amurian faunal area	(6,7,9,12,13,14,15,16,17)
2.c.	Zeya-Amurian faunal area	(2,3)
2.d.	Terney coast faunal area	
2.e.	South Sakhalin faunal area	(10,11)
<u>Eurosiberian faunal subregion</u>		
3.	Exclave of Daurian fauna	
	Khanka lake faunal area	(22,23,24,30)
4.	Okhotsk-Kamchatkian fauna	
4.a.	Southern Sikhote Alin faunal area	(21.1,33,34,37b)
4.b.	Northern Sikhote Alin faunal area	
4.c.	Sikhote Alin high mountain faunal area	
5.	East Siberian fauna	
5.a.	Bureya faunal area	(4)
5.b.	Lower Amur faunal area	(5)
5.c.	Tumnin coast faunal area	

4. Results

The following list contains 453 species recorded from the Russian Far East. Six of these species have been previously recorded from this area but are considered to be based on misidentifications and unlikely to occur in the area. Thus 448 species may be listed with certainty from the Russian Far East; 362 of them were found in Ussuria. From Ussuria 71 species are recorded for the first time, with 53 of them new for the Russian Far East and 32 are new for Russia. Seven species are considered as new to science and are described in chapter 4.2. It is expected that the total number of tachinid species in the Ussuri area may amount to 600 or more (in Germany: 484 species) because of the high percentage of new and previously unrecorded species found during rather brief surveys. A zoogeographical analysis is discussed in chapter 4.3.

4.1. List of species of Ussuria and the Russian Far East

Distribution ("Distr.") only indicates an approximate distribution of West Palearctics. HERTING (1984) gives details for of the European species. More specific distribution are given for East Palearctics. There is a semicolon behind the fields of the various continents [Europe, (North) Africa, Asia]. We indicate the reference to species from Ussuria. Reference is also made to species we did not find in Ussuria but that were proved in the Russian Far East.

The Ussurian species are numbered in the following list of the species of the Russian Far East. Six species are printed in small letters. They considered to be based on misidentifications.

4.1.1. Subfamily Exoristinae

1. *Exorista (Exorista) fasciata* (FALLÉN, 1820)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria).
Recorded from Ussuria: KOLOMYETZ (1977: 60).

2. *Exorista (Exorista) larvarum* (LINNAEUS, 1758)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East, Japan [also Kashmir and (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 62); RICHTER (1986: 88); SHIMA (1992: 15). New records: Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 1♀; (40) Ryazanovka, Boisman Inlet, 16.VI.1993, 2♀♀. On edges of broadleaf forests and in meadows; swept from low vegetation.

Exorista (Ptilotachina) civilis (RONDANI, 1859)

Distr.: S Europe; Transcaucasia, Central Asia, Mongolia, SE Siberia (Chita), Russian Far East (Sakhalin). Recorded from Sakhalin: KOLOMYETZ (1977: 60). Not recorded from Ussuria.

Exorista (Adenia) fucosa MESNIL, 1963

Recorded from Ussuria: HERTING et DELY-DRASKOVITS (1993: 126) "Type-locality: Tigrovaya, Primor'ye (FE, USSR). - Distr.: USSR:FE". MESNIL (1963: 19) wrote "Type mâle de Tigrovaya, sur le cours inférieur du fleuve Wach (affluent de l'Ob), URSS, capturé par A. STACKELBERG le 23-VII-1943". The genuine type-locality is Tigrovaya balka (=Tiger gorge) on river Vakhsh near Nizhniy Pyandzh (southwestern part of Tajikistan - formerly USSR - near to the border to Afghanistan). In this area the river Vakhsh joins the river Amudar'ya (=Oxus), not the river Ob. The type-locality must be in Tajikistan, not in Siberia or Russian Far East, because during this time STACKELBERG lived in this area. MESNIL (1963: 23) described *Spoggosia palpella* and noted "Type ... capturé par A. STACKELBERG au voisinage de Piandzh (Tadjikistan, URSS) le 20-VII-1943... Un mâle de Tigrovaya balka, près de Vakhzha, pris par A. STACKELBERG le 23-VII-1943".

3. *Exorista (Adenia) mimula* (MEIGEN, 1824)

Distr.: Europe; Middle East, Transcaucasia, Mongolia, Siberia, Russian Far East (Kuril Is.), Japan. First records from Ussuria: Primorskiy Kray: (28) Tikhoye, 19.VI.1993, 1♀; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂; (31) Ussuriysky Zapovednik, Komarovka Vall., 11.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♀; (40) Ryazanovka, Boisman Inlet, 16.VI.1993, 3♀♀. On edges of broadleaf forests and in meadows; swept from low vegetation and shrubs. The "*Exorista pratensis*" from Magadan [KOLOMYETZ (1977: 63)] and "*Exorista verax*" from Khabarovsk [KOLOMYETZ (1977: 64)] are possibly identical with this species.

Exorista (Adenia) rustica (FALLÉN, 1810)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 88). Not recorded from Ussuria.

Exorista (Adenia) tamias RICHTER, 1974

Distr.: S Siberia (Buryatia). Recorded from Russian Far East: HERTING et DELY-DRASKOVITS (1993: 132) "Type-locality: Khasura, Buryat ASSR (FE, USSR).-Distr.: USSR:FE" (= error). Only known from the holotype; see RICHTER (1974: 397) "Buryatia, Khasura southern of Zakamensk" (S Siberia near the border with Mongolia).

4. *Exorista (Adenia) tubigera* MESNIL, 1970

Distr.: Mongolia, SE Siberia (Chita), Russian Far East (Ussuria, Kuril Is.). Recorded from Ussuria: KOLOMYETZ (1977: 64); (1979: 140) (as *Exorista tubifera*).

5. *Exorista (Spixomyia) patelliforceps* (MESNIL, 1963)

Distr.: Japan (Honshu). **First record from Russia:** Primorskiy Kray: (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂. In meadow; swept from low vegetation.

6. *Exorista (Spixomyia) hyalipennis* (BARANOV, 1932)

Distr.: Russian Far East (Amuria), Japan [also Taiwan and Vietnam]. **First records from Ussuria:** Primorskiy Kray: (26) Samarka, Zhuravlyevka banks, 30.V.1993, 1♂; (31) Ussuriysky Zapovednik, Komarovka Vall., 11.VI.1993, 1♂; 14.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 1♂. In broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

7. *Exorista (Spixomyia) rusticoides* MESNIL, 1963

Distr.: Russian Far East (Ussuria). Only known from the holotype; see MESNIL (1963: 21) "Tigrovaya, Suchan" = (37) Tigrovoi W of Partizansk, Tigrovaya Vall.; quoted by KOLOMYETZ (1977: 63).

8. *Chaetexorista eutachinoides* (BARANOV, 1932)

Distr.: China, Japan (Honshu), Russian Far East (Ussuria and Sakhalin). Recorded from Ussuria: STACKELBERG (1943: 163) (as *Megacarcelia pavlovskiyi* ST.).

Neophryxe psychidis TOWNSEND, 1916

Distr.: Russian Far East (Amuria), China (Jiangxi), Japan (Kyushu, Honshu, Tsushima) [and Nearctic Region]. Recorded from Amuria: KOLOMYETZ (1977: 55). Not recorded from Ussuria.

Chetogena acuminata RONDANI, 1859

Distr.: S Europe (and atlantic seashores); Transcaucasia, Central Asia, Mongolia, S Siberia (Barnaul, Chita), Russian Far East (Kuril Is.), Japan (Hokkaido). Recorded from Kuril Is.: KOLOMYETZ (1977: 64). Not recorded from Ussuria.

Chetogena gelida (COQUILLET, 1897)

Distr.: NE Siberia (Taimyr Peninsula, Northern Yakutia), N Russian Far East (Wrangel Is.) [and Alaska, Yukon, northwestern North America]. Recorded from Wrangel Is.: RICHTER (1981: 932). Not recorded from Ussuria.

9. *Parasetigena silvestris* (ROBINEAU-DESVOIDY, 1863)

Distr.: Europe; Transcaucasia, E Siberia (Yakutia, Chita), Russian Far East, Japan (Hokkaido to Kyushu) [and (introd. and estab.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 66) (as *Phorocera agilis* R.-D. and *Phorocera silvestris* R.-D.); and RICHTER (1993: 422). New records: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 26.V.1993, 3♂♂; Kamenistaya Griva Hill, 27.V.1993, 4♂♂; Shivki Mtn., 27.V.1993, 1♂; Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 2♀♀; (20) Tamga, 24.V.1993, 1♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 3♀♀; 14.VI.1993, 3♀♀; Gornotayozhnoye, 11.VI.1980, 1♀, leg. MICHAILOVSKAYA (1980); (32) Przhvalski Mts., 13.VI.1993, 3♀♀; (33)

Biological station (Sikhote Alin) 650 m, 01.VI.1993, 1♂; (39) Zapovednik "Kedrovaya Pad", 28.V.1982, 1♂, leg. ZOBOLEVA (IBPV). In broadleaf forests and mixed forests. Swept from trees, shrubs and low vegetation. Sugar-mite and on flowers of *Euonymus sacrosancta*.

10. *Parasetigena takaai* (MESNIL, 1960)

Distr.: Japan (Honshu). First records from Russia: Khabarovskiy Kray: (17) Boitsovo, Kamenistaya Griva Hill, 27.V.1993, 1♂; Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♂, 2♀♀. On edges of broadleaf forests. Swept from shrubs and flowers of *Euonymus sacrosancta*.

11. *Phorocera assimilis* (FALLÉN, 1810)

Distr.: Europe; Transcaucasia, Central Asia, S Siberia, Russian Far East (incl. Kuril Is.), Japan (Honshu and Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 66), RICHTER (1993: 422). New records: AMURIA: Khabarovskiy Kray: (6) Komsomolsk-na-Amure, Zilinskiy Park, 09.VI.1975, 1♂, leg. SHUGIN (IBPV); USSURIA: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 26.V.1993, 10♂♂, 1♀; Kamenistaya Griva Hill, 27.V.1993, 12♂♂; Shivki Mtn., 27.V.1993, 2♂♂; Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♂, 1♀; (20) Tamga, 24.V.1993, 1♀; (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 6♂♂, 5♀♀; Samarka, Zhuravlyevka banks, 29.V.1993, 7♀♀; 30.V.1993, 10♀♀; (29) Partizan 13 km S of Ussuriysk, 23.V.1993, 7♂♂; Banevurovo, 10.VI.1993, 2♂♂, 3♀♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂, 6♀♀; 14.VI.1993, 4♀♀; Kamenushka, 27.VI.1979, 1♂, leg. ZOBOLEVA (IBPV); Gornotayozhnoye, 15.V.1980, 1♂, leg. MICHAILOVSKAYA (IBPV); (33) Biological station (Sikhote Alin) 650 m, 01.VI.1993, 6♀♀; (35) Vladivostok-Sedanka, 20.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂; 07.VI.1993, 1♀; 08.VI.1993, 1♀. In broadleaf and mixed forests, in gardens and on edges of meadows. Swept from trees, shrubs and low vegetation.

12. *Phorocera obscura* (FALLÉN, 1810)

Distr.: Europe; Russian Far East (Kuril Is.), Japan (Hokkaido) [and (introd.) Nearctic Region]. First records from Ussuria: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 26.V.1993, 1♂; Kamenistaya Griva Hill, 27.V.1993, 10♂♂; Shivki Mtn., 27.V.1993, 2♂♂; Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♂; (20) Tamga, 24.V.1993, 25♂♂; (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 31♂♂; Samarka, Zhuravlyevka banks, 30.V.1993, 5♂♂; (29) Partizan 15km S of Ussuriysk, 23.V.1993, 2♂♂; Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 2♂♂; 14.VI.1993, 3♂♂, 6♀♀; (32) Przhivalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂; (33) Biological station (Sikhote Alin) 650 m, 01.VI.1993, 17♂♂; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂; 08.VI.1993, 1♂, 1♀. In broadleaf and mixed forests and in gardens and on edges of meadows. Swept from trees, shrubs and low vegetation. On sprayed sugar solution (as artificial "honey dew"), too.

13. *Ctenophorinia adiscalis* MESNIL, 1963

Distr.: Russian Far East (Ussuria), Japan. Known from the holotype (MESNIL, 1963). Holotype male, "Tigrovaya, Suchan rn., 13-VI-1927"; quoted by KOLOMYETZ (1977: 65) "Tigrovaya, Partizanskovo rn." = (37) Tigrovaya Vall. near Tigrovoi W of Partizansk 80 km E of Vladivostok. New records: (17) Khabarovskiy Kray: Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 26.V.1993, 1♂; (26) Primorskiy Kray: Samarka 70 km N of Chuguyevka, 30.V.1993, 1♂ 1♀. On edges of broadleaf forests. Swept from low vegetation. Redescription in chapter 4.2.

14. *Ctenophorinia christiana* sp. n.

Distr.: Russian Far East (Ussuria), Japan. Description in chapter 4.2.

15. *Ctenophorinia frontalis* sp. n.

Distr.: Russian Far East (Ussuria), Japan. Description in chapter 4.2.

16. *Ctenophorinia grisea* MESNIL, 1967

Distr.: Japan (Hokkaido). **First record from Russia:** AMURIA: Amurskaya oblast: (2) Shimanovsk NW Svobodnyy, 21.V.1959, 1♀, leg. NAKONETSHNYI (ZMAS); USSURIA: Khabarovskiy Kray: (13) Khabarovsk, Dendraryi; 03.IX.1959, 1♀, leg. JURBA (ZMAS); (15) Durmin SE of Khabarovsk, 29.VII.1959, 1♀, leg. NAKONETSHNYI (ZMAS); (16) Vyazemskiy, Oak forest, 14.VI.1982, 1♀, leg. TUROVA (ZMAS); (17) Boitsovo N of Bikin, Shivki Mtn., 27.V.1993, 1♀; Kamenistaya Griva Hill, 27.V.1993, 1♂, 1♀; Primorskiy Kray: (19) Mezhdurechje 37 km SE of Dalnerechensk, 28.V.1993, 1♀; (25) Yakovlevka, 26.VI.1926, 1♀, leg. DYAKONOV and FILIPJEV (ZMAS) ["PARATYPE of *C. adiscalis*"]; (26) Samarka 70 km N of Chuguyevka, 30.V.1993, 1♂, 1♀; (26) Primorskiy Kray: Samarka 70 km N of Chuguyevka, Gordeyevsk. Mtn., 29.V.1993, 2♂♂, 3♀♀; Zhuravlyevka banks, 30.V.1993, 1♀; (32) Przhivalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 5♂♂, 1♀. On edges of broadleaf forests. Swept from trees, shrubs and low vegetation. On flowers of *Euonymus sacrosancta*. Redescription in chapter 4.2.

17. *Bessa parallela* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia, Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 65) (as *B. fugax* RD.); RICHTER (1986: 88) and (1993: 422). New record: Primorskiy Kray: (29) Banevurovo S of Ussuriysk, 10.VI.1993, 1♀. On edges of broadleaf forests swept from shrub.

18. *Bessa selecta* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Siberia (Novosibirsk, Yakutia), Russian Far East [and (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 65).

19. *Meigenia grandigena* (PANDELLÉ, 1896)

Distr.: Europe (Pyrénées, Massif Central, Alps); Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1986: 88).

20. *Meigenia majuscula* (RONDANI, 1859)

Distr.: Southern Europe (northern to S Germany, Slovakia, Hungary and Central Russia); Siberia (SW Siberia, Yakutia), Mongolia. **First records from Russian Far East:** Khabarovskiy Kray: (17) Boitsovo, Kamenistaya Griva Hill, 27.V.1993, 1♂. Primorskiy Kray: (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 1♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂; (40) Ryazanovka, 16.VI.1993, 3♀♀. On edges of broadleaf forests and in meadows. Swept from shrubs, low vegetation and flowers of *Anthriscus aemula*.

21. *Meigenia tridentata* MESNIL, 1961

Distr.: Russian Far East (Amuria, Ussuria), China (Northeast). Recorded from Ussuria: RICHTER (1986: 88); SHIMA (1992: 13).

22. *Meigenia velutina* MESNIL, 1952

Distr.: Russian Far East (Amuria, Ussuria), China (Northeast), Japan (Honshu), Nepal [also Burma]. Recorded from Ussuria: KOLOMYETZ (1979: 140).

23. *Zaira cinerea* (FALLÉN, 1810)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 70) (as *Viviania*).

24. *Trigonospila ludio* (ZETTERSTEDT, 1849)

Distr.: Europe (Italian and Austrian Alps, N Russia); SE Siberia, Russian Far East, Japan (Kyushu to Hokkaido) [and ?Burma]. Recorded from Ussuria: RICHTER (1986: 88). New record: (40) Primorskiy Kray: Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On edges of oak forest. Swept from low vegetation.

25. *Uromedina atrata* (TOWNSEND, 1927)

Distr.: Russian Far East (Ussuria), Japan [and SE Asia]. Recorded from Ussuria: SHIMA (1992: 15).

26. *Dolichocoxys rossica* MESNIL, 1963

Distr.: Russian Far East (Amuria, Ussuria). Recorded from Ussuria: RICHTER (1986: 88).

27. *Prodegeeria japonica* (MESNIL, 1957)

Distr.: Russian Far East (Ussuria, Sakhalin, Kuril Is.), Korea, Japan (Kyushu to Hokkaido). Recorded from Ussuria: SHIMA (1992: 15).

28. *Medina collaris* (FALLÉN, 1820)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria, Kuril Isl.). Recorded from Ussuria: RICHTER (1993: 423); SHIMA (1992: 16).

29. *Medina confinis* sp. n.

Distr.: Russian Far East (Ussuria). Description in chapter 4.2. In broadleaf and mixed forests. Swept from shrubs, low vegetation and flowers of *Anthriscus aemula*.

30. *Medina luctuosa* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, SE Siberia (Chita), Russian Far East (Kuril Is.), Japan (Honshu, Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 72); RICHTER (1986: 89).

31. *Medina melania* (MEIGEN, 1824)

Distr.: Europe (Germany, Austria, Switzerland, Hungary). First record from Russia: (28) Primorskiy Kray: Tikhoye nr. Razdolnoye 36 km S of Ussuriysk, 19.VI.1993, 1♂. On edges of oak forest. Swept from low vegetation.

Medina multispina (HERTING, 1966)

Distr.: Europe (France, Germany, Austria, Hungary); Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 89). Not recorded from Ussuria.

32. *Medina separata* (MEIGEN, 1824)

Distr.: Europe; SE Siberia (Chita), Russian Far East, Japan. Recorded from Ussuria: RICHTER (1986: 89). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 10.VI.1993, 9♂♂, 3♀♀; 14.VI.1993, 3♂♂, 3♀♀. On edges of broadleaf forests.

33. *Paratrixa takanoi* MESNIL, 1970

Distr.: Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: RICHTER (1986: 89).

34. *Phytorophaga nigriventris* MESNIL, 1942

Distr.: Russian Far East (Ussuria), China (Northeast). Recorded from Ussuria: RICHTER (1986: 89 and 1993: 423). SHIMA (1992: 16) (as *Phytorophaga* sp.). New records: Khabarovskiy Kray: (17) Boitsovo, Kamenistaya Griva Hill, 27.V.1993, 1♂; Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 07.VI.1993, 1♂; 09.VI.1993, 1♂. On edges of broadleaf forests. In a Malaise trap and swept from shrubs.

35. *Istocheta adrufipes* (BORISOVA-ZINOVJEVA, 1964)

Distr.: Russian Far East (Ussuria). Only known from the types, see BORISOVA-ZINOVJEVA (1964: 776); quoted by KOLOMYETZ (1977: 69) (as *Urophyllina adrufipes* K.ZIN.).

Istocheta aldrichi (MESNIL, 1953)

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido) [(introd.) Nearctic Region]. Not recorded from Ussuria.

36. *Istocheta amita* (BORISOVA-ZINOVJEVA, 1965)

Distr.: Russian Far East (Ussuria). Only known from the types, see BORISOVA-ZINOVJEVA (1965: 1365); quoted by KOLOMYETZ (1977: 67) (as *Hyperecteina amita* K.ZIN.).

Istocheta ectinohopliae (BORISOVA-ZINOVJEVA, 1963)

Distr.: Russian Far East (Amuria, Kuril Is.). Not recorded from Ussuria.

37. *Istocheta hemichaeta* (BRAUER et BERGENSTAMM, 1889)

Distr.: Europe; Russian Far East (Ussuria). Recorded from Ussuria by BORISOVA-ZINOVJEVA (1964: 779); quoted by KOLOMYETZ (1977: 69) (as *Urophyllina steinbergi* K.ZIN.).

38. *Istocheta maladerivora* (BORISOVA-ZINOVJEVA, 1963)

Distr.: Russian Far East (Amuria, Ussuria). BORISOVA-ZINOVJEVA (1963: 678); (2) Klimoutsy and other places near Svobodnyy (Amur Province). Recorded from Ussuria: KOLOMYETZ (1977: 67) (as *Hyperecteina maladerivora* K.ZIN.) and (1977: 69) (as *Urophyllina maladerivora* K.ZIN.): "Southern Primorie". New records: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 25.V.1993, 4♂, 2♀♀; 26.V.1993, 5♂♂, 1♀; Kamenistaya Griva Hill, 27.V.1993, 6♂♂, 1♀; Boitsovo, 27.V.1993, 1♀; Primorskiy Kray: (28) Tikhoye nr. Razdolnoye 36 km S of Ussuriysk, 22.V.1993, 1♂, 1♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀; (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♂. On edges of broadleaf forests. In a Malaise trap and swept from low vegetation (fig. 71).

39. *Istocheta mesnili* (BORISOVA-ZINOVJEVA, 1964)

Distr.: Russian Far East (Ussuria). Only known from the types; see BORISOVA-ZINOVJEVA (1964: 784); quoted by KOLOMYETZ (1977: 68) (as *Hyperecteina mesnili* K.ZIN.).

40. *Istocheta nyctia* (BORISOVA-ZINOVJEVA, 1966)

Distr.: Russian Far East (Ussuria). Only known from the types, see BORISOVA-ZINOVJEVA (1966: 272).

Istocheta rhombonicis (BORISOVA-ZINOVJEVA, 1963)

Distr.: Russian Far East (Amuria). Not recorded from Ussuria.

41. *Istocheta rufipes* (VILLENEUVE, 1937)

Distr.: Russian Far East (Ussuria), China (Sichuan). Recorded from Ussuria: BORISOVA-ZINOVJEVA (1964: 770); quoted by KOLOMYETZ (1977: 69) (as *Urophyllina*). New records: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 25.V.1993, 1♂, 1♀; Shivki Mtn., 27.V.1993, 2♂♂; Primorskiy Kray: (26) Samarka, Zhuravlyevka banks, 30.V.1993, 1♂. On edges of broadleaf forests. In a Malaise trap and swept from shrubs.

Istocheta splendens (BORISOVA-ZINOVJEVA, 1963)

Distr.: Russian Far East (Amuria). Not recorded from Ussuria.

42. *Istocheta subrufipes* (BORISOVA-ZINOVJEVA, 1964)

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: BORISOVA-ZINOVJEVA (1964: 774), KOLOMYETZ (1977: 69) (as *Urophyllina subrufipes* K.ZIN.) and RICHTER (1986: 91). New records: Khabarovskiy Kray: (17) Boitsovo, Kamenistaya Griva Hill, 27.V.1993, 1♂; Shivki Mtn., 27.V.1993, 1♂; Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 08.VI.1993, 1♀. In broadleaf forests swept from shrubs.

43. *Istocheta unicolor* (ALDRICH, 1928)

Distr.: Russian Far East (Ussuria), Korea. Recorded from Ussuria: BORISOVA-ZINOVJEVA (1966b: 435), KOLOMYETZ (1977: 68) (as *Hyperecteina*).

44. *Istocheta ussuriensis* (ROHDENDORF, 1949)

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: ROHDENDORF (1949: 418), BORISOVA-ZINOVJEVA (1963: 678) and (1964: 768), quoted by KOLOMYETZ (1977: 69) (as *Hyperecteina*).

45. *Istocheta zimini* (BORISOVA-ZINOVJEVA, 1964)

Distr.: Russian Far East (Ussuria, Kuril Is.). Recorded from Ussuria: BORISOVA-ZINOVJEVA (1964: 777); quoted by KOLOMYETZ (1977: 69) (as *Urophyllina zimini* K.ZIN.). New records: Khabarovskiy Kray: (17) Boitsovo, Kamenistaya Griva Hill, 27.V.1993, 1♂; Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♂. In broadleaf forests. Swept from low vegetation and flowers of *Euonymus sacrosancta*.

46. *Kallisomyia stackelbergi* BORISOVA-ZINOVJEVA, 1964

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: BORISOVA-ZINOVJEVA (1964: 783).

47. *Biomeigenia gynandromima* MESNIL, 1961

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: MESNIL (1961: 697), KOLOMYETZ (1977: 70). New record: Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 1♂, 1♀. On edges of broadleaf forest. In a Malaise trap.

48. *Biomeigenia magna* MESNIL, 1961

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: MESNIL (1961: 699), KOLOMYETZ (1977: 70).

49. *Lecanipa bicincta* (MEIGEN, 1824)

Distr.: Europe; S Siberia (Gorno-Altaysk, Krasnoyarsk, Chita). **First record from Russian Far East:** Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀. On edges of broadleaf forest. On flowers of *Anthriscus aemula*.

50. *Compsiluroides flavipalpis* MESNIL, 1957

Distr.: Russian Far East (Ussuria, Kuril Isl.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: SHIMA (1992: 16).

51. *Leiophora innoxia* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Mongolia, E Siberia (Chita, Yakutia), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1977: 66) (as *Arrhinomyia*). New records: Primorskiy Kray: (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 2♂♂, 2♀♀; (40) Ryazanovka, 16.VI.1993, 1♂. In meadows swept from low vegetation. Specimens of this species from the Russian Far East are darker in ground color than those from Europe.

52. *Admontia blanda* (FALLÉN, 1820)

Distr.: Europe; Transcaucasia, Mongolia, E Siberia (Chita, Yakutia), Russian Far East (Amuria, Ussuria, Sakhalin). Recorded from Ussuria: KOLOMYETZ (1979: 140) (as *Trichoparia*); RICHTER (1986: 91).

53. *Admontia grandicornis* (ZETTERSTEDT, 1849)

Distr.: Europe; Mongolia, SE Siberia (Chita), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1977: 70) (as *Trichoparia grandicornis* ZTT.); RICHTER (1986: 91).

Admontia seria (MEIGEN, 1824)

Distr.: Europe; Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 91). Not recorded from Ussuria.

54. *Admontia zimini* (MESNIL, 1963)

Distr.: Russian Far East (Ussuria, Sakhalin). Recorded from Ussuria: RICHTER (1993: 423). New record: Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♂ 1♀. On edges of oak forest. Swept from low vegetation.

55. *Oswaldia apicalis* (MESNIL, 1957)

Distr.: Mongolia, S Siberia (Barnaul, Krasnoyarsk, Chita), Russian Far East (Ussuria, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 75) (as *Dexodes*).

56. *Oswaldia confinis* sp. n.

Distr.: Russian Far East (Ussuria). In broadleaf forests. Swept from low vegetation. Description in chapter 4.2.

57. *Oswaldia gilva* SHIMA, 1991

Distr.: Russian Far East (Ussuria), Japan. Recorded from Ussuria: SHIMA (1992: 16). New record: Primorskiy Kray: (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂. On edges of broadleaf forests. Swept from low vegetation.

58. *Oswaldia issikii* (BARANOV, 1935)

Distr.: Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: RICHTER (1986: 91).

59. *Oswaldia muscaria* (FALLÉN, 1810)

Distr.: Europe; Japan (Kyushu to Hokkaido). **First records from Russian Far East:** Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 24.V.1993, 1♀; 25.V.1993, 2♂♂; 26.V.1993, 1♀; Primorskiy Kray: (21) Gorniye Klyuchi, 23.V.1993, 1♀; (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 1♂; Samarka, Zhuravlyevka banks, 30.V.1993, 4♂♂, 6♀♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂, 1♀; (28) Tikhoye, 22.V.1993, 2♂♂; (38) Sergeyevka, 04.VI.1993, 2♂♂, 4♀♀; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂, 3♀♀. On edges of broadleaf forests. Swept from trees, shrubs and low vegetation.

60. *Drinomyia hokkaidensis* (BARANOV, 1935)

Distr.: SE Siberia (Chita), Russian Far East (Ussuria, Kuril Is.), Korea, Japan (Kyushu to Hokkaido). Recorded from Ussuria: SHIMA (1992: 16). New record: Primorskiy Kray: (35) Vladivostok-Sedanka, 20.VI.1993, 1♀. In a garden near edges of broadleaf forest. Swept from low vegetation.

61. *Metadrinomyia proclinata* SHIMA, 1980

Distr.: Korea, Japan. **First record from Russia:** Primorskiy Kray: (26) Samarka, Zhuravlyevka banks, 30.V.1993, 1♂. In a wet broadleaf forest swept from low vegetation.

62. *Ligeria angusticornis* (LOEW, 1847)

Distr.: Europe; Middle East, Transcaucasia, SE Siberia (Chita), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1986: 91). New record: Primorskiy Kray: (40) Ryazanovka, 16.VI.1993, 1♀. On edges of an oak forest. Swept from low vegetation.

63. *Anechuromyia nigrescens* MESNIL et SHIMA, 1979

Distr.: Russian Far East (Ussuria), Japan (Honshu). Recorded from Ussuria: RICHTER (1991: 229). New record: Primorskiy Kray: (40) Ryazanovka, 16.VI.1993, 1♀. On a meadow swept from low vegetation.

64. *Blondelia nigripes* (FALLÉN, 1810)

Distr.: Europe; Transcaucasia, Central Asia, Mongolia, Siberia, Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido) [and (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 73); RICHTER (1986: 91); RICHTER (1993: 424); SHIMA (1992: 16). New records: Primorskiy Kray: (26) Samarka, 30.V.1993, 1♂; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂, 2♀♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀; 14.VI.1993, 1♀; (28) Tikhoye, 19.VI.1993, 3♂♂, 2♀♀; (37) Anisimovka 70

km, Sukhodol Vall., 05.VI.1993, 9♂♂, 2♀♀; 06.VI.1993, 19 ♂♂, 11♀♀; 07.VI.1993, 5♂♂, 4♀♀; (38) Sergeevka, 04.VI.1993, 1♂; (35) Vladivostok-Sedanka, 20.VI.1993, 4♂♂; (40) Ryazanovka, 16.VI.1993, 2♂♂, 7♀♀. On edges of broadleaf forests, in meadows and gardens. Swept from low vegetation.

65. *Vibrissina turrita* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Russian Far East, Korea, Japan (Kyushu, Honshu) [(introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1979: 141). New record: Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♂. In meadow swept from low vegetation.

66. *Acemya rufitibia* (VON ROSER, 1840)

Distr.: Central Europe; Transcaucasia, S Siberia, Russian Far East (Ussuria, Sakhalin). Recorded from Ussuria: RICHTER (1986: 91). New records: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 24.V.1993, 1♂; Primorskiy Kray: (26) Samarka, 30.V.1993, 1♂, 1♀; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 1♀. On edges of broadleaf forests and in meadows. In a Malaise trap and swept from low vegetation.

67. *Prosethilla kramerella* (STEIN, 1924)

Distr.: Central Europe; S Siberia (Tuva). First record from Russian Far East: Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♀. On edges of broadleaf forest swept from shrubs.

68. *Paratryphera barbatula* (RONDANI, 1859)

Distr.: Europe; Middle East, Transcaucasia, Mongolia, Siberia, Russian Far East (Amuria, Ussuria, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: RICHTER (1993: 424).

69. *Paratryphera magna* sp. n.

Distr.: Russian Far East (Ussuria). On edges of an oak forest. Swept from low vegetation. Description in chapter 4.2.

Atylomyia loewi BRAUER, 1898

Distr.: South and Central Europe, Middle East, Mongolia, S Siberia, Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 91). Not recorded from Ussuria.

70. *Rhaphiochaeta breviseta* (ZETTERSTEDT, 1838)

Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Ussuria). Recorded from Ussuria: ZIMIN (1960: 746); KOLOMYETZ (1975: 39) (as *Mimomeriania elongatula* ZIMIN).

71. *Smidtia antennalis* SHIMA, 1996

Distr.: Japan (Honshu, Kyushu). First records from Russia: Khabarovskiy Kray: (17) Boitsovo, Kamenistaya Griva Hill, 27.V.1993, 2♀♀; Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 1♀. On edges of broadleaf forests. In a Malaise trap and swept from low vegetation.

72. *Smidtia amoena* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Khazakhstan, Central Asia, S Siberia, Russian Far East (Amuria, Ussuria), China, Japan (Hokkaido, Kyushu, Honshu, Tsushima). Recorded from Ussuria: KOLOMYETZ (1979: 141) (as *Timavia amoena* MG.). New records: Primorskiy Kray: (20) Tamga, 24.V.1993, 2♀♀; (21) Gorniye Klyuchi, 23.V.1993, 2♂♂; (26) Samarka, 30.V.1993, 1♂; (30) Kremovo, 23.V.1993, 1♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♂. On edges of broadleaf forests. Swept from shrubs and low vegetation.

73. *Smidtia amurensis* (BORISOVA, 1962)

Distr.: Russian Far East (Amuria), Japan (Hokkaido, Honshu). Only known from the types; see BORISOVA (1962: 326) (as *Nemosturmia amurensis* BOR.): (2) Klimoutsy 40 km W of Svobodnyy and (2) Simonovo 75 km W of Svobodnyy between 10.VI. and 13.VII. **First record from Ussuria:** Primorskiy Kray: (32) Przhivalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂. On edges of a broadleaf forest. Swept from shrubs.

74. *Smidtia gemina* (MESNIL, 1949)

Distr.: China, Korea, Japan (Honshu, Tsushima, Kyushu). **First records from Russia:** Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂. On edges of broadleaf forests. Swept from shrubs and flowers of *Euonymus sacrosancta*.

75. *Smidtia japonica* (MESNIL, 1957)

Distr.: Russian Far East (Sakhalin), Japan (Kyushu, Honshu, Tsushima). **First records from Ussuria:** Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 26.V.1993, 1♀; Kamenistaya Griva Hill, 27.V.1993, 1♂; Primorskiy Kray: (26) Samarka, 30.V.1993, 5♂♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♀. In broadleaf forests swept shrubs and low vegetation.

76. *Smidtia laeta* (MESNIL, 1963)

Distr.: Europe (France); Japan (Hokkaido, Honshu). **First record from Russia:** Primorskiy Kray: (33) Biological station (Sikhote Alin) 650 m, 01.VI.1993, 1♂. On edges of a mixed forest. Swept from shrubs.

77. *Smidtia orientalis* (BORISOVA, 1962)

Distr.: Russian Far East (Ussuria), Japan (Honshu). Only known from the types; see BORISOVA (1962: 328) (as *Nemosturmia orientalis* BOR.). New records: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 26.V.1993, 2♂♂, 1♀; Kamenistaya Griva Hill, 27.V.1993, 6♂♂, 1♀; Shivki Mtn., 27.V.1993, 2♂♂, 1♀; Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 2♀♀. In broadleaf forests. Swept from shrubs and flowers of *Euonymus sacrosancta*.

78. *Smidtia verna* (KOCHA, 1971)

Distr.: Japan (Hokkaido, Kyushu). **First record from Russia:** Khabarovskiy Kray: (17) Boitsovo, Kamenistaya Griva Hill, 27.V.1993, 1♀. On edges of a broadleaf forest. Swept from low vegetation.

79. *Winthemia cruentata* (RONDANI, 1859)

Distr.: Europe; Transcaucasia, Mongolia, SE Siberia (Chita), Japan (Hokkaido, Honshu,

Kyushu). **First record from Russian Far East:** Khabarovskiy Kray: (17) Boitsovo N of Bikin, Kamenistaya Griva Hill, 27.V.1993, 1♂, 1♀. On the edges of a broadleaf forest. Swept from shrubs.

80. *Winthemia quadripustulata* (FABRICIUS, 1794)

Distr.: Europe; Transcaucasia, Central Asia, Mongolia, Siberia, Russian Far East (Ussuria) [and Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 40); RICHTER (1986: 92); SHIMA (1992: 16).

Winthemia speciosa (EGGER, 1861)

Distr.: Europe; Transcaucasia, Mongolia, Siberia (Krasnoyarsk, Chita, Yakutia), Russian Far East (Amuria, Sakhalin), Japan (Honshu). Recorded from Amuria: RICHTER (1986: 92). Not recorded from Ussuria.

81. *Winthemia venusta* (MEIGEN, 1824)

Distr.: Europe (Italy, Germany, Russia); E Siberia (Chita, Yakutia), Russian Far East (Ussuria, Kuril Is.), Japan (Hokkaido, Honshu, Kyushu). Recorded from Ussuria: KOLOMYETZ (1977: 41). New record: Primorskiy Kray: (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂. On the edges of a broadleaf forest. Swept from low vegetation.

82. *Nemorilla floralis* (FALLÉN, 1810)

Distr.: Europe; Transcaucasia, S Siberia (Tomsk to Chita), Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan [(introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 39); RICHTER (1993: 424).

83. *Nemorilla maculosa* (MEIGEN, 1824)

Distr.: Europe (incl. Canary Is.); Middle East, Transcaucasia, Central Asia, Mongolia, Siberia, Russian Far East (Ussuria), Japan [and Oriental Region, also (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 39).

84. *Aplomya confinis* (FALLÉN, 1820)

Distr.: Europe (incl. Canary Is.); Middle East, Transcaucasia, Central Asia, Mongolia, Siberia, Russian Far East (Ussuria, Kuril Is.), Japan (Kyushu, Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 49); RICHTER (1986: 92); (1993: 424). New records: Khabarovskiy Kray: (17) Boitsovo, 27.V.1993, 1♀; Primorskiy Kray: (26) Samarka, 29.V.1993, 1♂; (29) Banevurovo, 10.VI.1993, 1♀; Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂; (40) Ryazanovka, 16.VI.1993, 1♀. On edges of oak forests and in drier meadows. Swept from low vegetation.

85. *Phebellia clavellariae* (BRAUER et BERGENSTAMM, 1891)

Distr.: Europe (Poland, Czechia); SE Siberia (Chita), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1993: 424).

86. *Phebellia glauca* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Mongolia, Siberia (Novosibirsk to Yakutia), Japan (Honshu, Hokkaido), Russian Far East (Amuria, Kuril Is.). **First record from Ussuria:** Primorskiy Kray: (37) Anisimovka, Sukhodol Valley, 06.VI.1993, 1♀. On the edges of a broadleaf forest. Swept from shrubs.

87. *Phebellia latipalpis* SHIMA, 1981

Distr.: Japan (Kyushu, Honshu, Hokkaido). First records from Russia: Primorskiy Kray: (28) Tikhoye, 19.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 3♂♂, 1♀; 07.VI.1993, 1♂. On edges of broadleaf forests and in meadows. Swept from shrubs and low vegetation.

88. *Phebellia nigripalpis* (ROBINEAU-DESVOIDY, 1847)

Distr.: Europe; Transcaucasia, Central Asia, E Siberia (Yakutia), Russian Far East (Ussuria), Japan (Hokkaido).

Recorded from Ussuria: RICHTER (1981: 931). New records: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 24.V.1993, 3♂♂, 1♀; 26.V.1993, 8♂♂, 5♀♀; Shivki Mtn., 27.V.1993, 1♂; Shivki Vall., 27.V.1993, 1♀; Primorskiy Kray: (26) Samarka, Zhuravlyevka banks, 30.V.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 07.VI.1993, 1♀; 08.VI.1993, 1♀. On edges of broadleaf forests and on edges of meadows. Swept from shrubs and low vegetation.

89. *Nilea innoxia* ROBINEAU-DESVOIDY, 1863

Distr.: Europe; SE Siberia, Russian Far East (Amuria), Japan (Hokkaido). First record from Ussuria. Khabarovskiy Kray: (17) Boitsovo, 27.V.1993, 1♂; Primorskiy Kray: (20) Tamga, 24.V.1993, 1♂; (26) Samarka, 30.V.1993, 1♂. On edges of broadleaf forests. Swept from shrubs and low vegetation.

Nilea rufiscutellaris (ZETTERSTEDT, 1859)

Distr.: Europe; Siberia (Krasnoyarsk, Tuva, Yakutia), Russian Far East (Amuria). Recorded from Amuria: RICHTER (1981: 932). Not recorded from Ussuria.

90. *Epicampocera succincta* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, S Siberia (Tomsk), Russian Far East (Ussuria, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 48); RICHTER (1986: 92). New record: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀. On edges of a broadleaf forest. On flowers of *Anthriscus aemula*.

Buquetia intermedia (BARANOV, 1939)

Distr.: Russian Far East (Amuria), China (Northeast), Japan (Hokkaido). Recorded from Amuria: RICHTER (1993: 424). Not recorded from Ussuria.

Buquetia musca ROBINEAU-DESVOIDY, 1847

Distr.: Europe; Middle East, Transcaucasia, SW Siberia (Novosibirsk), Mongolia, Russian Far East (Amuria) [and Pakistan]. Recorded from Amuria: RICHTER (1986: 92). Not recorded from Ussuria.

91. *Phryxe heraclei* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia (Krasnoyarsk, Chita), Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 53).

Phryxe magnicornis (ZETTERSTEDT, 1838)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia, Russian Far East (Kuril Is.). Not recorded from Ussuria.

92. *Phryxe nemea* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, S Siberia (Krasnoyarsk), Russian Far East (Ussuria, Sakhalin), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 53). New record: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650m, 03.VI.1993, 1♂. On edges of a mixed forest. Swept from shrubs.

93. *Phryxe vulgaris* (FALLÉN, 1810)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria, Kuril Is.), Japan [and Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 54); RICHTER (1986: 92). New records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, 27.V.1993, 4♀♀; Primorskiy Kray: (30) Kremovo, 23.V.1993, 1♂; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 5♀♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♀; (28) Tikhoye near Razdolnoye, 22.V.1993, 1♂; 19.VI.1993, 1♂, 4♀♀; (40) Ryazanovka, 16.VI.1993, 1♂, 3♀♀. On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

94. *Bactromyia aurulenta* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Russian Far East (Sakhalin), Japan (Kyushu to Hokkaido). First record from Ussuria: Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On the edges of an oak forest. Swept from low vegetation.

95. *Pseudoperichaeta erebiae* (MESNIL, 1963)

Distr.: SE Siberia (Chita), Russian Far East (Ussuria). Recorded from Ussuria: MESNIL (1963: 7) (as *Parapales*).

Pseudoperichaeta nigrolineata (WALKER, 1853)

Distr.: Europe; Transcaucasia, S Siberia (Gorno-Altai, Kemerovo, Tuva), Russian Far East (Kuril Is.), Korea, Japan (Kyushu, Honshu, Hokkaido). Not recorded from Ussuria.

Lydella parasitica MESNIL, 1959

Distr.: [Oriental Region: Northern Mariana Is. (Rota)]. KOLOMYETZ (1977: 55) recorded this species from S Siberia (Tuva) and the Russian Far East (Sakhalin). We have not seen these flies.

96. *Lydella ripae* (BRISCHKE, 1885)

Distr.: Europe (N Germany, Denmark, S Sweden, S Finland, NW Russia); Mongolia, S Siberia (Buryatia, Chita), Russian Far East (Kuril Is.). First record from Ussuria: Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On a meadow on low vegetation.

Lydella stabulans (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Central Asia, Siberia, Russian Far East (Sakhalin). Recorded from Sakhalin: RICHTER (1993: 424). Not recorded from Ussuria.

97. *Lydella thompsoni* HERTING, 1959

Distr.: Europe (Spain, S France, SW Germany, Austria, Hungary, Ukraine); Transcaucasia, Central Asia, Mongolia, Russian Far East (Sakhalin) [(introd. and estab.) Nearctic Region]. **First record from Ussuria:** Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 3♀. In meadow on low vegetation.

98. *Drino bohémica* MESNIL, 1949

Distr.: Europe (N Scandinavia, N Russia); Russian Far East (Ussuria), Japan (Hokkaido) [(introd. and estab.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 43).

99. *Drino galii* (BRAUER & BERGENSTAMM, 1891)

Distr.: Europe (Germany, Switzerland, Slovakia, Hungary); Middle East (Turkey), Mongolia, S Siberia (Novosibirsk, Chita). **First record from Russian Far East:** Primorskiy Kray: (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂. On edges of a broadleaf forest. Swept from low vegetation.

100. *Drino lota* (MEIGEN, 1824)

Distr.: Europe; S Siberia (Tomsk, Novosibirsk), Russian Far East (Ussuria, Sakhalin), Japan (Kyushu, Honshu, Hokkaido) [and Afrotropical Region]. Recorded from Ussuria: KOLOMYETZ (1977: 43). New records: Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂; (28) Tikhoye near Razdolnoye, 19.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂; (40) Ryazanovka, 16.VI.1993, 1♂. On edges of broadleaf forests and in meadows. Swept from low vegetation, stones and flowers of *Euonymus sacrosanctus*.

101. *Drino magna* MESNIL, 1963

Distr.: Russian Far East (Ussuria). Only known from the holotype; see MESNIL (1963: 7) "Yakovlevka, Spassk rn." = (25) Yakovlevka 55 km ESE of Spassk-Dalniy.

102. *Thelyconychia solivaga* (RONDANI, 1861)

Distr.: Europe (Italy, SW Germany, Hungary, Ukraine); Middle East, Transcaucasia, Central Asia, S Siberia (Chita), Russian Far East (Ussuria), China (Northeast), Japan (Hokkaido) [Pakistan and Afrotropical Region too]. Recorded from Ussuria: RICHTER (1981: 931). New record: Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On a meadow swept from low vegetation.

103. *Carcelia (Carcelia) bombylans* ROBINEAU-DESVOIDY, 1830

Distr.: Europe; Transcaucasia, S Siberia (Tuva), Russian Far East (Kuril Is.), Japan (Kyushu, Hokkaido). **First records from Ussuria:** Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 25.V.1993, 1♀; Shivki Vall., 27.V.1993, 1♂, 1♀; Primorskiy Kray: (26) Samarka 70 km N of Chuguyevka, Zhuravlyevka banks, 29.V.1993, 1♀; 30.V.1993, 1♂; Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 03.VI.1993, 1♀; (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 2♀♀; 08.VI.1993, 2♀♀; 09.VI.1993, 1♀; (38) Sergeyevka 30 km N of Partizansk, Sergeyevka river banks, 04.VI.1993, 1♂. On edges of broadleaf and mixed forests. Swept from shrubs, leaves of *Filipendula palmata*, low vegetation and stones. In a Malaise trap too.

104. *Carcelia (Carcelia) dubia* BRAUER & BERGENSTAMM, 1891
Distr.: Europe (Spain, Italy, S France, Switzerland, SW Germany, Austria, Dalmatia); Middle East (Turkey). **First records from Russia:** Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 08.VII.1993, 5♂♂, 5♀♀; 10.VII.1993, 2♂♂, 6♀♀. Reared from caterpillars of *Spilosoma niveum* MENETRIES (Arctiidae).
105. *Carcelia (Carcelia) gnava* (MEIGEN, 1824)
Distr.: Europe; Transcaucasia, SE Siberia (Chita), Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido) [and (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1979: 142); SHIMA (1992: 16). New record: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 03.VI.1993, 1♀. On the edges of a mixed forest. In a Malaise trap.
106. *Carcelia (Carcelia) kowarzi* VILLENEUVE, 1912
Distr.: Europe (France, SW Germany, Switzerland, Austria); SE Siberia (Chita), Japan (Kyushu to Hokkaido). **First records from Russian Far East:** Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 05.VI.1993, 4♂♂, 1♀; 07.VI.1993, 1♂; 08.VI.1993, 1♀; 09.VI.1993, 1♂. On edges of broadleaf forests swept from shrubs. In a Malaise trap too.
107. *Carcelia (Carcelia) lucorum* (MEIGEN, 1824)
Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, SW Siberia (Altai), Russian Far East (Amuria), Japan (Honshu, Hokkaido). **First records from Ussuria:** Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 2♀♀; (32) Przhivalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♀; (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 05.VI.1993, 3♀♀; 06.VI.1993, 3♀♀; 08.VI.1993, 2♀♀. On edges of broadleaf forests. Swept from shrubs, low vegetation and flowers of *Anthriscus aemula*.
108. *Carcelia (Carcelia) matsukarehae* (SHIMA, 1969)
Distr.: Russian Far East (Ussuria), Japan (Kyushu, Honshu, Hokkaido). Recorded from Ussuria: KOLOMYETZ (1979: 141) (as *Carceliopsis matsukarehae* SHIMA); RICHTER (1986: 92).
109. *Carcelia (Carcelia) rasa* (MACQUART, 1849)
Distr.: Europe; Middle East, Transcaucasia, S Siberia, Russian Far East (Ussuria), Japan (Honshu, Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 36) and (1979: 142) (as *Carcelia amphion* R.-D.).
110. *Carcelia (Carcelia) sumatrana* TOWNSEND, 1927
Distr.: Russian Far East (Sakhalin), Japan (Kyushu, Honshu, Hokkaido) [and Oriental Region]. **First record from Ussuria:** Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 03.VI.1993, 1♂. On edges of a mixed forest swept from shrubs. In a Malaise trap too.
111. *Carcelia (Euryclea) tibialis* (ROBINEAU-DESVOIDY, 1863)
Distr.: Europe; Transcaucasia, SE Siberia (Chita), Russian Far East (Amuria, Sakhalin, Kuril Isl.), Japan (Kyushu, Honshu, Hokkaido). **First record from Ussuria:** Primorskiy Kray: (40)

Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♂. On edges of an oak forest and meadow. Swept from low vegetation.

Carcelia (Calocarcelia) excisoides (MESNIL, 1957)

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido). Not recorded from Ussuria.

112. *Senometopia excisa* (FALLÉN, 1820)

Distr.: Europe; Russian Far East (Amuria, Ussuria), Japan. Recorded from Ussuria: KOLOMYETZ (1979: 142) (as *Eucarcelia exisa* FALL.). New records: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 05.VI.1993, 1♀; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On edges of broadleaf forests. Swept from shrubs and low vegetation.

113. *Senometopia pollinosa* (MESNIL, 1941)

Distr.: Europe; S Siberia (Novosibirsk, Chita), Russian Far East (Amuria, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 38).

Senometopia separata (RONDANI, 1859)

Distr.: Europe; S Siberia (Novosibirsk, Krasnoyarsk), Russian Far East (Sakhalin), Japan (Honshu, Hokkaido) [and (introd.) Nearctic Region]. Recorded from Sakhalin: KOLOMYETZ (1979: 142). Not recorded from Ussuria.

114. *Erycia fatua* (MEIGEN, 1824)

Distr.: Europe; Mongolia, S Siberia (Tuva, Chita), Russian Far East (Ussuria). Recorded from Ussuria: SHIMA (1992: 17); RICHTER (1993: 424).

115. *Platymya fimbriata* (MEIGEN, 1824)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East (Sakhalin, Kuril Is.). First records from Ussuria: Primorskiy Kray: (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♀; (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♀; 08.VI.1993, 1♂, 1♀; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On edges of broadleaf forests and meadows. Swept from low vegetation and shrubs.

116. *Eumea linearicornis* (ZETTERSTEDT, 1844)

Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Ussuria, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 52) (as *Platymya westermanni* ZTT.); KOLOMYETZ (1979: 142) (as *Eumea westermanni* ZTT.).

117. *Eumea mitis* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Amuria), Japan (Hokkaido) [and (introd.) Nearctic Region]. First record from Ussuria: Primorskiy Kray: (26) Samarka, Zhuravlyevka banks, 08.VII.1993, 1♂. Reared from a puparia (host unknown).

Myxexoristops hertingi MESNIL, 1955

Distr.: Europe; S Siberia (Barnaul), Russian Far East (Kuril Isl.). Not recorded from Ussuria.

118. *Euexorista obumbrata* (PANDELLÉ, 1896)
Distr.: Europe (Austria, NW Germany, N Poland, N Russia); SE Siberia (Chita), Russian Far East (Ussuria) [and Nearctic Region]. Recorded from Ussuria: RICHTER (1981: 932).
119. *Zenillia dolosa* (MEIGEN, 1824)
Distr.: Europe; Transcaucasia, S Siberia (Altai, Novosibirsk, Tuva), Russian Far East (Amuria, Ussuria), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1979: 143).
120. *Zenillia libatrix* (PANZER, 1798)
Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Ussuria), Japan (Hokkaido) [and (introd.) Nearctic Region]. Recorded from Ussuria: RICHTER (1981: 932); (1986: 92); (1993: 424).
121. *Calozenillia tamara* (PORTSCHINSKY, 1884)
Distr.: Transcaucasia (Georgia), Russian Far East (Ussuria), China (Sichuan), Japan (Kyushu to Hokkaido). Recorded from Ussuria: RICHTER (1986: 92).
122. *Euhygia brevicornis* MESNIL, 1963
Distr.: Russian Far East (Ussuria). Only known from the holotype; see MESNIL (1963: 17) "Yakovleva, Spass"; quoted by KOLOMYETZ (1977: 44) "Yakovlevka" = (25) Yakovlevka 55 km ESE Spassk-Dalniy.
123. *Pales coxalis* (MESNIL, 1963)
Distr.: Russian Far East (Ussuria). Only known from the holotype; see MESNIL (1963: 6) "Ust. Lefu, Yu Khanda"; quoted by KOLOMYETZ (1977: 41) (as *Ctenophorocera coxalis* MESN.) "Mouth of river Ilistaya" = (23) Khankaisky Zapovednik 25 km WSW Spassk-Dalniy.
124. *Pales pavid*a (MEIGEN, 1824)
Distr.: Europe; Middle East, Transcaucasia, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria, Kuril Is.), Japan (Kyushu to Hokkaido) [and (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 41) (as *Ctenophorocera pavid*a MG.); RICHTER (1986: 92). New records: Primorskiy Kray: (28) Tikhoye near Razdolnoye, 19.VI.1993, 1♀; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂, 3♀♀; 14.VI.1993, 4♀♀; (40) Ryazanovka, 16.VI.1993, 1♂, 2♀♀. On edges of broadleaf forests and meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.
125. *Phryno* sp.
Unknown species. Records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Kamenistaya Griva Hill, 27.V.1993, 1♂; Shivki Mtn., 27.V.1993, 2♂♂, 2♀♀; Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♂, 1♀; (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 1♀; (26) Samarka, Zhuravlyevka banks, 30.V.1993, 2♀♀; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀; (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♀; (35) Vladivostok-Sedanka, 20.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 08.VI.1993, 1♀; (40) Ryazanovka, 16.VI.1993, 1♀. On edges of broadleaf forests. Swept from low vegetation, shrubs and flowers of *Euonymus sacrosancta*. *Phryno katoi* MESNIL is very closely related to *Phryno vetula* (MEIGEN) and this unknown *Phryno* sp. The genus *Phryno* is in need of revision.

126. *Phryno vetula* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Middle East, Russian Far East (Amuria, Ussuria). Recorded from Amuria: RICHTER (1986: 93) and from Ussuria: KOLOMYETZ (1977: 50).

Cyzenis jucunda (MEIGEN, 1838)

Distr.: Europe; Russian Far East (Sakhalin, Kuril Is.). Not recorded from Ussuria.

127. *Bothria frontosa* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Mongolia, Siberia (Tobolsk, Yakutia), Russian Far East (Ussuria), Japan. Recorded from Ussuria: KOLOMYETZ (1977: 50). First records from Amuria: Khabarovskiy Kray: (6) Komsomolsk-na-Amure, Zilinskiy Park, 17.IV.1988, 1♂, leg. MUTIN (IBPV); 26.IV.1988, 2♂♂, leg. MUTIN (IBPV); 19.IV.1989, 3♂♂, leg. MUTIN (IBPV). New records from Ussuria: Primorskiy Kray: (35) Vladivostok-Sedanka, 04.IV.1982, 1♂, leg. MUTIN (IBPV); Vladivostok, Mandkur Inlet, 09.IV.1988, 1♂, leg. LEHR (IBPV).

128. *Bothria japonica* MESNIL, 1957

Distr.: Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: ZIMIN (1960: 743) (as *Anameriana albomicans* ZIM.). *Anameriana* is a synonym of *Bothria* (pers. comm. HERTING and TSCHORSNIG). We found that *Anameriana albomicans* ZIMIN (1960) syn. nov. is a junior synonym of *Bothria japonica* MESNIL, 1957. New record: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♂. On edges of a mixed forest. Swept from shrubs.

129. *Erycilla rutila* (MEIGEN, 1824)

Distr.: Europe (Italy, Switzerland); Russian Far East (Amuria, Ussuria, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: RICHTER (1986: 93).

Pexopsis capitata MESNIL, 1952

Distr.: Russian Far East (Amuria), China (Shanghai). Recorded from Amuria: KOLOMYETZ (1977: 44). Not recorded from Ussuria.

130. *Erythrocer a crassinervis* MESNIL, 1963

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1977: 45).

131. *Erythrocer a* sp.

Unknown species. Records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 25.V.1993, 1♂, 1♀; Kamenistaya Griva Hill, 27.V.1993, 4♀♀; Shivki Mtn., 27.V.1993, 1♂; Primorskiy Kray: (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 1♀; (29) Partizan 13 km S of Ussuriysk, 23.V.1993, 1♀. On edges of broadleaf forests. Swept from shrubs, from leaves of *Filipendula palmata* and from low vegetation. This unknown species differs from the closely related *Erythrocer a crassinervis* MESNIL, 1963 and *Erythrocer a longicornis* (BRAUER et BERGENSTAMM, 1891). The genus *Erythrocer a* is in need of revision.

132. *Erythrocer a longicornis* (BRAUER et BERGENSTAMM, 1891)

Distr.: Russian Far East (Ussuria). Only known from the type. Redescription in chapter 4.2.

133. *Erythrocer a nigripes* (ROBINEAU-DESVOIDY, 1830)

Distr.: Europe (France to Ukraine). First records from Asia and the Russian Far East: Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♀; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♂. On edges of broadleaf forests. Swept from shrubs and low vegetation.

134. *Eurysthaea scutellaris* (ROBINEAU-DESVOIDY, 1848)

Distr.: Europe; Transcaucasia, Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1977: 45); SHIMA (1992: 17). New record: Primorskiy Kray: (19) Mezhdurechje 37 km SE of Dalnerechensk, 28.V.1993, 1♂. In broadleaf forest on leaves of shrubs.

Elodia morio (FALLÉN, 1820)

Distr.: Europe; Mongolia, S Siberia (Altai, Buryatia, Chita), Russian Far East (Sakhalin, Kuril Is.), Japan (Honshu, Hokkaido). Not recorded from Ussuria.

135. *Blepharipa jacobsoni* (TOWNSEND, 1927)

Distr.: Russian Far East (Ussuria), Japan (Kyushu to Hokkaido) [and Oriental Region]. Recorded from Ussuria: KOLOMYETZ (1977: 42) (as *Blepharipoda*). The identification needs to be confirmed.

136. *Blepharipa pratensis* (MEIGEN, 1824)

Distr.: Europe; Middle East, Transcaucasia, S Siberia (Tuva), Russian Far East (Amuria, Ussuria), Japan (Hokkaido) [(introd. and estab.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 42).

137. *Blepharipa schineri* (MESNIL, 1939)

Distr.: Europe, S Siberia (Novosibirsk, Tomsk, Krasnoyarsk), Russian Far East (Amuria), China, Japan (Kyushu to Hokkaido) [and (introd.) Nearctic Region]. First records from Ussuria: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 26.V.1993, 2♂♂, 1♀; Kamenistaya Griva Hill, 27.V.1993, 4♀♀; Shivki Vall., 27.V.1993, 2♂♂; Shivki Mtn., 27.V.1993, 3♀♀. Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♀; (20) Tamga, 24.V.1993, 2♂♂; (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 1♂, 3♀♀; Zhuravlyevka banks, 30.V.1993, 2♂♂; (29) Banevurovo, 10.VI.1993, 1♀; Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 4♀♀; 14.VI.1993, 2♂♂, 1♀; (32) Przhivalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 2♀♀; (37) Anisimovka, Sukhodol Vall., 08.VI.1993, 1♀. On edges of broadleaf forests. Swept from leaves of *Quercus mongolica*, shrubs, low vegetation and flowers of *Euonymus sacrosancta*. In Malaise traps and yellow pan traps also.

138. *Blepharipa zebina* (WALKER, 1849)

Distr.: Russian Far East (Ussuria), Japan (Kyushu to Hokkaido) [and Oriental Region]. Recorded from Ussuria: Cited by HERTING (1984: 76), from a manuskript list provided by RICHTER.

Masicera sphingivora (ROBINEAU-DESVOIDY, 1830)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, Siberia, Russian Far East (Sakhalin), Japan (Honshu). Recorded from Sakhalin: KOLOMYETZ (1977: 46). Not recorded from Ussuria.

139. *Dolichocolon paradoxum* BRAUER ET BERGENSTAMM, 1889

Distr.: Mediterranean Europe (Spain, S France, Italy, Dalmatia); Middle East, Transcaucasia, Russian Far East (Ussuria) [also Oriental and Afrotropical Region]. Recorded from Ussuria: KOLOMYETZ (1979: 143); RICHTER (1981: 932).

140. *Prosopaea nigricans* (EGGER, 1861)

Distr.: S Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia (Tomsk, Krasnoyarsk, Chita), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1993: 425).

141. *Hebia flavipes* ROBINEAU-DESVOIDY, 1830

Distr.: Europe; Transcaucasia, Russian Far East (Kuril Is.), Japan (Honshu). **First records from Ussuria:** Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 25.V.1993, 1♂; Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 3♂♂; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂. On edges of broadleaf and mixed forests. Swept from low vegetation.

142. *Frontina laeta* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Central Asia, Siberia (Altai to Yakutia), Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1977: 50); RICHTER (1986: 93).

143. *Baumhaueria nobilis* MESNIL, 1963

Distr.: Russian Far East (Ussuria). Only known from the type; see MESNIL (1963: 18) "Maiklzl. Shkotova"; quoted by KOLOMYETZ (1977: 57) "Shkotovo". The original spelling is Майхе близ Шкотова = (36) Shtykovo N of Shkotovo 45 km NE of Vladivostok.

144. *Pachystylum breinii* MACQUART, 1848

Distr.: Europe; Transcaucasia, Siberia (Tuva, Krasnoyarsk, Chita, Yakutia), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1993: 425).

145. *Gonia divisa* (MEIGEN, 1826)

Distr.: Europe; S Siberia (Novosibirsk, Tomsk, Krasnoyarsk, Tuva), Japan (Hokkaido). **First records from Russian Far East:** AMURIA: Khabarovskiy Kray: (6) Komsomolsk-na-Amure, Zilinskiy Park, 19.IV.1985, 1♀, leg. MUTIN (IBPV); 05.V.1985, 1♀, leg. MUTIN (IBPV); 30.IV.1986, 1♀, leg. MUTIN (IBPV); 19.V.1987, 1♀, leg. MUTIN (IBPV); 22.IV.1988, 1♂ 1♀, leg. MUTIN (IBPV). USSURIA: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 26.V.1993, 1♀; (30) Kremovo 25 km SW of Sibirtsevo, 23.V.1993, 1♀; (31) Gornotayozhnoye (=GTS) 19 km SE of Ussuriysk, Dendrayi, 26.IV.1981, 1♀, leg. MUTIN (IBPV). On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Potentilla* sp. In the Russian Far East only a dark form.

Gonia ornata MEIGEN, 1824

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia (Altai, Tomsk). **First record from Russian Far East:** AMURIA: Khabarovskiy Kray: (6) Komsomolsk-na-Amure, Zilinskiy Park; 05.V.1985, 1♂, leg. MUTIN (IBPV) [a dark form].

146. *Gonia ussuriensis* (ROHDENDORF, 1928)

Distr.: Russian Far East (Ussuria), Japan (Kyushu, Honshu, Shikoku). Recorded from Ussuria:

ROHDENDORF (1928: 99); KOLOMYETZ (1977: 58). New records: Primorskiy Kray: (25) Forest 10 km SE Chernigovka, 19.V.1979, 1♂ 1♀, leg. LELEJ (IBPV); Forest 12 km SE Chernigovka, 15.V.1979, 1♂ 1♀, leg. LEHR (IBPV); (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 3♀♀; Gornotayozhnoye (=GTS) 19 km SE of Ussuriysk, Dendraryi; 26.IV.1981, 1♂, leg. MUTIN (IBPV); (35) Vladivostok-Sedanka, 20.VI.1993, 1♀; (37) Anisimovka, 23.V.1986, 1♂, leg. MAKARKIN (IBPV). In broadleaf forests. Swept from low vegetation and flowers of *Anthriscus aemula* (see fig. 67).

147. *Onychogonia flaviceps* (ZETTERSTEDT, 1838)

Distr.: European mts. (Alps, Ligurian Apennines, Tatra, Scandinavien mts.); Mongolia, E Siberia (Chita, Yakutia), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1993: 425). First record from AMURIA: "NW Amur Province", 02.VII.1975, 1♂, leg. ZOBOLÉVA (IBPV).

148. *Pseudogonia rufifrons* (WIEDEMANN, 1830)

Distr.: S Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia (Barnaul, Tuva), Russian Far East (Ussuria), China, Japan (Kyushu to Hokkaido) [also Oriental, Australasian/Oceanian and Afrotropical Region]. Recorded from Ussuria: KOLOMYETZ (1977: 59) (as *Isomera cinerascens* RD.).

149. *Spallanzania hebes* (FALLÉN, 1820)

Distr.: Europe, Transcaucasia, C. Asia, Siberia (Tuva, Chita, Yakutia), Russian Far East (Ussuria) [recorded from India (Kashmir) (?) and Nearctic Region (?), too]. Recorded from Ussuria: KOLOMYETZ (1977: 59).

4.1.2. Subfamily Tachininae

Tachina (Tachina) grossa (LINNAEUS, 1758)

Distr.: Europe; Transcaucasia, Kazakhstan, Kirgizia, Mongolia, S Siberia, Russian Far East (Amuria). Recorded from Amuria: KOLOMYETZ (1975: 23) and RICHTER (1986: 93). Not recorded from Ussuria.

150. *Tachina (Tachina) magna* (GIGLIO-TOS, 1890)

Distr.: S Europe; Transcaucasia, Kazakhstan, S Siberia (Altai, Chita), Russian Far East (Amuria, Ussuria). Recorded from Ussuria: KOLOMYETZ (1975: 24); RICHTER (1986: 93); ZIMIN and KOLOMYETZ (1984: 63).

151. *Tachina (Eudoromyia) fera* (LINNAEUS, 1761)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East (Ussuria), Japan (Honshu, Hokkaido). Recorded from Ussuria: RICHTER (1993: 425); ZIMIN and KOLOMYETZ (1984: 46).

152. *Tachina (Eudoromyia) magnicornis* (ZETTERSTEDT, 1844)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East (Ussuria, Kuril Is.), Korea, China, Japan (Hokkaido) [and (introd., not estab.) Nearctic Region].

Recorded from Ussuria: KOLOMYETZ (1975: 24). New records: Primorskiy Kray: (26) Samarka 70 km N of Chuguyevka, 29.V.1993, 2♂♂, 1♀; 30.V.1993, 5♂♂, 1♀; (27) Krounovka 40 km SW of Ussuriysk, 05.VII.1993, leg. KUTZSCHER, 2♂♂ (DEI); (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 2♂♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 2♀♀; (34) Sikhote Alin 56 km SE of Chuguyevka, 850 m, 02.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♀; 08.VI.1993, 2♀♀; (38) Sergeyevka, Sergeyevka river banks, 04.VI.1993, 1♂; (40) Ryazanovka, 16.VI.1993, 1♂. On edges of broadleaf and mixed forests and in meadows. Swept from low vegetation, shrubs, stones and flowers of *Anthriscus aemula*. The ♂♂ have long claws and a wide vertex with 0 to 1 proclinate orbital seta. We collected this form in mountain areas of Central Europe, too.

Tachina (Eudoromyia) nupta (RONDANI, 1859)

Distr.: Europe; Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East (Ussuria, Kuril Is.), Korea, China (Northeast), Japan (Kyushu to Hokkaido). Recorded from Ussuria: ZIMIN (1967: 473) (as *T. nigriventris*); KOLOMYETZ (1975: 25) (as *T. nigriventris* ZIMIN and *T. orientalis* ZIMIN); ZIMIN and KOLOMYETZ (1984: 73, 77). In Ussuria only a subspecies:

153. *Tachina (Eudoromyia) nupta micado* (KIRBY, 1884)

New records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Shivki Vall., 27.V.1993, 1♂; (27) Krounovka 40 km SW of Ussuriysk, 05.VII.1993, leg. KUTZSCHER, 1♂ (DEI); (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 4♀♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀; 14.VI.1993, 4♀♀; (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 3♀♀; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 2♀♀; 07.VI.1993, 2♂♂, 1♀; 08.VI.1993, 4♂♂, 1♀; 09.VI.1993, 1♂, 2♀♀; (38) Sergeyevka 30 km N of Partizansk, Sergeyevka river banks; 04.VI.1993, 1♂; (40) Ryazanovka, 16.VI.1993, 1♀. On edges of broadleaf forests and in meadows. Swept from low vegetation, shrubs and flowers of *Euphorbia* sp. and *Anthriscus aemula*. These specimens are darker in body color than European ones. They are similar to the form of "*Tachina nigriventris* ZIMIN, 1967" and have 3+3 or 3+4 dc and a differently sharpened dark spot on the fifth tergum.

154. *Tachina (Eudoromyia) stackelbergiana* HERTING & DELY-DRASKOVITS, 1993

Distr.: Russian Far East (Ussuria, Sakhalin, Kuril Is.). Recorded from Ussuria: ZIMIN (1967: 476); KOLOMYETZ (1975: 26) (as *T. stackelbergi* ZIMIN).

155. *Tachina (Servillia) amurensis* (ZIMIN, 1929)

Distr.: Russian Far East (Amuria, Ussuria, Sakhalin, Kuril Is.), China, Korea, Japan (Kyushu to Hokkaido). Recorded from Ussuria: SHIMA (1992: 17); ZIMIN and KOLOMYETZ (1984: 109).

156. *Tachina (Servillia) ardens* (ZIMIN, 1929)

Distr.: East Siberia (Yakutia), Russian Far East (Amuria, Ussuria), China (Gansu) and Burma. Recorded from Ussuria: ZIMIN (1929: 219); KOLOMYETZ (1975: 22); SHIMA (1992: 17); ZIMIN and KOLOMYETZ (1984: 112). New record: Primorskiy Kray: (27) Krounovka SW of Ussuriysk, 05.VII.1993, leg. KUTZSCHER, 1♂ 2♀♀ (DEI).

157. *Tachina (Servillia) breviceps* (ZIMIN, 1929)

Distr.: SE Siberia (Chita), Russian Far East (Amuria, Ussuria, Sakhalin, Kuril Is.), Korea, China (Northeast), Japan (Hokkaido). Recorded from Ussuria: ZIMIN (1929: 214, 215) (as

Servillia breviceps ZIM. and *S. pallidohirta* ZIM.); RICHTER (1986: 93); ZIMIN and KOLOMYETZ (1984: 117). New records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Kamenistaya Griva Hill, 27.V.1993, 8♀♀; Shivki Mtn., 27.V.1993, 1♀; Primorskiy Kray: (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 3♀♀; (29) Partizan 13 km S of Ussuriysk, 23.V.1993, 1♀; (33) Biological station 30 km SE of Chuguyevka, 650 m, 01.VI.1993, 2♂♂, 1♀; (37) Anisimovka, Sukhodol Vall., 08.VI.1993, 1♀. On edges of broadleaf and mixed forests. On shrubs, low vegetation, soil and flowers of *Crataegus maximoviczii*. The specimens mostly have the same whitish-yellow body hair as "*Servillia pallidohirta* ZIMIN, 1929" that is a colour variation of *Tachina breviceps*. The "*S. pallidohirta*" is very closely related to *T. lurida*. The ♂♂ of *T. breviceps* have a narrower vertex than *T. lurida* has. The ♀♀ of *T. breviceps* lack yellow laterally on the 2nd and 3rd terga and lack the transverse pollinose bands on each tergum, compared with *T. lurida*.

158. *Tachina (Servillia) chaoi* MESNIL, 1966

Distr.: Russian Far East (Ussuria), China (Northeast), Japan (Kyushu to Hokkaido). Recorded from Ussuria: ZIMIN (1935) [as *Servillia luteola* COQ. (misident.)].

159. *Tachina (Servillia) jakovlevi* (PORTSCHINSKY, 1882)

Distr.: Mongolia, Siberia (Gorno-Altai to Yakutia), Russian Far East (Amuria, Ussuria, Kuril Is.), China (Northeast), Korea, Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 23).

160. *Tachina (Servillia) luteola* (COQUILLETT, 1898)

Distr.: Russian Far East (Ussuria), Korea, Japan (Kyushu to Hokkaido). Recorded from Ussuria: ZIMIN (1929: 220) (as *Servillia elongata* ZIMIN). KOLOMYETZ (1975: 22) (as *T. elongata* ZIMIN). New record: Primorskiy Kray: (27) Krounovka 40 km SW of Ussuriysk, 05.VII.1993, 1♀, leg. KUTZSCHER (DEI).

161. *Tachina (Servillia) majae* (ZIMIN, 1935)

Distr.: Russian Far East (Ussuria). Only known from the types, see ZIMIN (1935: 574) (as *Servillia*).

162. *Tachina (Servillia) stackelbergi* (ZIMIN, 1929)

Distr.: Russian Far East (Ussuria, Kuril Isl.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: ZIMIN (1929: 216) (as *Servillia*); SHIMA (1992: 17).

163. *Tachina (Servillia) trigonophora* ZIMIN, 1980

Distr.: Russian Far East (Ussuria), Korea. From Ussuria only known from the types; see ZIMIN (1980: 211) "Kedrovaya Pad" = (39) Zapovednik "Kedrovaya Pad" near Barabash W of Vladivostok. New records: Primorskiy Kray: (26) Samarka, 29.V.1993, 1♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♀; (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♀. On edges of broadleaf forests. Swept from leaves of *Quercus mongolica*, from shrubs and from flowers of *Anthriscus aemula* (see fig. 68).

164. *Tachina (Servillia) ursina* (MEIGEN, 1824)

Distr.: Europe; Caucasus, S Siberia, Russian Far East (Ussuria, Kuril Is.), China. Recorded from Ussuria: SHIMA (1992: 17) (as *Tachina ? ursina*). New record: Primorskiy Kray: (31)

Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 2♀♀. On edges of a broadleaf forest. Swept from low vegetation.

Tachina (Servillia) zaqu CHAO et ARNAUD, 1993

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido), China (E Tibet) [syn. *Servillia basalis* ZIMIN, 1929]. Not recorded from Ussuria.

165. *Schineria majae* ZIMIN, 1947

Distr.: Russian Far East (Ussuria), China (Northeast). Recorded from Ussuria: ZIMIN (1947: 1830); RICHTER (1986: 93); ZIMIN and KOLOMYETZ (1984: 24).

Schineria tergestina RONDANI, 1859

Distr.: S Europe; S Siberia (Novosibirsk, Krasnoyarsk, Irkutsk). Recorded from Ussuria: KOLOMYETZ (1975: 28) (error), corrected by ZIMIN and KOLOMYETZ (1984: 22).

166. *Nowickia (Nowickia) marklini* (ZETTERSTEDT, 1838)

Distr.: Europe (central european mts. and N Europe). Northern or mountain regions of Asia: Mongolia, Siberia, Russian Far East (Kamchatka, Amuria, Sakhalin, Ussuria), Korea. Recorded from Ussuria: RICHTER (1986: 93).

167. *Nowickia (Fabriciella) atripalpis* (ROBINEAU-DESVOIDY, 1863)

Distr.: Europe (mainly south and central European mts.); Caucasus, Ural, Central Asia (Pamir and other mts.), Mongolia, Siberia, Russian Far East (Ussuria), China (mts. of Sichuan). Recorded from Ussuria: KOLOMYETZ (1975: 26); RICHTER (1986: 93); ZIMIN and KOLOMYETZ (1984: 185).

168. *Nowickia (Fabriciella) macularia* (WIEDEMANN, 1824)

Distr.: S Ural, Kazakhstan, N Mongolia, S Siberia (Gorno-Altai, Tuva, Minusinsk), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1975: 27); ZIMIN and KOLOMYETZ (1984: 193) (as *Fabriciella*).

169. *Cnephaotachina spectanda* (VILLENEUVE, 1930)

Distr.: SE Kazakhstan, Mongolia, S Siberia (Gorno-Altai, Tomsk, Tuva, Chita), Russian Far East (Ussuria), N China. Recorded from Ussuria: ZIMIN and KOLOMYETZ (1984: 174).

170. *Mikia tepens* (WALKER, 1849)

Distr.: N Kazakhstan, S Siberia (Novosibirsk, Kemerovo, Altai, Chita), Russian Far East (Amuria, Ussuria), China (Northeast), Japan (Hokkaido) [and Oriental Region]. Recorded from Ussuria: KOLOMYETZ (1975: 28) (as *M. magnifica* MIK); RICHTER (1986: 93) and (1993: 425); ZIMIN and KOLOMYETZ (1984: 168).

171. *Anaeudora japonica* (BARANOV, 1935)

Distr.: Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 22) (as *A. japonica* BARANOV); ZIMIN and KOLOMYETZ (1984: 163).

172. *Anaeudora patellipalpis* MESNIL, 1953

Distr.: Russian Far East (Ussuria), China [and Oriental Region]. Recorded from Ussuria: ZIMIN (1974: 466) (as *Anaeudora sabroskyi* ZIMIN) and ZIMIN and KOLOMYETZ (1984: 165).

173. *Peleteria adelphe* (ZIMIN, 1961)

Distr.: Mongolia, Russian Far East (Amuria, Ussuria). Only known from the types, see ZIMIN (1961: 303).

174. *Peleteria ferina* (ZETTERSTEDT, 1844)

Distr.: Europe; Transcaucasia, Kazakhstan, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria). Recorded from Ussuria: KOLOMYETZ (1975: 29); RICHTER (1986: 94) and (1993: 425).

Peleteria mesnili (ZIMIN, 1965)

Distr.: Russian Far East (Magadan Province). Not recorded from Ussuria.

175. *Peleteria pallida* (ZIMIN, 1935)

Distr.: Russian Far East (Ussuria). Only known from the types; see ZIMIN (1961: 246); quoted by KOLOMYETZ (1975: 29) (as *Hemipeletieria*). New record: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀. On edges of a broadleaf forest. On flowers of *Anthriscus aemula*.

176. *Peleteria popelii* (PORTSCHINSKY, 1882)

Distr.: Europe; Kazakhstan, Mongolia, S Siberia (Altai, Tuva, Krasnoyarsk, Chita), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1975: 30).

177. *Peleteria propinqua* (ZIMIN, 1961)

Distr.: Russian Far East (Ussuria), Korea, Japan (Hokkaido). Recorded from Ussuria: ZIMIN (1961: 250); quoted by KOLOMYETZ (1975: 29) (as *Hemipeletieria*). New records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 26.V.1993, 1♂, 1♀; Kamenistaya Griva Hill, 27.V.1993, 1♀; Shivki Mtn., 27.V.1993, 1♀; Primorskiy Kray: (29) Banevurovo S of Ussuriysk, 10.VI.1993, 1♀; Partizan 13 km S of Ussuriysk, 15.VI.1993, 2♀♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 2♀♀; (35) Vladivostok-Sedanka, 20.VI.1993, 1♀; (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 08.VI.1993, 1♀. On edges of broadleaf forests. Swept from low vegetation and flowers of *Crataegus maximoviczii*.

Peleteria rubescens (ROBINEAU-DESVOIDY, 1830)

Distr.: Europe; Transcaucasia, Central Asia, Mongolia, Siberia, Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 94). Not recorded from Ussuria.

178. *Peleteria semiglabra* (ZIMIN, 1961)

Distr.: Russian Far East (Ussuria), China (Northeast), Korea. Recorded from Ussuria: ZIMIN (1961: 25) (as *Hemipeletieria*); RICHTER (1986: 94). New records: Primorskiy Kray: (19) Mezhdurechje SE of Dalnerechensk, 28.V.1993, 1♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂, 10♀♀; 14.VI.1993, 5♀♀; (37) Anisimovka, Sukhodol Vall.,

05.VI.1993, 1♀; 06.VI.1993, 1♀; 07.VI.1993, 1♀. On edges of broadleaf forests. On low vegetation and on flowers of *Euonymus sacrosancta* and *Anthriscus aemula*.

Peleteria sphyrocera (MACQUART, 1835)

Distr.: S Europe; Transcaucasia, SE Siberia (Chita), Russian Far East (Sakhalin). Recorded from Sakhalin: KOLOMYETZ (1975: 29). Not recorded from Ussuria.

179. *Peleteria varia* (FABRICIUS, 1794)

Distr.: S Europe; North Africa; Transcaucasia, N Kazakhstan, S Siberia, Russian Far East (Amuria, Ussuria), Korea, [also Oriental, Afrotropical and Australasian Regions]. Recorded from Ussuria: RICHTER (1993: 425) (as *P. pyrrhogaster* RD.).

180. *Peleteria versuta* (LOEW, 1871)

Distr.: N Kazakhstan, N Mongolia, Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 31).

181. *Nemoraea japonica* (BARANOV, 1935)

Distr.: Japan (Hokkaido, Honshu). **First record from Russia:** Primorskiy Kray: (28) Tikhoye near Razdolnoye 36 km S of Ussuriysk, 22.V.1993, 1♂. On edges of an oak forest. On a trunk of *Quercus mongolica*.

182. *Nemoraea pellucida* (MEIGEN, 1824)

Distr.: Europe; North Africa; Transcaucasia, Siberia (Altai, Krasnoyarsk, Chita, Yakutia), Russian Far East (Amuria, Ussuria, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 40); RICHTER (1986: 94) and (1993: 425).

Nemoraea sapporensis KOCHA, 1969

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido). Not recorded from Ussuria.

183. *Nemoraea takanoi* (BARANOV, 1935)

Distr.: Russian Far East (Amuria, Ussuria), Japan (Hokkaido, Kyushu). Recorded from Ussuria: RICHTER (1986: 94).

184. *Linnaemya (Ophina) fissiglobula* (PANDELLÉ, 1895)

Distr.: S Europe; N Kazakhstan, S Siberia (Minusinsk, Tuva, Chita), Russian Far East (Kuril Is.), Japan (Hokkaido).

185. *Linnaemya (Ophina) haemorrhoidalis* (FALLÉN, 1810)

Distr.: Europe (mainly Central European mts. and N Europe); Ural, Mongolia, S Siberia (Altai, Tuva, Irkutsk, Chita), Russian Far East (Ussuria, Kuril Is.), Japan (Hokkaido, Honshu). Recorded from Ussuria: KOLOMYETZ (1975: 32) (as *Linnaemyia*).

186. *Linnaemya (Ophina) media* ZIMIN, 1954

Distr.: S Europe; SE Siberia (Chita), Russian Far East (Amuria, Ussuria), China, Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 32) (as *Linnaemyia*). New records: Primorskiy Kray: (26) Samarka, 30.V.1993, 1♂; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On edges of broadleaf forests. On low vegetation.

187. *Linnaemya (Ophina) microchaetopsis* SHIMA, 1986

Distr.: Korea, China (Fujian), Japan (Hokkaido, Honshu, Kyushu). **First records from Russia:** Primorskiy Kray: (28) Tikhoye near Razdolnoye 36 km S of Ussuriysk, 19.VI.1993, 1♀; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 3♂♂, 5♀♀. On edges of oak forests (*Quercus mongolica*-forests and *Quercus dentata*-forests) and in meadows. On low vegetation.

188. *Linnaemya (Ophina) olsufjevi* ZIMIN, 1954

Distr.: Europe, Transcaucasia, Kazakhstan, S Siberia (Tyumen to Chita), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1975: 33) (as *Linnaemyia*).

189. *Linnaemya (Ophina) omega* ZIMIN, 1954

Distr.: Russian Far East (Ussuria), China (Sichuan) [and Oriental Region]. Recorded from Ussuria: KOLOMYETZ (1975: 33) (as *Linnaemyia*).

190. *Linnaemya (Ophina) pallidula* ZIMIN, 1954

Distr.: SE Kazakhstan, Mongolia, S Siberia (Altai, Tuva, Tomsk, Krasnoyarsk), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1975: 33) (as *Linnaemyia*).

191. *Linnaemya (Ophina) picta* (MEIGEN, 1824)

Distr.: Europe, Transcaucasia, Siberia, Russian Far East (Amuria, Ussuria, Kuril Is.), Japan (Hokkaido to Kyushu) [and Oriental Region]. Recorded from Ussuria: KOLOMYETZ (1975: 34) (as *Linnaemyia retroflexa* PAND.). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♀; (32) Przhivalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂; (40) Ryazanovka, 16.VI.1993, 4♂♂, 3♀♀. On edges of broadleaf forests. On shrubs, low vegetation and on flowers of *Anthriscus aemula*.

192. *Linnaemya (Ophina) rossica* ZIMIN, 1954

Distr.: Europe (mainly Central European mts. and N Europe), Siberia (Tomsk, Chita, Yakutia), Mongolia, Russian Far East (Magadan Province, Kamchatka, Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 34) (as *Linnaemyia*).

193. *Linnaemya (Ophina) zachvatkini* ZIMIN, 1954

Distr.: Europe (Switzerland, Austria, Hungary); Mongolia, SE Siberia (Chita), Russian Far East (Ussuria, Kuril Isl.), China, Japan (Hokkaido to Kyushu). Recorded from Ussuria: KOLOMYETZ (1975: 35); RICHTER (1986: 94) (as *Linnaemyia*).

194. *Linnaemya (Linnaemya) amicorum* DRABER et KOLOMYETZ, 1982

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: SHIMA (1992: 17).

195. *Linnaemya (Linnaemya) atriventris* (MALLOCH, 1935)

Distr.: Russian Far East (Ussuria; Kuril Is.), Japan (Kyushu to Hokkaido) [and Oriental Region]. Recorded from Ussuria: KOLOMYETZ (1975: 32) (as *Linnaemyia montshadskyi* ZIMIN, 1954); SHIMA (1986: 74).

Linnaemya (Linnaemya) bella MESNIL, 1970

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido). Not recorded from Ussuria.

196. *Linnaemya (Linnaemya) comta* (FALLÉN, 1810)

Distr.: Europe; Transcaucasia, Central Asia, Afghanistan, Mongolia, Siberia, Russian Far East (Amuria, Ussuria), China (Hubei), Nepal [also Oriental Region, Afrotropical Region (Sudan) and Nearctic Region]. Recorded from Ussuria: RICHTER (1986: 94) (as *Linnaemyia*).

Linnaemya (Linnaemya) pallidohirta CHAO, 1962

Distr.: Russian Far East (Sakhalin, Kuril Is.), Japan (Hokkaido, Honshu, Kyushu). Not recorded from Ussuria.

197. *Linnaemya (Linnaemya) paralongipalpis* CHAO, 1962

Distr.: Russian Far East (Ussuria, Sakhalin), China (Sichuan). Recorded from Ussuria: ZIMIN (1963: 210) (as *Linnaemyia*).

198. *Linnaemya (Linnaemya) scutellaris* (MALLOCH, 1927)

Distr.: Russian Far East (Ussuria), China [and Oriental Region]. Recorded from Ussuria: RICHTER (1993: 425) (as *Linnaemyia*).

199. *Linnaemya (Linnaemya) soror* (ZIMIN, 1954)

Distr.: S Europe (incl. Canary Isl.); Middle East, Transcaucasia, Central Asia, S Siberia (Tomsk, Barnaul, Tuva), Russian Far East (Ussuria), N China [also Nepal and India]. Recorded from Ussuria: RICHTER (1993: 425) (as *Linnaemyia*).

200. *Linnaemya (Linnaemya) tessellans* (ROBINEAU-DESVOIDY, 1830)

Distr.: Europe; S Siberia, Russian Far East (Ussuria), Japan (Hokkaido, Honshu, Kyushu), Nepal [also Taiwan]. Recorded from Ussuria: KOLOMYETZ (1975: 34) and (1988: 134) (as *Linnaemyia pudica* RD.).

201. *Linnaemya (Linnaemya) timida* (RICHTER, 1993)

Distr.: Russian Far East (Ussuria). Only known from the types; see RICHTER (1993: 425) (as *Linnaemyia*).

202. *Linnaemya (Linnaemya) tuberculata* SHIMA, 1986

Distr.: Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: SHIMA (1986: 77).

Chrysosomopsis aurata (FALLÉN, 1820)

Distr.: Europe: Transcaucasia, Mongolia, S Siberia (Krasnoyarsk, Chita), Russian Far East (Amuria), Japan (Kyushu to Hokkaido). Recorded from Amuria: RICHTER (1986: 94). Not recorded from Ussuria.

203. *Chrysosomopsis helenae* (ZIMIN, 1958)

Distr.: Russian Far East (Ussuria). Only known from the types; see ZIMIN (1958: 47) (as *Chrysocosmius Helenae* ZIMIN).

204. *Chrysosomopsis ignorabilis* (ZIMIN, 1958)

Distr.: Central Asia, Mongolia, S Siberia (Tomsk, Krasnoyarsk), Russia Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1975: 39) (as *Chrysocosmius*).

205. *Lydina aenea* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia (Altai, Chita). **First record from Russian Far East:** Ussuria, Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On edges of an oak forest (*Quercus dentata*). Swept from low vegetation. The body pollinosity is very light.

206. *Lydina ussuricola* RICHTER, 1993

Distr.: Russian Far East (Ussuria). Only known from the holotype (♂); see RICHTER (1993: 427).

207. *Lypha dubia* (FALLÉN, 1810)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia (Tomsk, Altai, Irkutsk), Japan (Honshu, Hokkaido) [and (introd.) Nearctic Region]. **First records from Russian Far East:** AMURIA: Khabarovskiy Kray: (5) Khrebet Myaotshan nr. Gornyy NW of Komsomolsk-na-Amure, 01.VI.1989, 1♂, leg. MUTIN (IBPV); USSURIA: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♀; 03.VI.1993, 2♂♂; (40) Ryazanovka, 16.VI.1993, 2♂♂. On edges of oak forests and mixed forests. On shrubs and low vegetation. On sprayed sugar solution (as artificial "honey dew" and in Malaise trap too. The females from Ussuria have narrower vertex as the females from Europe.

208. *Lyphosia barbata* MESNIL, 1957

Distr.: Russian Far East (Sakhalin), Japan (Hokkaido, Honshu). **First record from Ussuria:** Primorskiy Kray: (28) Tikhoye near Razdolnoye 36 km S of Ussuriysk 22.V.1993, 1♂; (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 03.VI.1993, 1♂. On edges of broadleaf and mixed forests. On stones and in a Malaise trap.

209. *Panzeria laevigata* (MEIGEN, 1838)

Distr.: Europe; Mongolia, S Siberia (Krasnoyarsk), Russian Far East (Kuril Is.), Japan (Hokkaido). **First records from Ussuria:** Primorskiy Kray: (26) Samarka, 30.V.1993, 1♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂; (32) Przhivalskiy Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂; (33) Meteorological station 28 km SE of Chuguyevka (Sikhote Alin), 900 m, 01.VI.1993, 1♂; Biological station 30 km SE of Chuguyevka, 650 m, 01.VI.1993, 9♂♂, 1♀. In broadleaf and mixed forests. On shrubs and low vegetation. On sprayed sugar solution (as artificial "honey dew") and in Malaise trap too.

Panzeria puparum (FABRICIUS, 1794)

Distr.: Europe; Transcaucasia, S Siberia (Tyumen, Irkutsk), Russian Far East, Japan. In East Asia a dark subspecies occurs:

210. *Panzeria puparum melanopyga* (ZIMIN, 1960)

Distr.: Mongolia, Russian Far East (Ussuria, Kuril Is.), Japan (Kyushu, Honshu). Recorded from Ussuria: ZIMIN (1960: 732) (as *Meriana*). New records: Khabarovskiy Kray: (17) Boitsovo, Bolshoi Solntsepyok Hill, 24.V.1993, 1♀; Primorskiy Kray: (21) Gorniye Klyuchi, 23.V.1993, 1♀. On broadleaf forests. On shrubs and low vegetation.

The differences between *P. puparum* and *P. melanopyga* are given by ZIMIN for males. We have collected two females, which differ from females of European *P. puparum* only by the following features: arista thickened on approximately 60 % of its length (*P. puparum* ap-

proximately 50 %); scutellum and postalar callus dark (*P. puparum*: yellow or brown), head-pollinosity white-greyish (*P. puparum* more yellowish). The females of both subspecies have parafacials with only a small number of dark hairs on their upper part.

211. *Panzeria rudis* (FALLÉN, 1810)

Distr.: Europe, Transcaucasia, Tadzhikistan, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria, Kuril Is.), Japan (Honshu, Hokkaido). Recorded from Ussuria: ZIMIN (1960: 727). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 13♂♂, 2♀♀; 14.VI.1993, 11♂♂; (32) Przhivalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 4♂♂, 1♀; (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 2♂♂. In broadleaf and mixed forests. On shrubs and low vegetation. On sprayed sugar solution (as artificial "honey dew"), too.

212. *Panzeria sulciforceps* (ZIMIN, 1960)

Distr.: Russian Far East (Ussuria). Only known from the holotype, see ZIMIN (1960: 732); quoted by KOLOMYETZ (1975: 38) (as *Meriania*).

213. *Appendicia truncata* (ZETTERSTEDT, 1838)

Distr.: Europe (mainly northern part); Ural Mts., N Mongolia, S Siberia (Tuva), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1975: 37).

214. *Fausta inusta* MESNIL, 1957

Distr.: Siberia (Krasnoyarsk, Irkutsk, Yakutia), Russian Far East (Sakhalin), Japan (Kyushu to Hokkaido). First record from Ussuria: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♀; 03.VI.1993, 1♀. On edges of mixed forests. On shrubs and in a Malaise trap.

Fausta nemorum (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, SE Siberia (Chita), Russian Far East (Sakhalin), Japan (Honshu). Not recorded from Ussuria.

Eurithia ampelus (WALKER, 1849)

Distr.: North America (British Columbia to Nova Scotia, south to California and Maryland, also Georgia). Recorded from Russian Far East (Amuria) by NAKONECHNYI, quoted by KOLOMYETZ (1975: 36). We have not seen this material.

215. *Eurithia anthophila* (ROBINEAU-DESVOIDY, 1830)

Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Honshu, Hokkaido) [and Nearctic Region]. Recorded from Ussuria: Cited by HERTING (1984: 104), from a manuscript list provided by RICHTER.

216. *Eurithia caesia* (FALLÉN, 1810)

Distr.: Europe, Transcaucasia, Siberia, Russian Far East (Ussuria, Sakhalin). Recorded from Ussuria: KOLOMYETZ (1975: 38) (as *Eurythia*).

217. *Eurithia connivens* (ZETTERSTEDT, 1844)

Distr.: Europe; Transcaucasia, S Siberia (Altai, Chita), Russian Far East (Amuria, Ussuria,

Sakhalin, Kuril Is.), Japan (Honshu, Hokkaido). Recorded from Ussuria: ZIMIN (1957: 525); KOLOMYETZ (1975: 36) (as *Ernestia*); SHIMA (1992: 17).

218. *Eurithia consobrina* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, N Kazakhstan, S Siberia (Tobolsk to Chita), Russian Far East (Amuria, Ussuria, Sakhalin, Kuril Is.), N China (Gansu). Recorded from Ussuria: KOLOMYETZ (1975: 36) (as *Ernestia*); RICHTER (1986: 94).

219. *Eurithia emdeni* (MESNIL, 1957)

Distr.: Mongolia, SE Siberia (Buryatia), Russian Far East (Ussuria), Japan (Honshu, Hokkaido). Recorded from Ussuria: ZIMIN (1957: 536); KOLOMYETZ (1975: 38) (as *Platychira tuberculata* ZIMIN). New record: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂. On the edges of a broadleaf forest. On low vegetation.

220. *Eurithia excellens* (ZIMIN, 1957)

Distr.: S Siberia (Krasnoyarsk, Irkutsk) and Russian Far East (Ussuria). Recorded from Ussuria: ZIMIN (1957: 532); KOLOMYETZ (1975: 38). New records: Primorskiy Kray: (28) Tikhoye near Razdolnoye, 19.VI.1993, 1♂; (29) Banevurovo S of Ussuriysk, 10.VI.1993, 1♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 07.VI.1993, 1♂; 09.VI.1993, 2♂♂. On edges of broadleaf forests and meadows. On low vegetation and on flowers of *Anthriscus aemula*.

221. *Janthinomyia elegans* (MATSUMURA, 1905)

Distr.: Mongolia, Russian Far East (Amuria, Ussuria, Kuril Is.), N China, Japan (Honshu, Hokkaido). Recorded from Ussuria: ZIMIN (1958: 43); KOLOMYETZ (1975: 39) (as *Chrysocosmiomima magnifica* ZIMIN); RICHTER (1986: 94); SHIMA (1992: 17). New record: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 08.VI.1993, 1♀. On edges of a broadleaf forest. Sitting on a stone.

Hyalurgus abdominalis (MATSUMURA, 1911)

Distr.: SE Siberia (Chita), Russian Far East (Amuria, Sakhalin, Kuril Is.), China (Northeast), Japan (Hokkaido). Not recorded from Ussuria.

222. *Hyalurgus sima* (ZIMIN, 1960)

Distr.: S Siberia (Gorno-Altai, Irkutsk), Russian Far East (Ussuria, Kuril Is.), Japan (Honshu, Hokkaido). Recorded from Ussuria: SHIMA (1992: 17).

223. *Gymnocheta lucida* ZIMIN, 1958

Distr.: Russian Far East (Ussuria), Japan (Honshu, Hokkaido). Recorded from Ussuria: ZIMIN (1958: 60).

224. *Gymnocheta mesnili* ZIMIN, 1958

Distr.: Mongolia, N China. First records from Russian Far East: Primorskiy Kray: (26) Samarka 70 km N of Chuguyevka, Gordeyevskaya Mtn., 29.V.1993, 1♀; (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 2♂♂; 03.VI.1993, 2♂♂, 2♀♀. On edges of broadleaf and mixed forests. On low vegetation and on soil. In a Malaise trap also.

225. *Gymnocheta magna* ZIMIN, 1958

Distr.: Europe (Switzerland, Germany, N Russia, Ukraine, Caucasus); Mongolia, S Siberia (Novosibirsk to Irkutsk), Russian Far East (Amuria, Ussuria, Kuril Is.), Japan (Kyushu). Recorded from Ussuria: Cited by HERTING (1984: 108), from a manuscript list provided by RICHTER.

226. *Gymnocheta zhelochovtsevi* ZIMIN, 1958

Distr.: Russian Far East (Ussuria). Only known from the holotype; see ZIMIN (1958: 62).

227. *Zophomyia nitens* MESNIL, 1963

Distr.: Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: RICHTER (1986: 95); SHIMA (1992: 17). New records: Primorskiy Kray: (29) Yakonovka 20 km S of Ussuriysk, 07.VII.1975, 1♀, leg. KUZNETZOV (IBPV); Partizan 13 km S of Ussuriysk, 15.VI.1993, 2♂♂; (31) GTS 19 km SE of Ussuriysk, 30.VI.1980, 2♂♂ 1♀, leg. MICHAILOVSKAYA (IBPV). On edges of broadleaf forests and meadows. On low vegetation.

Zophomyia temula (SCOPOLI, 1763)

Distr.: Europe; Transcaucasia, Kazakhstan, S Siberia. Recorded from Ussuria: KOLOMYETZ (1975: 41) [KOLOMYETZ listed from Ussuria only *Z. temula* not *Z. nitens*. Probably wrong].

228. *Cleonice* sp.

A probably undescribed species similar to *Cleonice nitidiuscula* (ZETTERSTEDT, 1859). Record: Primorskiy Kray: (28) Tikhoye near Razdolnoye 36 km S of Ussuriysk, 22.V.1993, 1♂. On edges of an oak forest (as *Quercus mongolica*) and meadow. Swept from low vegetation.

229. *Gastroptilops ater* MESNIL, 1957

Distr.: Russian Far East (Sakhalin), Japan (Honshu). First records from Ussuria: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 25.V.1993, 2♀♀; Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 12♀♀; 03.VI.1993, 2♀♀; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♀. On edges of broadleaf and mixed forests. On trees, shrubs and on low vegetation. In a Malaise trap also.

230. *Symmorphomyia katayamai* MESNIL & SHIMA, 1977

Distr.: Russian Far East (Ussuria), Japan (Honshu). Recorded from Ussuria: RICHTER and ROMANKOVA (1993: 310). New records: Primorskiy Kray: (26) Samarka 70 km N of Chuguyevka, Gordeyevskaya Mtn., 29.V.1993, 1♂; (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♂; 03.VI.1993, 1♂. On edges of broadleaf and mixed forests. Swept from low vegetation and in a Malaise trap.

231. *Loewia latifrons* MESNIL, 1973

Distr.: SE Siberia (Chita), Russ. Far East (Ussuria). Recorded from Ussuria: MESNIL (1973: 1208).

Corybantia flaviaristata RICHTER, 1986

Distr.: Russian Far East (Kuril Is.). Only known from the types. Not recorded from Ussuria.

Eloceria delecta (MEIGEN, 1824)

Distr.: Europe; Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 97). Not recorded from Ussuria.

Pseudopachystylum gonioides (ZETTERSTEDT, 1838)

Distr.: Europe; Transcaucasia, Siberia (Altai, Tomsk, Krasnoyarsk, Irkutsk, Yakutia), Russian Far East (Amuria), Japan (Honshu, Hokkaido). Recorded from Amuria: RICHTER (1986: 97). Not recorded from Ussuria.

232. *Pelatachina tibialis* (FALLÉN, 1810)

Distr.: Europe; Transcaucasia, Mongolia, Siberia, Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 41). New records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 24.V.1993, 1♀; 25.V.1993, 1♂; Kamenistaya Griva Hill, 27.V.1993, 1♂, 1♀; Primorskiy Kray: (20) Tamga, 24.V.1993, 1♂; (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 2♀♀; Zhuravlyevka banks, 30.V.1993, 1♂ 1♀; (28) Tikhoye near Razdolnoye, 22.V.1993, 1♀; 19.VI.1993, 1♀; (33) Biological station 30 km SE of Chuguyevka, 650 m, 01.VI.1993, 3♂♂, 2♀♀; 03.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♂. On edges of broadleaf and mixed forests. Swept from trees, shrubs and low vegetation.

233. *Macquartia nudigena* MESNIL, 1972

Distr.: Europe; Russian Far East (Sakhalin, Kuril Is.). First records from Ussuria: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 24.V.1993, 1♀; Shivki Mtn., 27.V.1993, 1♀; Primorskiy Kray: (26) Samarka 70 km N of Chuguyevka, Gordeyevskaya Mtn., 29.V.1993, 3♀♀; Zhuravlyevka banks, 30.V.1993, 2♀♀; (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 3♀♀. On edges of broadleaf and mixed forests. Swept from trees, shrubs and low vegetation. In a Malaise trap also.

234. *Macquartia pubiceps* (ZETTERSTEDT, 1849)

Distr.: Europe; Transcaucasia. First records from Russian Far East: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♀; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♂. On edges of broadleaf forests. Swept from low vegetation. The female from Ussuria has a narrower vertex as the specimen from Europe.

Macquartia obscura (COQUILLET, 1902)

Distr.: arctic Siberia (Taimyr Peninsula, Yakutia), arctic Russian Far East (Magadan Province: Wrangel Is.) [and Alaska: St. Paul Is., Yukon]. Not recorded from Ussuria. Recorded from Magadan Province: RICHTER (1981: 932) (as *Alaskophyto*).

235. *Macquartia viridana* ROBINEAU-DESVOIDY, 1863

Distr.: Europe (S England, Germany, Switzerland, Austria, Spain). First records from Asia and Russia: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Litovka Mtn. 700 m, 08.VI.1993, 1♀; 1000 m, 08.VI.1993, 1♀. In mixed forests swept from shrubs.

236. *Trichoformosomyia sauteri* BARANOV, 1934

Distr.: Russian Far East (Ussuria), Japan (Honshu) [and Oriental Region]. Recorded from Ussuria: KOLOMYETZ (1974: 133); RICHTER (1986: 97).

237. *Dicarca fluviatilis* RICHTER, 1993

Distr.: Russian Far East (Ussuria). Only known from the types, see RICHTER (1993: 433).

238. *Triarthria setipennis* (FALLÉN, 1810)

Distr.: Europe; Middle East, Transcaucasia, Russian Far East (Ussuria). New record: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 26.V.1993, 1♂. In an oak forest, sitting on a stem of *Quercus mongolica*. A small specimen with narrow parafacials.

Elfia amuricola RICHTER, 1992

Distr.: Russian Far East (Amuria). Only known from the type, see RICHTER (1992: 145)

Elfia zonella (ZETTERSTEDT, 1844)

Distr.: Europe; SE Siberia (Chita), Russian Far East (Kuril Is.). Not recorded from Ussuria.

239. *Goniocera dichæta* (RICHTER, 1993)

Distr.: Russian Far East (Ussuria). Only known from the types; see RICHTER (1993: 435) (as *Galsania*) and (1994: 747).

240. *Entomophaga nigrohalterata* (VILLENEUVE, 1921)

Distr.: Europe. First record from Asia and Russia: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 05.VI.1993, 1♀. On edges of broadleaf forest. Swept from shrubs.

241. *Ceromya dorsigera* HERTING, 1967

Distr.: Europe (Switzerland, Germany); Russian Far East (Ussuria, Kuril Is.), Japan (Honshu, Hokkaido). Recorded from Ussuria: SHIMA (1992: 17).

242. *Ceromya longipila* (RICHTER, 1993)

Distr.: Russian Far East (Ussuria). Only known from the types; see RICHTER (1993: 435).

243. *Ceromya silacea* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, SE Siberia (Chita), Russian Far East (Ussuria), Japan (Honshu, Hokkaido). Recorded from Ussuria: SHIMA (1992: 18).

Proceromyia macronychia MESNIL, 1957

Distr.: Russian Far East (Kuril Isl.), Japan (Hokkaido, Honshu). Not recorded from Ussuria.

244. *Actia crassicornis* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, Mongolia, SE Siberia (Chita), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1993: 437). New records: Primorskiy Kray: (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 3♀♀; 09.VI.1993, 1♂; 06.VII.1993, leg. KUTZSCHER, 1♂ 1♀; (40) Ryazanovka, 16.VI.1993, 4♀♀. On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

245. *Actia dubitata* HERTING, 1971

Distr.: Europe (France, Switzerland, S Germany, Austria, N Russia); N Kazakhstan, SE Siberia (Chita), Russian Far East (Amuria). First records from Ussuria: Primorskiy Kray: (28) Tikhoye near Razdolnoye, 22.V.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂, 2♀♀; 06.VI.1993, 4♂♂, 2♀♀; 09.VI.1993, 1♂; Anisimovka, 06.VII.1993, leg. KUTZSCHER, 1♂ (DEI); (40) Ryazanovka, 16.VI.1993, 1♀. On edges of broadleaf forests and in meadows. Swept from low vegetation, shrubs and flowers of *Anthriscus aemula*.

246. *Actia lamia* (MEIGEN, 1838)

Distr.: Europe, Transcaucasia, S Siberia (Altai, Chita), Russian Far East (Ussuria, Kuril Is.).
Recorded from Ussuria: RICHTER (1986: 98).

Actia nigra SHIMA, 1970

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido). Recorded from Kuril Is.: RICHTER (1993: 437). Not recorded from Ussuria.

Actia nudibasis STEIN, 1924

Distr.: Europe; SE Siberia (Chita), Russian Far East (Kuril Is.), Japan (Kyushu). Not recorded from Ussuria.

247. *Actia pilipennis* (FALLÉN, 1810)

Distr.: Europe; Mongolia, S Siberia (Novosibirsk, Barnaul, Chita), Russian Far East (Amuria, Ussuria, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: SHIMA (1992: 18). New records: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 03.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 2♂♂, 1♀. On edges of broadleaf and mixed forests. Swept from shrubs and in a Malaise trap.

248. *Actia tarsata* RICHTER, 1980

Distr.: SE Siberia, Russian Far East (Ussuria). Recorded from Ussuria: SHIMA (1992: 18).

Peribaea apicalis ROBINEAU-DESVOIDY, 1863

Distr.: Europe (Germany, Switzerland, N Italy, Austria, Slovakia); Transcaucasia, S Siberia, Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 98). Not recorded from Ussuria.

249. *Peribaea fissicornis* (STROBL, 1910)

Distr.: Europe; S Siberia, Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1977: 75) (*Strobliomyia*); RICHTER (1986: 98) and (1993: 437); SHIMA (1992: 18).

250. *Peribaea tibialis* (ROBINEAU-DESVOIDY, 1851)

Distr.: Europe (S and Central Europe); Middle East, Transcaucasia, Uzbekistan, Mongolia, Russian Far East (Ussuria), Japan (Kyushu, Honshu) [and Afrotropical Region]. Recorded from Ussuria: KOLOMYETZ (1977: 75) (as *Strobliomyia*). New records: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♀. On a meadow swept from low vegetation.

251. *Peribaea ussuriensis* (MESNIL, 1963)

Distr.: Russian Far East (Ussuria), Japan (Ryukyu Is.). Recorded from Ussuria: RICHTER (1993: 437); SHIMA (1992: 18).

The species of the genus *Siphona* are listed according to O'HARA (1989). Only *Siphona hokkaidensis* MESNIL, 1957 is separated from *S. nigricans* (VILLENEUVE, 1930).

252. *Siphona (Aphantorhaphopsis) samarensis* (VILLENEUVE, 1921)

Distr.: Europe (France, Switzerland, Germany, Austria, Hungary, S Sweden, Russia); Russian Far East (Ussuria). Recorded from Ussuria: SHIMA (1992: 18).

253. *Siphona (Aphantorhaphopsis) starkei* (MESNIL, 1952)

Distr.: Europe (Switzerland, Germany). **First record from Asia and Russia:** Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♀. On a meadow swept from low vegetation.

Siphona (Siphona) boreata MESNIL, 1960

Distr.: Europe; Russian Far East (Sakhalin). Not recorded from Ussuria.

254. *Siphona (Siphona) collini* MESNIL, 1960

Distr.: Europe; Mongolia, SE Siberia (Chita), Russian Far East (Ussuria), Japan (Honshu, Hokkaido). Recorded from Ussuria: SHIMA (1992: 18).

Siphona (Siphona) cristata (FABRICIUS, 1805)

Distr.: Europe; S Siberia (Tuva, Chita), Russian Far East (Kuril Is.), Japan (Hokkaido). Not recorded from Ussuria.

Siphona (Siphona) geniculata (DEGEER, 1776)

Distr.: Europe; Transcaucasia, Mongolia, Siberia, Russian Far East (Sakhalin, Kuril Is.), Japan (Hokkaido, Honshu) [and (introd.) Nearctic Region]. Not recorded from Ussuria.

255. *Siphona (Siphona) hokkaidensis* MESNIL, 1957

Distr.: Japan (Hokkaido). **First record from Russia:** Primorskiy Kray: (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂. On the edges of a broadleaf forest, on flowers of *Anthriscus aemula*.

256. *Siphona (Siphona) sp.*

A probably undescribed species near *Siphona hungarica* ANDERSEN, 1984. Records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 25.V.1993, 1♂; Primorskiy Kray: (26) Samarka, 30.V.1993, 1♀; (28) Tikhoye near Razdolnoye, 22.V.1993, 1♂; (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂; 06.VI.1993, 3♂♂, 5♀♀; 07.VI.1993, 2♂♂; 09.VI.1993, 1♀; (38) Sergeyevka, Sergeyevka river banks, 04.VI.1993, 5♂♂. On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

257. *Siphona (Siphona) ingerae* ANDERSEN, 1982

We have collected only females. The determination of these is not possible with absolute certainty. Distr.: Europe (Sweden, Denmark, Germany, Austria). Distr. type: disjunct-eurosiberian. **First records from Russia:** Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♀; 03.VI.1993, 2♀♀. On edges of a mixed forest. Swept from shrubs.

258. *Siphona (Siphona) maculata* STAEGER, 1849

Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Amuria, Ussuria, Sakhalin) [and Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 76). New records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 26.V.1993, 9♂♂, 1♀; Primorskiy Kray: (28) Tikhoye near Razdolnoye, 22.V.1993, 2♂♂, 1♀; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂. On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

06.VI.1993, 2♀♀. In broadleaf forests and meadows. Swept from low vegetation. Eight ♂♂ were swarming in the morning at the foot of a tree of *Quercus mongolica* (near Boitsovo, 26.V.1993).

259. *Siphona (Siphona) paludosa* MESNIL, 1960

Distr.: Europe (Belgium, Germany, S Sweden, S Finland, N Russia), Mongolia, SE Siberia (Chita), Russian Far East (Kuril Isl.), Japan (Hokkaido). **First records from Ussuria:** Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 05.VI.1993, 1♂ 1♀; 06.VI.1993, 4♂♂ 2♀♀; 07.VI.1993, 19♂♂ 8♀♀; 09.VI.1993, 1♀; (38) Sergeyevka 30 km N of Partizansk, Sergeyevka river banks, 04.VI.1993, 1♂; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 5♂♂, 7♀♀. On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

260. *Siphona (Siphona) pauciseta* RONDANI, 1865

Distr.: Europe; Mongolia, SE Siberia (Chita), Russian Far East (Ussuria, Kuril Isl.). Recorded from Ussuria: SHIMA (1992: 18) (as *S. delicatula* MESN.). New record: Khabarovskiy Kray: (17) Boitsovo N of Bikin, 27.V.1993, 1♂. On edges of oak forest (*Quercus mongolica*). Swept from low vegetation.

Siphona (Siphona) rossica MESNIL, 1961

Distr.: Europe (Spain, Switzerland, Germany, Denmark, Sweden, Austria, Hungary, Dalmatia, N Russia); Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 98). Not recorded from Ussuria.

261. *Aphria longilingua* RONDANI, 1861

Distr.: Europe (Switzerland, Germany); Transcaucasia, Mongolia, Siberia (Novosibirsk, Tuva, Chita, Yakutia), Russian Far East (Ussuria), Japan (Honshu, Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 43) (as *A. longiungua*); RICHTER (1986: 98).

Demoticus amorphus VILLENEUVE, 1911

Distr.: Europe (France, Switzerland, Germany); SE Siberia (Chita), Russian Far East (Amuria). Recorded from Amuria: KOLOMYETZ (1975: 43). Not recorded from Ussuria.

262. *Atylostoma towadensis* (MATSUMURA, 1916)

Distr.: SE Siberia (Chita), Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido) [and Oriental Region]. Recorded from Ussuria: RICHTER (1986: 98); SHIMA (1992: 19). New records: Primorskiy Kray: (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂, 1♀; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂. On edges of broadleaf forests. Swept from shrubs and low vegetation.

263. *Atylostoma tricolor* (MIK, 1884)

Distr.: Europe (Belgium, Switzerland, Austria, Slovenia, Slovakia, N Russia); Transcaucasia, Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1975: 44); SHIMA (1992: 19).

264. *Demoticoidea pallidus* MESNIL, 1953

Distr.: S Siberia (Tuva), Russian Far East (Ussuria, Sakhalin), Japan (Kyushu, Tsushima) [also

Oriental and Australasian Regions]. Recorded from Ussuria: KOLOMYETZ (1979: 143); RICHTER (1986: 98).

265. *Leskia aurea* (FALLÉN, 1820)

Distr.: Europe; Transcaucasia, Siberia (Barnaul, Chita, Yakutia), Russian Far East (Amuria, Ussuria), Japan (Honshu). Recorded from Ussuria: KOLOMYETZ (1975: 43); RICHTER (1986: 98) and (1993: 437).

266. *Leskia miranda* MESNIL, 1973

Distr.: Russian Far East (Ussuria), Japan. Recorded from Ussuria: RICHTER (1986: 98).

267. *Cavillatrix calliphorina* RICHTER, 1986

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1986: 98) and (1993: 437).

Solieria pacifica (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, East Siberia (Yakutia), Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 101). Not recorded from Ussuria.

268. *Mintho rufiventris* (FALLÉN, 1817)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, S Siberia (Barnaul, Tuva, Chita), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1986: 101). New records: Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂, 1♀; 09.VI.1993, 1♀. On edges of broadleaf forests. Swept from shrubs and in a Malaise trap.

269. *Sumpigaster sumatrensis* TOWNSEND, 1926

Distr.: Russian Far East (Ussuria), Japan (Kyushu, Tsushima) [and Oriental Region]. Recorded from Ussuria: RICHTER (1986: 102).

270. *Dexiosoma caninum* (FABRICIUS, 1781)

Distr.: Europe, SW Siberia, Russian Far East (Amuria, Ussuria, Sakhalin, Kuril Isl.), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1974: 140); RICHTER (1986: 102); SHIMA (1992: 19).

271. *Glaurocara ghilarovi* RICHTER, 1988

Distr.: Russian Far East (Ussuria). Only known from the holotype; see RICHTER (1988: 202).

272. *Parhamaxia antennata* RICHTER, 1991

Distr.: Russian Far East (Ussuria). Only known from the types; see RICHTER (1991: 234).

273. *Parhamaxia discalis* MESNIL, 1967

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: MESNIL (1967: 50); KOLOMYETZ (1977: 70).

274. *Parhamaxia palposa* RICHTER, 1991

Distr.: Russian Far East (Ussuria). Only known from the types; see RICHTER (1991: 235).

Parhamaxia sp.

Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 1 ♀. On edges of broadleaf forests. At night by light. Wider vertex and wider parafrontalia than all others species. The fly is in poor condition.

275. *Hamaxia incongrua* WALKER, 1860

Distr.: Russian Far East (Ussuria), China, Korea, Japan [Oriental Region and (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1977: 70); RICHTER (1991: 234).

276. *Therobia mongolica* (RICHTER, 1972)

Distr.: Mongolia, Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1986: 102).

4.1.3. Subfamily Dexiinae

Trixella rufiventris (MESNIL, 1967)

Distr.: Russian Far East (Amuria, Kuril Isl.), N China. Not recorded from Ussuria.

Billaea adelpha (LOEW, 1873)

Distr.: S Europe; Transcaucasia, W Kazakhstan. KOLOMYETZ (1974: 137) recorded *Billaea mesnili* KOL. = ? *Billaea adelpha* (LOEW) from Ussuria. We have not seen these specimens.

277. *Billaea fortis* (RONDANI, 1862)

Distr.: Europe; N Kazakhstan, S Siberia (Tobolsk, Tomsk), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1974: 137) (as *B. magna* KOL.).

278. *Billaea impigra* KOLOMYETZ, 1966

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1966). KOLOMYETZ (1974: 137) recorded *B. impigra* KOL. and *Billaea microcera* RD. from Ussuria, too. The female of this "*B. microcera*" is a *Billaea impigra* (pers. comm. HERTING).

279. *Billaea kolomyetzi* MESNIL, 1970

Distr.: E Poland, N Russia, S Siberia (Tomsk), Russian Far East (Ussuria, Sakhalin). Recorded from Ussuria: KOLOMYETZ (1974: 137) [as *B. maritima* (SCHIN.)].

280. *Billaea morosa* MESNIL, 1963

Distr.: Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1974: 137). New record: Primorskiy Kray: (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1 ♂ (determination HERTING).

281. *Billaea steini* (BRAUER ET BERGENSTAMM, 1891)

Distr.: Europe (Hungary, Sweden (only Gotland)), Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1974: 137) (as *B. inumbratum* KOL.).

282. *Billaea triangulifera* (ZETTERSTEDT, 1844)

Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Sakhalin), Japan (Hokkaido). First record from Ussuria: "Tigrovaya, Such.; Stackelberg, 2.VIII.1927" (ZMAS) = Primorskiy Kray: (37) Tigrovoi W of Partizansk (=Suchan) 80 km E of Vladivostok, Tigrovaya Vall., 1 ♀ [pers. comm. HERTING].

283. *Dinera carinifrons* (FALLÉN, 1817)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria). Recorded from Ussuria: KOLOMYETZ (1974: 143) (as *Myiocera*).

284. *Dinera grisea* (FALLÉN, 1817)

Distr.: Europe; Transcaucasia, Central Asia, Mongolia, Siberia, Russian Far East (Amuria, Ussuria) [and Nearctic Region]. Recorded from Ussuria: RICHTER (1986: 102).

285. *Dinera miranda* (MESNIL, 1963)

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1974: 136) (as *Phorostoma*).

286. *Dinera takanoi* (MESNIL, 1957)

Distr.: Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1974: 136) (as *Phorostoma*). New record: Primorskiy Krai: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀ (determination HERTING).

287. *Estheria magna* (BARANOV, 1935)

Distr.: Russian Far East (Ussuria, Sakhalin), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1972: 90); (1974: 138) (as *Myiostoma*).

288. *Dexia fulvifera* VON RÖDER, 1893

Distr.: Russian Far East (Ussuria), China (Northeast) [and widespread Oriental Region]. Recorded from Ussuria: KOLOMYETZ (1970: 73); (1974: 140, 141) (as *Calotheresia sumatrensis* T.T. and as *Dexia amurensis* KOL.).

289. *Dexia maritima* KOLOMYETZ, 1968

Distr.: Russian Far East (Ussuria). Only known from the types; see KOLOMYETZ (1968).

290. *Dexia vacua* (FALLÉN, 1817)

Distr.: Europe, Kazakhstan, S Siberia, Russian Far East (Amuria, Ussuria, Sakhalin) [and (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1970: 67) and (1974: 141).

291. *Dexia ventralis* ALDRICH, 1925

Distr.: Mongolia, SE Siberia (Chita), Russian Far East (Ussuria, Sakhalin), Korea [and (introd.) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1970: 68); (1974: 141); RICHTER (1986: 102).

292. *Prosenia siberita* (FABRICIUS, 1775)

Distr.: Europe; Transcaucasia, Central Asia, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria, Sakhalin, Kuril Isl.), Japan (Kyushu to Hokkaido) [widespread Oriental and Afro-tropical Regions also (introd. and established) Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1974: 142); RICHTER (1986: 102).

Zeuxia zejana KOLOMYETZ, 1971

Distr.: NE Turkey (Kars), SE Siberia (Chita), Russian Far East (Amuria). Not recorded from Ussuria. The type is described by KOLOMYETZ (1971: 57) from the river Zeya (Amur Province); quoted by KOLOMYETZ (1974: 136), contrib.entomol.46.2.379-478

293. *Eriothrix rufomaculatus* (DEGEER, 1776)

Distr.: Europe; Middle East, Transcaucasia, Kazakhstan, Uzbekistan, S Siberia, Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1967: 251).

294. *Eriothrix umbrinervis* MESNIL, 1957

Distr.: Mongolia, S Siberia (Tuva, Chita), Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1967: 254); (1974: 144) (as *E. mesnili* KOL.) and (1974: 145) (as *E. tragicus* KOL.); RICHTER (1993: 437).

Feriola insularis RICHTER, 1986

Distr.: Russian Far East (Sakhalin). Only known from the types. Not recorded from Ussuria.

295. *Dexiomimops rufipes* BARANOV, 1935

Distr.: Russian Far East (Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: RICHTER (1986: 105).

296. *Campylocheta bisetosa* SHIMA, 1985

Distr.: Japan (Hokkaido, Honshu). First records from Russia: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka, 650 m, 01.VI.1993, 1♂, 1♀; 03.VI.1993, 1♂. On edges of mixed forests. Swept from shrubs. In a Malaise trap and on sprayed sugar solution (as artificial "honey dew") also.

Campylocheta dentifera (RICHTER, 1981)

Distr.: Russian Far East (Kuril Isl.), Japan (Honshu). Recorded from Kuril Is.: RICHTER (1981: 136). Not recorded from Ussuria.

297. *Campylocheta hirticeps* SHIMA, 1985

Distr.: Japan (Hokkaido, Honshu, Tsushima). First records from Russia: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♀. On the edges of a mixed forests. Swept from shrubs.

Campylocheta umbrinervis MESNIL, 1974

Distr.: Mongolia, Russian Far East (Amuria), Japan (Kyushu to Hokkaido). Recorded from Amuria: RICHTER (1986: 105). Not recorded from Ussuria.

298. *Campylocheta similis* sp. n.

Distr.: Russian Far East (Ussuria). On edges of broadleaf and mixed forests. Swept from low vegetation. On sprayed sugar solution (as artificial "honey dew"), too. Description in chapter 4.2.

299. *Eulasiona zimini* MESNIL, 1963

Distr.: Russian Far East (Ussuria). Only known from the type; see MESNIL (1963: 50).

300. *Peteina erinaceus* (FABRICIUS, 1794)

Distr.: Europe; Transcaucasia, Mongolia, S Siberia (Altai, Chita), Russian Far East (Ussuria). Recorded from Ussuria: SHIMA (1992: 19); RICHTER (1993: 437) (as *Petina*).

Petinarctia stylata (BRAUER et BERGENSTAMM, 1891)

Distr.: Arctic Europe; arctic East Siberia (Yakutia), arctic Russian Far East (Magadan Province: Chukotsk Peninsula) [also arctic Canada and Greenland]. Recorded from Magadan Province: RICHTER (1991: 932). Not recorded from Ussuria.

301. *Ramonda prunicia* (HERTING, 1969)

Distr.: Europe (Spain, Switzerland, Germany); Middle East, Mongolia, SE Siberia (Chita), Russian Far East (Amuria, Sakhalin). First records from Ussuria: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♂; 07.VI.1993, 1♂, 1♀; 09.VI.1993, 1♂; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 11♂♂, 6♀♀. On edges of broadleaf forests and in meadows. Swept from low vegetation and from shrubs.

Ramonda ringdahli (VILLENEUVE, 1922)

Distr.: Europe (only N Scandinavia and Alps); East Siberia (Yakutia), Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 105). Not recorded from Ussuria.

302. *Ramonda spathulata* (FALLÉN, 1820)

Distr.: Europe; Caucasus, Mongolia, E Siberia (Chita, Yakutia), Russian Far East (Amuria, Ussuria, Kuril Is.), China (Tibet), Japan (Honshu, Hokkaido). Recorded from Ussuria: SHIMA (1992: 19). New record: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 07.VI.1993, 4♀♀. On a meadow swept from low vegetation. The females from Ussuria have narrower vertex than those from Europe.

303. *Wagneria gagatea* ROBINEAU-DESVOIDY, 1830

Distr.: Europe. First records from Asia and Russia: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Bolshoi Solntsepyok Hill, 25.V.1993, 1♀; Shivki Mtn., 27.V.1993, 1♂; Primorskiy Kray: (20) Tamga 17 km NE of Lesozavodsk, 24.V.1993, 1♀; (26) Samarka 70 km N of Chuguyevka, 30.V.1993, 1♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♀; (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 07.VI.1993, 1♂, 1♀. On edges of broadleaf forests. Swept from shrubs, leaves of *Filipendula palmata* and from low vegetation.

304. *Athrycia curvinervis* (ZETTERSTEDT, 1844)

Distr.: Europe; SE Siberia (Chita), Russian Far East (Ussuria), Japan (Honshu, Hokkaido). Recorded from Ussuria: SHIMA (1992: 19).

305. *Athrycia trepida* (MEIGEN, 1824)

Distr.: Europe; Middle East, Caucasus, Mongolia, Siberia, Russian Far East (Magadan Prov., Amuria, Ussuria, Sakhalin, Kuril Is.), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1974: 147) (as *Blepharigena erythrocerata* R.-D.). New records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, 27.V.1993, 1♂; Primorskiy Kray: (19) Mezhdurechje, 28.V.1993, 1♀; (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 1♂; Zhuravlyevka banks, 30.V.1993, 14♂♂, 8♀♀; (28) Tikhoye near Razdolnoye, 22.V.1993, 2♂♂, 1♀; 19.VI.1993, 1♂; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 2♀♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 2♀♀; 14.VI.1993, 1♂, 2♀♀; (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 2♂♂, 1♀; (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♂; (34) Sikhote Alin 56 km SE of Chuguyevka, 850 m, 02.VI.1993,

1♂; (35) Vladivostok-Sedanka, 20.VI.1993, 2♂♂, 2♀♀; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂; 06.VI.1993, 1♂, 7♀♀; 07.VI.1993, 1♂, 1♀; 08.VI.1993, 1♀; 09.VI.1993, 1♀; (38) Sergeyevka, Sergeyevka river banks, 04.VI.1993, 1♀; (40) Ryazanovka, 16.VI.1993, 2♀♀. On edges of broadleaf and mixed forests, in meadows and in gardens. Swept from low vegetation and from shrubs and trees.

306. *Voria ruralis* (FALLÉN, 1810)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, Siberia, Russian Far East (Amuria, Ussuria, Sakhalin, Kuril Is.), Japan [and with nearly cosmopolitan distribution]. Recorded from Ussuria: KOLOMYETZ (1974: 148); RICHTER (1986: 106). New records: Primorskiy Kray: (20) Tamga, 24.V.1993, 1♂; (26) Samarka, 29.V.1993, 1♀; (26) 30.V.1993, 13♂♂, 1♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 3♂♂; 06.VI.1993, 4♂♂, 2♀♀; 07.VI.1993, 1♂, 1♀; 09.VI.1993, 1♀; (40) Ryazanovka, 16.VI.1993, 2♂♂. On edges of broadleaf forests and in meadows. Swept from low vegetation.

307. *Cyrtophleba ruricola* (MEIGEN, 1824)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, Mongolia, Siberia (Altai, Chita, Yakutia), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1986: 106). New records: Khabarovskiy Kray: (17) Boitsovo N of Bikin, 27.V.1993, 1♂; Primorskiy Kray: (26) Samarka, Gordeyevskaya Mtn., 29.V.1993, 1♀; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♂; (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂. On edges of broadleaf and mixed forests. Swept from low vegetation, shrubs and trees.

Hyleorus elatus (MEIGEN, 1838)

Distr.: Europe; S Siberia (Altai, Chita), Russian Far East (Amuria), Japan (Kyushu to Hokkaido). Recorded from Amuria: RICHTER (1986: 106). Not recorded from Ussuria.

308. *Phyllomya aristalis* (MESNIL et SHIMA, 1978)

Distr.: Russian Far East (Ussuria), Japan (Honshu). Recorded from Ussuria: KOLOMYETZ (1972: 91); (1974: 138) (as *Myiostoma elegans* KOL.) New records: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 05.VI.1993, 1♂; 07.VI.1993, 1♂; 08.VI.1993, 1♀. On edges of broadleaf forests on shrubs.

Phyllomya procera (MEIGEN, 1824)

Distr.: S Europe; Transcaucasia, Russian Far East (Sakhalin). Not recorded from Ussuria.

Phyllomya takanoi (MESNIL, 1970)

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido, Kyushu). Not recorded from Ussuria.

Phyllomya volvulus (FABRICIUS, 1794)

Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 106). Not recorded from Ussuria. A new record of AMURIA: Khabarovskiy Kray: (4) Khrebet Bureiskiy NW Khabarovsk, 1♂, 20.VII.1988, leg. MUTIN (IBPV).

309. *Thelaira nigripes* (FABRICIUS, 1794)

Distr.: Europe; Transcaucasia, S Siberia (Altai, Chita), Russian Far East (Kamchatka, Ussuria, Sakhalin, Kuril Is.), Japan. Recorded from Ussuria: KOLOMYETZ (1974: 149); RICHTER (1993: 437). New records: Primorskiy Kray: (24) Novoselskoye, 28.VI.1985, 1♂, leg. MAKARKIN (IBPV); (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♀; (35) Vladivostok-Sedanka, 20.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 1♂; (40) Ryazanovka, 16.VI.1993, 1♂. On edges of broadleaf forests and in meadows. Swept from low vegetation and shrubs.

310. *Thelaira solivaga* (HARRIS, 1780)

Distr.: Europe; Transcaucasia (Georgia) [and Nearctic Region to Mexico]. First records from Russia: Khabarovskiy Kray: (17) Boitsovo N of Bikin, 27.V.1993, 1♂; Primorskiy Kray: (21) Gorniye Klyuchi, 23.V.1993, 1♂; (29) Partizan 13 km S of Ussuriysk, 15.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 05.VI.1993, 2♀♀; 06.VI.1993, 1♂. On edges of broadleaf forests and in meadows. Swept from shrubs and low vegetation. The males have a dark abdomen without yellowish color laterally and are very similar to males from England and to males of *T. solivago americana* BROOKS, 1945 [Mesnil (1944-75: 1340)]. Morphological and zoogeographical remarks are given in chapters 4.2. and 4.3.

Leptothelaira longicaudata MESNIL et SHIMA, 1979

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido). Recorded from Kuril Isl.: RICHTER (1981: 932). Not recorded from Ussuria.

311. *Halidaya aurea* EGGER, 1856

Distr.: S Europe (France, Switzerland, Austria, Ukraine); Transcaucasia, Mongolia, S Siberia (Altai, Tomsk), Russian Far East (Amuria, Ussuria, Sakhalin), Japan (Honshu). Recorded from Ussuria: RICHTER (1986: 106; SHIMA (1992: 19).

Actinochaetopteryx japonica MESNIL, 1970

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido, Honshu). Recorded from Kuril Is.: KOLOMYETZ (1977: 72). Not recorded from Ussuria.

Actinochaetopteryx patellipalpis RICHTER, 1986

Distr.: Russian Far East (Kuril Is.). Only known from the holotype; see RICHTER (1986: 106).

Dufouria chalybeata (MEIGEN, 1824)

Distr.: Europe; Middle East, Siberia (Tomsk, Yakutia), Russian Far East (Sakhalin, Kuril Is.). Not recorded from Ussuria.

312. *Dufouria nova* MESNIL, 1968

Distr.: Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: RICHTER (1986: 107). New records: Primorskiy Kray: (38) Sergeyevka 30 km N of Partizansk, Sergeyevka river banks, 04.VI.1993, 1♂. On the edges of a riverside forest in a meadow. Swept from low vegetation.

Chetoptilia puella (RONDANI, 1862)

Distr.: Europe (Italy, Switzerland, Germany, Hungary), Caucasus, SW Siberia (Novosibirsk),

Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 107). Not recorded from Ussuria.

Pandelleia pschorni MESNIL, 1963

Distr.: Russian Far East (Kuril Is.), Japan (Honshu). Not recorded from Ussuria.

313. *Microsoma exiguum* (MEIGEN, 1824)

Distr.: Europe; Middle East, Transcaucasia, Russian Far East (Amuria, Ussuria, Sakhalin, Kuril Isl.), Japan (Hokkaido). Recorded from Ussuria: RICHTER (1986: 109).

Microsoma vicinum (MESNIL, 1970)

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido). Not recorded from Ussuria.

4.1.4. Subfamily Phasiinae

314. *Redtenbacheria insignis* EGGER, 1861

Distr.: Europe; Transcaucasia, Uzbekistan, Russian Far East (Ussuria), Japan (Honshu). Recorded from Ussuria: SHIMA (1992: 19).

315. *Eliozeta helluo* (FABRICIUS, 1805)

Distr.: Warmer parts of Europe; Middle East, Transcaucasia, S Siberia (Altai, Krasnoyarsk), Russian Far East (Amuria, Ussuria). Recorded from Ussuria: KOLOMYETZ (1976: 145) (as *Clytiomyia*); RICHTER (1993: 437); SHIMA (1992: 20). New records from AMURIA: Amurskiy oblast: (3) Arkhara SE Blagoveshchensk, 21.VII.1975, 1♀, leg. LEHR (IBPV); 09.VI.1987, 1♂, leg. STOROYENKO (IBPV). New records from USSURIA: Khabarovskiy Kray: (17) Boitsovo N of Bikin, 27.V.1993, 1♀; Primorskiy Kray: (28) Tikhoye near Razdolnoye, 22.V.1993, 1♀; (30) Nikolayevka 20 km ENE of Ussuriysk, 07.VI.1986, 1♂, leg. LELEJ (IBPV); (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂; 14.VI.1993, 1♂; GTS 19 km SE of Ussuriysk, 01.VIII.1986, 1♂, leg. STOROYENKO (IBPV); 18.VII.1990, 1♂, leg. MAKARKIN (IBPV); (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂, 1♀; (37) Anisimovka, 06.VII.1975, 1♂, leg. KRIVOLUZKAYA (IBPV); 26.VII.1975, 1♂, leg. KRIVOLUZKAYA (IBPV); Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂; 07.VI.1993, 1♂, 2♀♀; (38) Sergeyevka, 04.VI.1993, 1♀; (41) Posyet NE Khasan, 04.VII.1975, 1♂, leg. KRIVOLUZKAYA (IBPV). On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

316. *Eliozeta pellucens* (FALLÉN, 1820)

Distr.: Europe; Transcaucasia, Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1976: 146) (as *Clytiomyia*). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 3♂♂, 1♀; 14.VI.1993, 3♀♀. On edges of broadleaf forests, on flowers of *Anthriscus aemula*.

317. *Clytiomya continua* (PANZER, 1798)

Distr.: Europe; Transcaucasia, Uzbekistan, Mongolia, Siberia (Altai, Chita, Yakutia), Russian Far East (Amuria, Ussuria). Recorded from Ussuria: RICHTER (1993: 438). New records: Primorskiy Kray: (26) Samarka, 30.V.1993, 1♂, (27) Banevurovo S of Ussuriysk, 10.VI.1993,

3♂♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 6♂♂, 8♀♀; 14.VI.1993, 3♂♂; (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 11♂♂, 3♀♀; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 2♀♀; 09.VI.1993, 4♂♂, 1♀. On edges of broadleaf forests. Swept from low vegetation and on flowers of *Anthriscus aemula*.

318. *Ectophasia crassipennis* (FABRICIUS, 1794)

Distr.: Warmer parts of Europe; Transcaucasia, S Siberia, Russian Far East (Amuria, Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1976: 151) (as *Phasia*). New record: Primorskiy Kray: (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂. On edges of a broadleaf forest. Swept from flowers of *Anthriscus aemula*. A dark specimen.

319. *Ectophasia rotundiventris* (LOEW, 1858)

Distr.: E Siberia (Chita, Yakutia), Russian Far East (Amuria, Ussuria, Kuril Is.), China (Northeast), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1976: 151) (as *Phasia*); SHIMA (1992: 20). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 2♂♂; (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂, 1♀; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 2♀♀. On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

Subclytia rotundiventris (FALLÉN, 1820)

Distr.: Europe; Caucasus, Mongolia, S Siberia (Altai, Novosibirsk, Krasnoyarsk, Tuva, Chita), Russian Far East (Amuria, Kuril Is.), Japan (Honshu, Hokkaido). Recorded from Amuria: RICHTER (1986: 109). Not recorded from Ussuria.

It is necessary to revise the genus *Gymnosoma*. Indications from literature are to be considered provisional results, only.

320. *Gymnosoma clavata* (ROHDENDORF, 1947)

Distr.: Europe; Middle East, Transcaucasia, Central Asia, S Siberia, Russian Far East (Ussuria).

Recorded from Ussuria: KOLOMYETZ (1976: 147).

Gymnosoma costata (PANZER, 1800)

Distr.: Warmer parts of Europe (Spain, France, Germany, Switzerland, Italy, Austria, Dalmatia). KOLOMYETZ (1976: 147) recorded a *Gymnosoma* ? *costatum* from Siberia and Ussuria. We have not seen these specimens.

321. *Gymnosoma dolycoridis* DUPUIS, 1961

Distr.: Warmer parts of Europe (Germany, Czechia, Slovakia, Ukraine); Caucasus, Central Asia, Kazakhstan, S Siberia, Russian Far East (Ussuria), China (Northeast). Recorded from Ussuria: ZIMIN (1966: 450) (as *G. dolycoridis orientalis*). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 3♂♂, 1♀; 14.VI.1993, 1♂, 1♀; (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 2♀♀. On edges of broadleaf forests and in meadows. On flowers of *Anthriscus aemula* and *Fragaria orientalis*.

322. *Gymnosoma inornatum* ZIMIN, 1966

Distr.: S Europe (Spain, Switzerland, Greece, Ukraine); S Siberia (Altai, Tomsk, Irkutsk,

Chita), Russian Far East (Amuria, Ussuria, Sakhalin), China (Northeast), Japan (Kyushu to Hokkaido). Recorded from Ussuria: ZIMIN (1966: 446) (as *G. inornatum* f. *agchista*); KOLOMYETZ (1976: 148).

Gymnosoma nitens MEIGEN, 1824

Distr.: Europe; Transcaucasia, Tadzhikistan, Mongolia, S Siberia (Tuva, Chita), Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 109). Not recorded from Ussuria.

323. *Gymnosoma nudifrons* HERTING, 1966

Distr.: Europe; Transcaucasia, Siberia (Novosibirsk to Yakutia), Russian Far East (Ussuria, Sakhalin). Recorded from Ussuria: ZIMIN (1966: 448); KOLOMYETZ (1976: 148).

324. *Gymnosoma rotundatum* (LINNAEUS, 1758)

Distr.: Europe; Transcaucasia, S Siberia, Russian Far East (Amuria, Ussuria), Japan (Kyushu to Hokkaido). Recorded from Ussuria: KOLOMYETZ (1976: 149); RICHTER (1986: 109). New records: Primorskiy Kray: (29) Banevurovo S of Ussuriysk, 10.VI.1993, 1♂; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♂; 14.VI.1993, 2♀♀; (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂; 09.VI.1993, 1♂; (40) Ryazanovka, 16.VI.1993, 1♂, 1♀. On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

Gymnosoma rungsi (MESNIL, 1952)

Distr.: Europe (Portugal, Spain, S France, Italy, Hungary, Rumania), Turkey, Transcaucasia, Turkmenia, Uzbekistan, Tadzhikistan. KOLOMYETZ (1976: 149) recorded *G. rungsi* from Ussuria. We have not seen these specimens.

325. *Gymnosoma sylvaticum* ZIMIN, 1966

Distr.: S Siberia (Novosibirsk to Chita), Russian Far East (Amuria, Ussuria). Recorded from Ussuria: ZIMIN (1966: 454); KOLOMYETZ (1976: 150).

326. *Perigymnosoma globulum* VILLENEUVE, 1929

Distr.: Russian Far East (Ussuria) [and Oriental Region]. Recorded from Ussuria: RICHTER (1986: 109). New records: Primorskiy Kray: (31) Kamenushka 30 km SE of Ussuriysk, 12.VI.1981, 1♂, leg. MUTIN (IBPV); (35) Vladivostok-Sedanka, 20.VI.1993, 2♂♂; (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 09.VI.1993, 8♂♂, 3♀♀; (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♂, 1♀. On edges of broadleaf forests and in meadows. Swept from low vegetation and flowers of *Anthriscus aemula*.

327. *Cistogaster agata* (ZIMIN, 1966)

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: ZIMIN (1966: 434); KOLOMYETZ (1976: 146) (as *Pallasia*). New records: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♀; 09.VI.1993, 1♀. In meadows swept from low vegetation and flowers of *Anthriscus aemula*.

328. *Opesia cana* (MEIGEN, 1824)

Distr.: Europe; Mongolia, Siberia, Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1976: 150) (as *Xysta*).

329. *Opesia grandis* (EGGER, 1860)

Distr.: Europe; Transcaucasia, S Siberia (Novosibirsk, Krasnoyarsk, Tuva, Chita), Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1976: 151) (as *Xysta*); RICHTER (1986: 110).

330. *Elomya lateralis* (MEIGEN, 1824)

Distr.: Warmer parts of Europe (France, Austria, Hungary, Ukraine); N Africa (Morocco); Middle East, Transcaucasia, Iran, Uzbekistan, Mongolia, Siberia (Irkutsk, Chita, Yakutia), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1976: 152) (as *Helomyia*); RICHTER (1986: 110). New records: Primorskiy Kray: (32) Przhevalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 2♂♂. On edges of a broadleaf forest, on flowers of *Anthriscus aemula*.

331. *Phasia (Phasia) albopunctata* (BARANOV, 1935)

Distr.: S Siberia (Novosibirsk, Krasnoyarsk), Russian Far East (Amuria, Ussuria). Recorded from Ussuria: KOLOMYETZ (1976: 152) (as *Alophora*). New record: Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On a meadow swept from low vegetation.

332. *Phasia (Phasia) aurigera* (EGGER, 1860)

Distr.: Warmer parts of Europe (France, Germany, S Poland, Ukraine); Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1976: 152).

333. *Phasia (Phasia) aurulans* MEIGEN, 1824

Distr.: Europe; N Kazakhstan, S Siberia (Altai, Tomsk, Krasnoyarsk, Irkutsk), Russian Far East (Amuria, Ussuria), Japan (Hokkaido). Recorded from Ussuria: DRABER-MONKO (1965: 167) (as *Alophora*).

334. *Phasia (Phasia) barbifrons* (GIRSCHNER, 1887)

Distr.: Europe (France, Germany, Switzerland, Austria, Poland, Russia), Russian Far East (Ussuria). Recorded from Ussuria: DRABER-MONKO (1965: 185) (as *Alophora*). New records: Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♂; 09.VI.1993, 1♂. In meadows on flowers of *Anthriscus aemula*.

335. *Phasia (Phasia) hemiptera* (FABRICIUS, 1794)

Distr.: Europe; Transcaucasia, S Siberia (Altai, Irkutsk), Russian Far East (Kamchatka, Amuria, Ussuria, Sakhalin, Kuril Is.), Japan (Honshu, Hokkaido). Recorded from Ussuria: DRABER-MONKO (1965: 127); KOLOMYETZ (1976: 153) (as *Alophora*). New records: Primorskiy Kray: (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♀; (37) Anisimovka, Sukhodol Vall., 08.VI.1993, 1♂. On edges of broadleaf and mixed forests. Swept from low vegetation and on flowers of *Crataegus maximoviczii*. A dark form, see fig. 70.

336. *Phasia (Phasia) obesa* (FABRICIUS, 1798)

Distr.: Europe; Middle East, Transcaucasia, Kazakhstan, Central Asia, Mongolia, S Siberia, Russian Far East (Amuria, Ussuria), Japan (Hokkaido). Recorded from Ussuria: KOLOMYETZ (1976: 154) (as *Alophora*). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 2♂♂; 14.VI.1993, 2♂♂; (37) Anisimovka, Sukhodol Vall., 09.VI.1993, 1♀. On edges of broadleaf forests and in meadows on flowers of *Anthriscus aemula*.

337. *Phasia (Phasia) rohdendorfi* (DRABER-MONKO, 1965)

Distr.: Russian Far East (Amuria, Ussuria). Recorded from Ussuria: DRABER-MONKO (1965: 183); quoted by KOLOMYETZ (1976: 155) (as *Alophora*). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 10.VI.1993, 1♂, 1♀; (31) GTS 19 km SE of Ussuriysk, 11.VI.1980, 1♀, leg. MICHAILOVSKAYA (IBPV); (34) Mts. 50 km SE of Chuguyevka, 02.VI.1986, 1♂, leg. LELEJ (IBPV); (37) Anisimovka, 29.V.1975, 2♂♂, leg. BERESANZEV (IBPV). On edges of broadleaf forests. The two flies from Ussuriysky Zapovednik were collected inside a house on a window together with many living and dead Heteroptera.

338. *Phasia (Phasia) subcoleoprata* (LINNAEUS, 1767)

Distr.: Warmer parts of Europe; N Africa (Marocco); Middle East, Transcaucasia, N Kazakhstan, Central Asia, Iran, Siberia (Irkutsk, Yakutia), Russian Far East (Amuria, Ussuria). Recorded from Ussuria: KOLOMYETZ (1976: 155) (as *Alophora*).

339. *Phasia (Phasia) takanoi* (DRABER-MONKO, 1965)

Distr.: Russian Far East (Ussuria), Japan (Hokkaido). Recorded from Ussuria: DRABER-MONKO (1965: 147); KOLOMYETZ (1976: 155) (as *Alophora*).

340. *Phasia (Phasia) zimini* (DRABER-MONKO, 1965)

Distr.: Russian Far East (Amuria, Ussuria). Only known from the types; see DRABER-MONKO (1965: 172).

Phasia (Hyalomya) karczewskii (DRABER-MONKO, 1965)

Distr.: Europe (Germany, Poland, S Russia); Kazakhstan, Mongolia, Siberia (Irkutsk to Yakutia). "Urga, Charbarowskiy Kraj" (DRABER-MONKO, 1965: 105) and "?Urgal", Russian Far East (ZIEGLER, 1994: 169) is possibly not the correct locality. "Urga" is the old name of Ulaanbaatar (Mongolia) too; see KOLOMYETZ (1976: 153).

Phasia (Hyalomya) mesnili (DRABER-MONKO, 1965)

Distr.: S Europe (Portugal, Spain, France, Greece, Hungary, Ukraine, S Russia); N Africa (Algeria, Tunisia), Middle East (Israel), Kazakhstan, Central Asia, NW China. The record from Ussuria: RICHTER (1971: 822); quoted by KOLOMYETZ (1976: 154) (as *Alophora*) is not correct (pers. comm. RICHTER).

341. *Phasia (Hyalomya) pusilla* MEIGEN, 1824

Distr.: Europe; Middle East, Transcaucasia, Kazakhstan, Mongolia, Siberia (Novosibirsk to Yakutia), Russian Far East (Amuria, Ussuria), Japan (Hokkaido) [and Pakistan]. Recorded from Ussuria: KOLOMYETZ (1976: 154) (as *Alophora*); RICHTER (1986: 110); SHIMA (1992: 20). New records: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993, 1♂; (37) Anisimovka, Sukhodol Vall., 06.VI.1993, 1♀; 07.VI.1993, 1♀. On edges of broadleaf forests and in meadows on flowers of *Anthriscus aemula*.

342. *Riedelia bicolor* MESNIL, 1942

Distr.: Russian Far East (Ussuria), China (Northeast and Central China). Recorded from Ussuria: RICHTER (1981: 932); (1986: 110); (1993: 438). New record: Primorskiy Kray: (40) Ryazanovka 14 km SW of Slavyanka, 16.VI.1993, 1♀. On edges of an oak forest (*Quercus dentata*). Swept from low vegetation. Morphological remarks about the female in chapter 4.2.

343. *Strongygaster globula* (MEIGEN, 1824).

Distr.: Europe; Transcaucasia, Mongolia, S Siberia (Novosibirsk, Altai, Krasnoyarsk, Chita), Russian Far East (Amuria, Ussuria, Kuril Isl.). Recorded from Ussuria: KOLOMYETZ (1976: 159) (as *Tamiclea globulus* MG.); SHIMA (1992: 20).

Arcona amuricola RICHTER, 1988

Distr.: Russian Far East (Amuria). Only known from the holotype; see RICHTER (1988: 210).

344. *Parerigone aurea* BRAUER, 1898

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1986: 111). Holotype (♂) from "Sidemi, Ussuri" (label), wrongly recorded from "Podolien" by BRAUER (1898: 48), see HERTING (1974: 143), too. "Sidemi" is perhaps the river Sidimi E of Khabarovsk. New record: Primorskiy Kray: "Ussuriysk Reserve" = (31) Ussuriysky Zapovednik SE of Ussuriysk, 16.VII.1990, 1♀, leg. T. SAIGUSA (BLKU).

Parerigone takanoi MESNIL, 1957

Distr.: Russian Far East (Kuril Is.), Japan (Hokkaido, Honshu, Kyushu). Not recorded from Ussuria.

345. *Zambesomima hirsuta* MESNIL, 1967

Distr.: Russian Far East (Amuria), Japan (Hokkaido, Honshu). First records from Ussuria: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♀; 08.VI.1993, 1♂. On broadleaf forests sitting on shrubs and on leaves of *Adiantum pedatum* (fig. 66).

346. *Dionaea aurifrons* (MEIGEN, 1824)

Distr.: Europe; Middle East, Transcaucasia, S Siberia (Krasnoyarsk), Russian Far East (Ussuria). Recorded from Ussuria: KOLOMYETZ (1976: 155).

347. *Calyptromyia barbata* VILLENEUVE, 1915

Distr.: Russian Far East (Ussuria), Japan (Kyushu, Honshu, Tsushima) [and Oriental Region]. Recorded from Ussuria: RICHTER (1993: 438).

It is necessary to revise the genus *Leucostoma*. The determination of species may not be accurate.

Leucostoma meridianum (RONDANI, 1868)

Distr.: Europe (France, Italy, Austria); Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 111). Not recorded from Ussuria.

348. *Leucostoma crassum* KUGLER, 1966

Distr.: Warmer parts of Europe (Portugal, Spain, France, Switzerland, SW Germany, Dalmatia, Greece, Malta); Middle East. First records from Russia: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀; (32) Przhivalski Mts. 53 km SE of Ussuriysk, 13.VI.1993, 1♂. On edges of broadleaf forests, on flowers of *Anthriscus aemula*. We did not discover any differences between the specimens from Ussuria and from the Mediterranean Region.

349. *Leucostoma ?nudifacies* TSCHORSNIG, 1991

Distr.: Europe (Spain, ?Austria). First records from Asia and Russia: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♀; 09.VI.1993, 1♀. In meadows on low vegetation and on flowers of *Euphorbia* sp. Together with these females we collected 2♂♂: (37) Anisimovka, Sukhodol Vall., 09.VI.1993. These ♂♂ are closely related to ♂♂ of *Leucostoma semibarbata*, having haired parafrontalia up to middle height. They differ from *L. semibarbata* in their head proportions and their smaller calypters. It might be that these two flies are the undescribed ♂ of *Leucostoma nudifacies*.

Leucostoma simplex (FALLÉN, 1815)

Distr.: Europe; Transcaucasia, Kazakhstan, Uzbekistan, Mongolia, SE Siberia (Chita), Russian Far East (Amuria) [and Nearctic Region]. Recorded from Amuria: RICHTER (1986: 111). Not recorded from Ussuria.

350. *Clelimyia paradoxa* HERTING, 1981

Distr.: Russian Far East (Amuria, Ussuria), Japan (Honshu). Recorded from Ussuria: RICHTER (1986: 111).

351. *Clairvillia biguttata* (MEIGEN, 1824)

Distr.: Europe; Middle East, Transcaucasia, Mongolia, E Siberia (Chita, Yakutia), Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1993: 438). New record: Primorskiy Kray: (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♂. In a meadow on shrubs. A small form. Abdomen black without reddish sides. Claws shorter than usual.

352. *Sepseocara itians* RICHTER, 1986

Distr.: Russian Far East (Ussuria). Recorded from Ussuria: RICHTER (1986: 111) and (1993: 438).

Lophosia fasciata MEIGEN, 1824

Distr.: Europe; Transcaucasia, Russian Far East (Amuria, Kuril Is.), Japan (Hokkaido). Not recorded from Ussuria.

353. *Cylindromyia (Cylindromyia) angustipennis* HERTING, 1983

Distr.: Russian Far East (Amuria, Ussuria), China (Beijing, Hubei, Jiangsu, Jilin, Zhejiang). Known from the types (HERTING, 1983) and recorded from China by SUN and MARSHALL, (1996).

354. *Cylindromyia (Cylindromyia) brassicaria* (FABRICIUS, 1775)

Distr.: Europe (incl. Madeira, Canary Isl.); N Africa, Middle East, Central Asia, Mongolia, S Siberia, Russian Far East (Ussuria, Sakhalin), China (Northeast), Japan (Honshu, Hokkaido) [and Oriental Region of China]. Recorded from Ussuria: KOLOMYETZ (1976: 156); SHIMA (1992: 20). New record: Primorskiy Kray: (37) Anisimovka, Sukhodol Vall., 06.-10.VII.1993, 1♀, leg. KUTZSCHER (DEI).

Cylindromyia (Ocypterula) pusilla (MEIGEN, 1824)

Distr.: Europe; Middle East, Transcaucasia, Mongolia, S Siberia (Altai, Krasnoyarsk), Russian Far East (Amuria). Recorded from Amuria: RICHTER (1986: 111). Not recorded from Ussuria.

355. *Cylindromyia (Calocyptera) intermedia* (MEIGEN, 1824)

Distr.: Warmer parts of Europe; Middle East, Transcaucasia, Uzbekistan, Tadzhikistan, Iran, Mongolia, S Siberia (Altai, Tuva, Chita), Russian Far East (Ussuria), China (Hubei, Heilongjiang, Inner Mongolia) [and Nearctic Region]. Recorded from Ussuria: KOLOMYETZ (1976: 157).

356. *Cylindromyia (Neocyptera) arator* REINHARD, 1956

Distr.: Mongolia, Russian Far East (Ussuria), Korea, China (Heilongjiang, Jiangsu, Sichuan, Zhejiang). Recorded from Ussuria: HERTING (1983: 51); KOLOMYETZ (1976: 158) (as *C. lehri* KOL.).

357. *Cylindromyia (Neocyptera) auriceps* MEIGEN, 1838

Distr.: Europe; N Africa (Algeria); Middle East, Transcaucasia, Turkmenia, Siberia (Altai, Krasnoyarsk, Yakutia), Russian Far East (Ussuria). KOLOMYETZ (1976: 156) recorded this species from Russian Far East. The identification needs to be confirmed.

358. *Cylindromyia (Neocyptera) interrupta* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, S Siberia (Tomsk, Krasnoyarsk, Altai, Tuva, Buryatia, Yakutia), Russian Far East (Amuria), China (Hubei, Heilongjiang) [and North America]. Not recorded from Ussuria.

359. *Cylindromyia (Malayocyptera) agnieszkae* KOLOMYETZ, 1977

Distr.: Russian Far East (Ussuria), N Korea. Recorded from Ussuria: HERTING (1983: 49).

360. *Hemyda hertingi* sp. n.

Distr.: Russian Far East (Ussuria), Taiwan. In broadleaf forests and in their edges. Swept from shrubs and low vegetation. In a Malaise trap, too. Description in chapter 4.2.

361. *Hemyda obscuripennis* (MEIGEN, 1824)

Distr.: Warmer parts of Europe; Russian Far East (Amuria, Ussuria), Japan. Recorded from Ussuria: RICHTER (1986: 115). New records: Primorskiy Kray: (22) Novoselische 18 km SW Kamen-Rybolov, 18.VIII.1975, 1♂, leg. LEHR (IBPV); "St. Ussuri", 21.VIII.1926, 1♂, leg. KUZNETZOV (ZMAS).

362. *Hemyda vittata* (MEIGEN, 1824)

Distr.: Europe; Transcaucasia, S Siberia (Novosibirsk, Altai), Russian Far East (Amuria, Ussuria), (?Japan). Recorded from Ussuria: RICHTER (1986: 116). We have seen these specimens.

4.2. Taxonomic results

In some species there are intraspecific morphological differences between Ussurian specimens and European ones. One of the differences is commonly colour variation, i.e., Ussuri specimens are darker than European ones: e.g., *Leiophora innoxia*, *Gonia divisa*, *Tachina nupta*, *Panzeria puparum*, *Thelaira solivaga*, *Ectophasia crassipennis*, *Phasia hemiptera*, and *Clairvillia biguttata*. Another difference is the width of the vertex, i.e., females from Ussuri having narrower vertex than

those from Europe: e.g., *Lypha dubia*, *Macquartia pubiceps*, and *Ramonda spathulata*. In the following section seven new species are described. Three previously described species are redescribed and remarks are provided on the morphological features of *Thelaira* spp. and *Riedelia bicolor*.

***Ctenophorinia christianae* sp. n.**

This new species is dedicated to Mrs. CHRISTIANE LANGE (Berlin, Germany), the wife of the first author and member of the expedition to Ussuria.

Holotype: ♂. Locus typicus: RUSSIA: Ussuria: Primorskiy Kray: Samarka 70 km N of Chuguyevka, Gordeyevskaya Mtn., 29.V.1993, on edges of broadleaf forest on shrubs, leg. C. LANGE and J. ZIEGLER. 2 paratypes (♀ ♀) with the same data. Further paratypes with following data: RUSSIA: Khabarovskiy Kray: (17) Boitsovo N of Bikin, Kamenistaya Griva Hill, 27.V.1993, 1♀, leg. C. LANGE and J. ZIEGLER; Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀, leg. C. LANGE and J. ZIEGLER; (32) Vinogradovka 80 km E of Ussuriysk, 27.V.1929, 1♀, leg. DYAKONOV and FILIPJEV (ZMAS) [= paratype of *C. adiscalis* MESNIL, 1963]. JAPAN: Hokkaido, Ashoro, Berabonai, 5.VII.1986, 1♂ 1♀, leg. H. SHIMA; Honshu, Aomori, Mt. Bonju, 23.VI.1966, 1♂, leg. S. FUKUSHI; Honshu, Saitama, Nogami, 14.IV.1972, 1♂, leg. T. TAMBU; Honshu, Nagano, Shimashimadani, 23.V.1975, 1♂, leg. A. NAKANISHI; Kyushu, Fukuoka, Aburayama, 17.IV.1984, 1♂, leg. H. SHIMA; Fukuoka, Mizunashi, 24.IV.1984, 2♂♂, leg. H. SHIMA; Fukuoka, Mt. Tachibana, 1-7, 15-21.IV.1979, 2♂♂, leg. K. YAMAGISHI (yellow pan trap); Kyushu, Kumamoto, Naidaijin, 10.V.1967, 1♀, leg. H. SHIMA; Kyushu, Is. Yaku, Kosugidani, 16-17.V.1972, 3♂♂ 2♀♀, leg. S. SHINONAGA. On edges of broadleaf forests. Swept from shrubs and low vegetation. Holotype and two paratypes in the collection of the DEI; one paratype in the collection of SMNS, one paratype in the collection of ZMAS, one paratype in the collection of CZE and 16 paratypes in collection of BLKU.

Description (fig. 4, 5, 6, 16, 17)

Male: Small species. Frons, thorax and dorsum of abdomen greyish white, or greyish green, pollinose. Body length 6.5-7.5 mm. **Head** (fig. 4): Vertex at the narrowest point 0.34-0.35 of head width and 1-1.1 of single eye width; frontal vitta subequal in width to fronto-orbital plate at middle; face about 1.3 times as long as frons; parafacials in horizontal position 0.55-0.75 times as wide as the 1st flagellomere at middle height, in position of head profile at its narrowest point 0.35-0.45 as wide as the 1st flagellomere; gena in horizontal position 0.25-0.3 of eye height, in position of head profile 0.2-0.25 of the latter. Inner vertical seta subequal in length to eye height; outer vertical seta weak, hair-like, with almost same length as postocular setae; several postocellar setae present, apices bent forward; 2 strong reclinate orbital setae, anterior seta subequal in length to inner vertical seta; 6-7 frontal setae, lowest seta nearly level with base of arista; parafacial bare; vibrissa equal in length to face, arising near level of lower facial margin; facial ridge with 6-7 very strong down-curved setae and with 1-3 fine hair-like ones on lower five-sixths; occiput with densely yellow pile. First flagellomere 3.9-4.1 times as long as pedicel and 3.4-3.7 times as long as wide. Arista bare, thickened on slightly more than basal 1/3 of its length. 2nd aristomere about 2 times as long as wide. Palpus yellow, shorter than the 1st flagellomere (0.6-0.7 times as long). Eye dense haired. **Thorax:** Black in ground colour, dorsum rather greyish white (or greyish green) pollinose; 4 longitudinal vittae present on scutum, median vittae ending nearly on anterior 1/3 of postsutural scutum. Hair dense, erect and black, 3+3 acrostichal setae, 3+3 dorsocentral setae, 2+5 1-katepisternal setae, the lowest

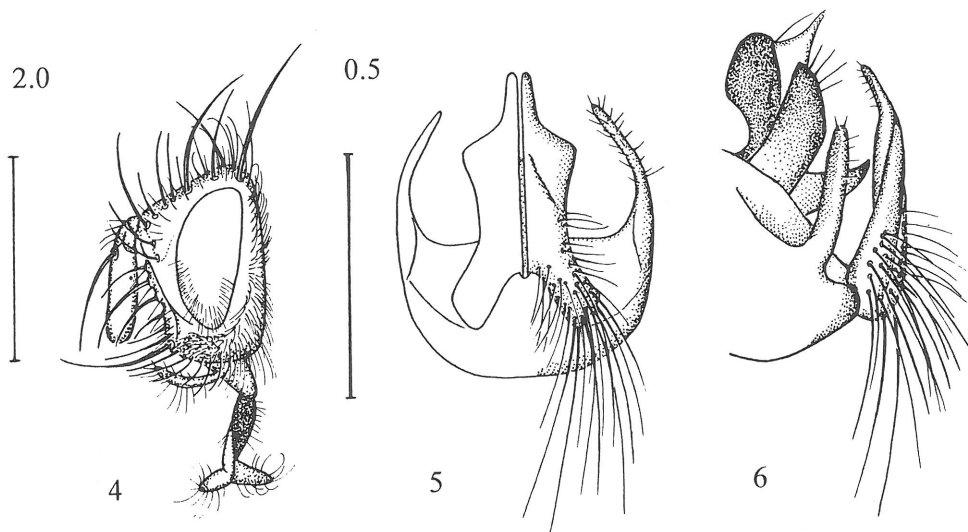


Fig. 4-6 Male of *Ctenophorinia christiana* sp. n. Head in lateral view and postabdomen (partly) in caudal and lateral view. Hair omitted on left side of fig. 5. Syncercus, surstylus, acrophallus, praegonite (gonopod) and postgonite (paramere) are shown without dissection in lateral view in fig. 6.

seta weak. Scutellum black in ground colour, densely greyish white (or greyish green) pollinose, with one pair each basal, lateral, subapical, preapical and apical setae; basal and subapical setae strong and nearly equal in length to each other; apical setae crossed and suberect. **Wing:** Hyaline, lower calypter whitish, basicosta dark brown; halter yellow. Costal seta not differentiated; vein R4+5 with 3 setulae at base dorsally and ventrally. Bend of vein M about equidistant between dm-cu crossvein and wing margin extending along vein M, or slightly closer to wing margin; cell r4+5 broad open. **Legs:** Black. Fore tibia with 2 posterior setae; mid tibia with 3 anterodorsal, 2 posterodorsal and 1 ventral seta; hind tibia with a row of anterodorsal setae of a rather short uniform length mixed with 2-4 longer and stronger setae, 3 posterodorsal and 3 ventral setae. Fore claws slightly longer than, or subequal in length to, 4th and 5th tarsomeres together. **Abdomen:** Black, dorsum with a transverse band of densely greyish white, or greyish green, pollinosity on each tergum, a broad mid dorsal longitudinal vitta present; the pollinosity occupying anterior 3/5 of 3rd tergum; pollinose band greyish and narrower on venter. Hairs dense erect and black; 1 pair median marginal setae and 1-2 each weak lateral marginal setae on Syntergum 1+2 and 3th terga; a row of marginal setae each on 4th and 5th terga. **Male genitalia** (fig. 5, 6): Syncercus in dorsal view rather angulated and strongly narrowed on apical 1/4 to 1/3. Distiphallus bulged, not strongly widened apically.

Female: Similar to ♂. Differences: Body length 5.5-7.5 mm. **Head:** Vertex 0.35-0.39 of head width (1.1-1.3 of eye width); face 1.1-1.3 times as long as frons; 1st flagellomere 3-3.8 times as long as pedicel; palpus only slightly swollen at apex; anterior reclinate orbital seta very strong, posterior seta shorter but well developed; 1 prevertical seta, reclinate to lateroclinate; 2 proclinate orbital setae; only 4-6 frontal setae; outer vertical seta developed, strong, 1.5-2 times as long as the postocular hairs. **Legs:** Mid coxa (fig. 16) with a row of 5-6 long and strong

spines, the largest one 1.3-1.4 times as long as mid trochanter and subequal in length to and as wide as anterodorsal preapical seta of mid tibia. Fore claws at most subequal in length to 5th tarsomere. **Abdomen:** Bands of pollinosity narrower; side of 3rd tergum pollinose only on anterior 0.5-0.7 of the tergum.

Remarks

The genus *Ctenophorinia* seems to be closely related to *Phorinia*, but may be easily distinguished from it by shorter 2nd aristomere, only a few fine setulae at dorsal base of wing vein R4+5 and absence of discal setae on the abdomen including the 5th tergum. This genus is also very characteristic in having a row of strong spines on the female mid coxa (fig. 16, 18, 20). This structure may be used for a tight holding of host insects. Hosts of *Ctenophorinia* spp. are unknown.

Ctenophorinia christiana is the smallest known species in this genus and apparently differs from species in having 3+3 dc setae on the scutum. Moreover, this species has a wide frons and long face in relation to the frons. The spines on the female mid coxa are not very modified but are long and not flattened (fig. 16). Males of this species differ from those of other known species in having relatively wide antenna and narrow parafacial. The parafacial in profile is less than half as wide as the 1st flagellomere in the male of this species (fig. 4). There are two forms of this species in colour of the pollinosity.

Ctenophorinia adiscalis MESNIL, 1963

Specimens examined other than from Ussuria: JAPAN: Honshu, Nagano, Shimashimadani, 5.VII.1966, 1♂, leg. H. SHIMA; same locality as preceding, 22.V.1975, 1♀, leg. A. NAKANISHI; Honshu, Niigata, Mt. Atema, 28.VI.1972, 1♀, leg. M. HONDA; Honshu, Hyogo, Kawabe-gun, 3.V.1980, 1♂ 1♀, leg. M. NAKATA; Kyushu, Is. Yaku, Kosugidani, 21.V.1968, 1♀, leg. A. TANAKA; same locality as preceding, 10.V.1972, 1♀, leg. S. SHINONAGA (all in BLKU).

Redescription (fig. 7, 8, 9, 18, 19)

Holotype examined (ZMAS). The male genitalia of the holotype were dissected by Dr V. RICHTER.

Male: A medium-sized species. Body length: 9-9.5 mm. Frons, thorax and dorsum of abdomen light grayish green pollinose. **Head** (fig. 7): Vertex at the narrowest point 0.26-0.31 of head width and 0.7-0.9 of eye width; face 1.15-1.25 times as long as frons in profile; frontal vitta subequal in width to fronto-orbital plate at middle; parafacial in horizontal position 0.85-1.15 as wide as 1st flagellomere at middle height, in position of head profile 0.5-0.8 as wide as 1st flagellomere at the narrowest point; gena in horizontal position 0.2-0.3 times as wide as eye height, in position of head profile 0.20-0.25. Inner vertical seta 0.6-0.7 times as long as the eye height; outer vertical seta undeveloped, hair-like, about as long as postocular hairs; ocellar seta very strong; several postocellar setae, apices bent forward; 2 strong reclinate orbital setae, anterior seta subequal in length to inner vertical seta; 6-8 frontal setae, lowest seta nearly level with base of arista; occiput with dense yellow pile; facial ridge with 6-7 very strong and down-curved setae and 0-3 fine hair-like setae up to lower five-sixths; vibrissa subequal in length to face, inserted near level of lower facial margin which is visible in profile; parafacial bare. Antenna with 1st flagellomere 3.1-4 times as long as pedicel, 3.9-4.1 times as long as wide. Arista bare, thickened on basal 0.4-0.5, 2nd aristomere about 2.5 times as long as wide. Palpus

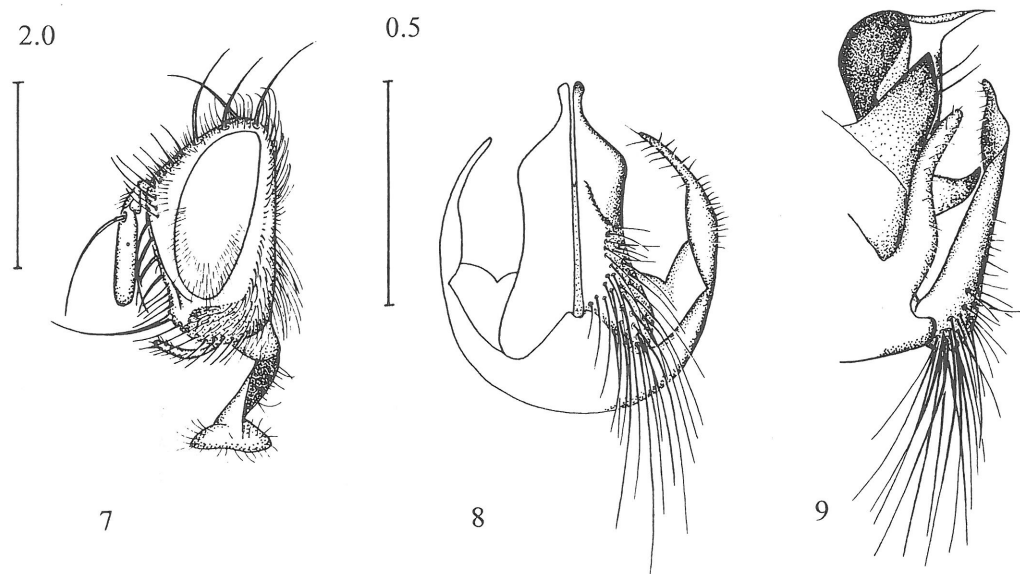


Fig. 7-9 Male of *Ctenophorinia adiscalis* MESNIL, 1963. Head in lateral view and postabdomen (partly) in caudal and lateral view. Hair omitted on left side of fig. 8. Syncercus, surstylus, acrophallus, praegonite (gonopod) and postgonite (paramere) are shown without dissection in lateral view in fig. 9.

yellow, shorter than 1st flagellomere (0.8-0.9 times as long). Eye densely haired. **Thorax:** Black in ground colour, dorsum rather greyish green pollinose, 4 longitudinal vittae present on scutum, median vittae ended nearly on anterior 1/3 of postsutural scutum. Hair rather dense, erect and black; 3+4 dorsocentral setae; 3 katapisternal setae, lowest seta weak. Scutellum black in ground colour, densely greyish green pollinose, with 1 pair each of basal, lateral, subapical, preapical and apical setae; basal and subapical setae strong and subequal in length to each other; apical setae crossed and suberect. **Wing:** Hyaline, lower calypter whitish; basicosta dark brown; halter yellow. Costal seta not differentiated; vein M from dm-cu crossvein to its bend 1.1-1.3 times as long as distance between the bend and wing margin extending along vein M; cell r4+5 broadly open. **Legs:** Black. Fore tibia with 2 posterodorsal setae; mid tibia with 2-4 anterodorsal setae, 2 posterodorsal setae and 1 ventral seta; hind tibia with an irregular row of anterodorsal setae, 1-2 longer and stronger setae present among them, 4 posterodorsal and 3 short ventral setae. Fore claws a little longer than or almost equal in length to 4th and 5th tarsomeres together. **Abdomen:** Black, dorsum with bands of densely greyish green pollinosity; a mid dorsal longitudinal vitta present. Pollinose band occupying anterior 3/5 of 3rd tergum on each side; pollinosity greyish and narrower on venter. Hair dense erect and black, without discal setae; syntergum 1+2 and 3rd terga with 1 pair median marginal and 1-2 each weak lateral marginal setae; 4th and the 5th terga each with a row of 16 marginal setae. **Male genitalia** (fig. 8, 9): Syncercus in dorsal view swollen on each side, narrowed on apical 1/4 to 1/3. Distiphallus bulged, not strongly widened apically.

Female: Similar to ♂. Differences: Body length 8.0 mm. **Head:** Vertex 0.34-0.35 of head width, 1.05-1.1 of eye wide; face 1.15-1.2 times as long as frons; 1st flagellomere 3.3-3.5

times as long as pedicel; palpus slightly swollen at apex. Anterior reclinate orbital seta very strong, posterior seta shorter but well developed; 1 reclinate to laterocliniate prevertical seta; 2 proclinate orbital setae; only 4-6 frontal setae; outer vertical seta strong, about 2 times as long as the postocular hairs. **Legs:** Mid coxa (fig. 18) with a row of 6-7 long and strong spines, largest spine nearly subequal in length as mid trochanter and broader (1.2 times) but shorter (0.8 times) than anterodorsal preapical seta of mid tibia and more flattened. Fore claws almost equal in length to the last tarsomere. **Abdomen:** Side of 3rd tergum with pollinosity only on anterior 0.7.

Remarks

This is a medium-sized species that resembles *C. christiana*, but may be distinguished from it by 3+4 dc setae and a narrower vertex. The spines on the mid coxa (fig. 18) are not as strong as in *C. grisea* or *C. frontalis*.

Ctenophorinia grisea MESNIL, 1967

Specimens examined other than from Ussuria: JAPAN: Holotype of *C. grisea* MESNIL, Sapporo, Maruyama, 15.VII.1966, 1♂, leg. S. TAKANO; Aomori, Mt. Bonju, 23.VI.1966, 1♂ 1♀, leg. S. FUKUSHI; Nagano, Shimashimadani, 22.V.1975, 1♀, leg. A. NAKANISHI; Yamaguchi, Kanayama, 8.VI.1975, 1♂, leg. J. EMOTO. Holotype of *C. grisea* in Canadian National Collection, Ottawa, and other specimens in BLKU.

Redescription (fig. 10, 11, 12, 20, 21)

Male: Large species. Frons, thorax and dorsum of abdomen greyish white or golden olive-green pollinose. Body length 10.5-14.5 mm. **Head** (fig. 10): Frons at the narrowest point 0.23-0.28 of head width and 0.6-0.8 of eye width; frontal vitta subequal in width to parafacial at middle; face 1-1.15 times as long as frons; gena in horizontal position 0.25-0.35 of eye height, in the position of head profile 0.23-0.3. Inner vertical seta 0.6-0.7 times as long as eye height; outer vertical seta weak, hair-like, about as long as postocular hairs; ocellar seta very strong; several postocellar setae present, nearly straight; 2 strong reclinate orbital setae, anterior seta subequal in length to inner vertical seta, posterior seta only slightly shorter than anterior one; 9-12 frontal setae, lowest seta nearly level with base of arista; occiput with dense yellow or whitish pile; parafacial bare or only a very few hairs below the lowest frontal seta; vibrissa shorter than the face, arising near level of lower facial margin which is visible in lateral view; facial ridge with 6-8 very strong down-curved setae and 1-3 fine hair-like setae up to lower 5/6. Parafacial in horizontal position 1.3-1.75 times as wide as 1st flagellomere at middle height, in position of head profile 1.0-1.3 as wide as the 1st flagellomere at narrowest point. Antenna with 1st flagellomere 3-3.7 times as long as pedicel and 4.1-5.2 times as long as wide. Arista bare, thickened nearly on basal 1/3; 2nd aristomere 2-3 times as long as wide. Palpus yellow, about as long as 1st flagellomere. Eye dense haired. **Thorax:** Black in ground colour, dorsum greyish white or golden olive-green pollinose, 4 longitudinal vittae present on scutum, median vittae stopped ending at anterior 1/3 of postsutural scutum. Hair rather dense, erect and black; 3+4 dorsocentral setae; 3 katepisternal setae, lowest seta weak. Scutellum black in ground colour, densely greyish white or golden olive-green pollinose. One pair each of basal, lateral, subapical, preapical and apical setae present, basal and subapical setae strong and nearly subequal in length to each other, apical setae crossed and suberect. **Wing:** Hyaline; lower calypter withish; basicoستا dark brown; halter yellow. Costal seta not differentiated. R4+5 with 2-4 setulae at base

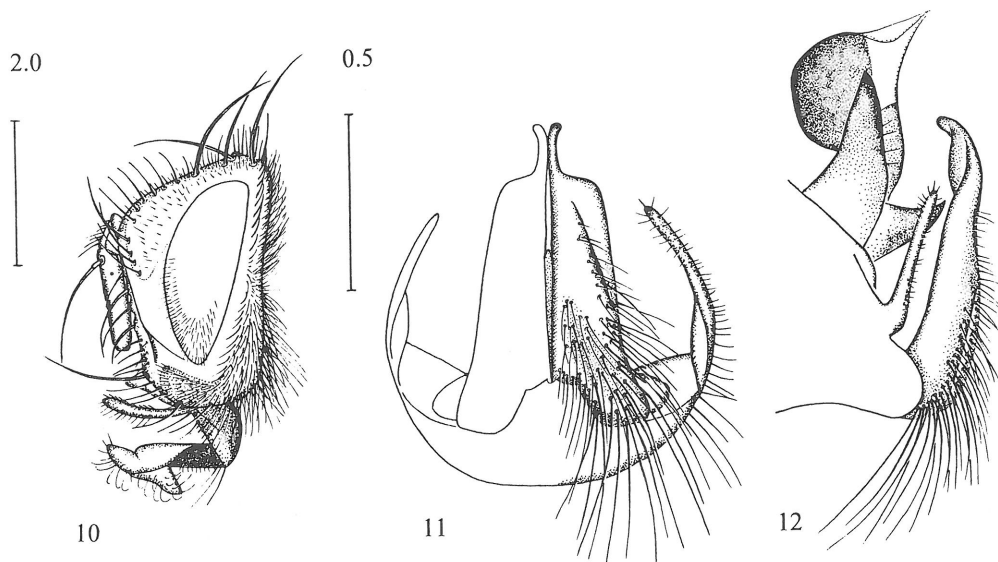


Fig. 10-12 Male of *Ctenophorinia grisea* MESNIL, 1967. Head in lateral view and postabdomen (partly) in caudal and lateral view. Hair omitted on left side of **fig. 11**. Syncercus, surstylus, acrophallus, praegonite (gonopod) and postgonite (paramere) are shown without dissection in lateral view in **fig. 12**.

dorsally and ventrally. Vein M from dm-cu crossvein to its bend 1.3-1.4 times as long as distance between the bend and wing margin extending along vein M. **Legs:** Black. Fore tibia with 2 posterodorsal setae; mid tibia with 3-4 anterodorsal, 2 posterodorsal and 1 ventral setae; hind tibia with a row of anterodorsal setae of rather short uniform length, 2-4 longer and stronger setae present among them, 3 posterodorsal and 5 short ventral setae. Fore claws a little longer than or almost equal in length to 4th and 5th tarsalsomeres together. **Abdomen:** Black, dorsum with bands of dense greyish white or golden olive-green pollinosity; a mid dorsal longitudinal vitta present; the pollinosity occupying anterior 3/4-4/5 of side of 3rd tergum; pollinose bands greyish and narrower on venter. Hair dense, erect and black; 1 pair median marginal and 1-2 each weak lateral marginal setae present each on syntergum 1+2 and 3th terga.; a row of 16 marginal setae each on the 4th and the 5th terga. **Male genitalia** (**fig. 11, 12**): Syncercus in dorsal view strongly narrowed on apical 1/5; surstylus narrow and straight. Distiphallus bulged, not strongly widened apically.

Female: Similar to ♂. Differences: Body length 9.5-13.0 mm. **Head:** Vertex 0.3-0.33 of head width (0.85-1.00 of eye width); face 1.1-1.3 times as long as frons; outer vertical seta weakly developed; anterior reclinate orbital seta very strong, posterior seta shorter but well developed; 1 reclinate to laterocline preverticale seta; 2 proclinate orbital setae; 6-8 frontal setae; 1st flagellomere 3.3-4.2 times as long as pedicel; palpus slightly swollen at apex. **Legs:** Mid coxa (**fig. 20**) with a row of 7 short and strong spines, largest spine 3/4 as long as mid trochanter and broader (1.5 times) but shorter (0.6 times) than anterodorsal preapical seta of the mid tibia. Fore claws almost equal in length to 5th tarsomere. **Abdomen:** Bands of pollinosity narrower, side of 3rd tergum with pollinosity only on anterior 2/3-3/5 of the tergum.

Male: Large greyish yellow or greyish white pollinose species, similar to *C. grisea*. Body length, 10-10.7 mm. **Head** (fig. 13): Densely pale greyish white or pale greyish yellow pollinose, more greyish or yellowish on fronto-orbital plate toward vertex. Vertex 0.3-0.31 of head width, 0.91 of eye width; frontal vitta subequal in width to fronto-orbital plate at middle; face about 1.2 times as long as frons in profile; parafacial weakly narrowed below, slightly wider than 1st flagellomere at middle height (5:4) in horizontal position, subequal in width in profile; gena 0.37-0.38 of eye height in horizontal position, about 0.33 in head profile. Inner vertical seta about 4/5 of eye height; outer vertical seta absent; 4-6 very fine and long postocellar setae, about 1/2 as long as long inner vertical seta; 1 postvertical seta on each side, as long as postocellar seta; ocellar seta strong, slightly longer than 2/3 of inner vertical seta; 2 reclinate orbital setae, anterior seta stronger than posterior seta and subequal in length to ocellar seta; 7-10 frontal setae, lowest seta inserted slightly below level of base of arista; fronto-orbital plate with dense long fine hairs, only a few hairs descending below lowest frontal seta; vibrissa nearly level with lower margin of face; facial ridge with strong downcurved setae on lower 3/4-4/5; occiput with dense yellowish pile. Antenna with 1st flagellomere 5-5.3 times as long as pedicel, 3.8-4 times as long as wide. Arista thickened on basal 1/2; 2nd aristemere about 3 times as long as wide. Palpus yellowish, nearly parallel-sided, weakly flattened and weakly narrowed at apex, about 3/4 as long as 1st flagellomere. Eye dense haired. **Thorax:** Black in ground color, densely pale greyish white or yellowish (somewhat golden) pollinose; dorsum with 4 rather broad black longitudinal vittae, scutellum black on basal 1/2. 3+4 dorsocentral setae; 2+1 katepisternal setae. Scutellum narrowly paler on apical portion; 4 pairs of marginal setae present, lateral seta rather short, apical setae subequal in length to lateral seta, crossed nearly horizontally. **Wing:** Hyaline; basicosta black. Bend of vein M about equidistant between dm-cu crossvein and wing margin extending along vein M; basal node of vein R4+5 with 4-6 fine setulae dorsally, 3 ventrally. **Legs:** Black. Fore tibia with 2 posterior setae; mid tibia with 6-7 anterodorsal setae, of which 3 are strong, 2 posterodorsal and 1 ventral setae; hind tibia with a row of sparsely set row of anterodorsal, 3-4 posterodorsal and 2-3 ventral setae. Claws and pulvilli very long.

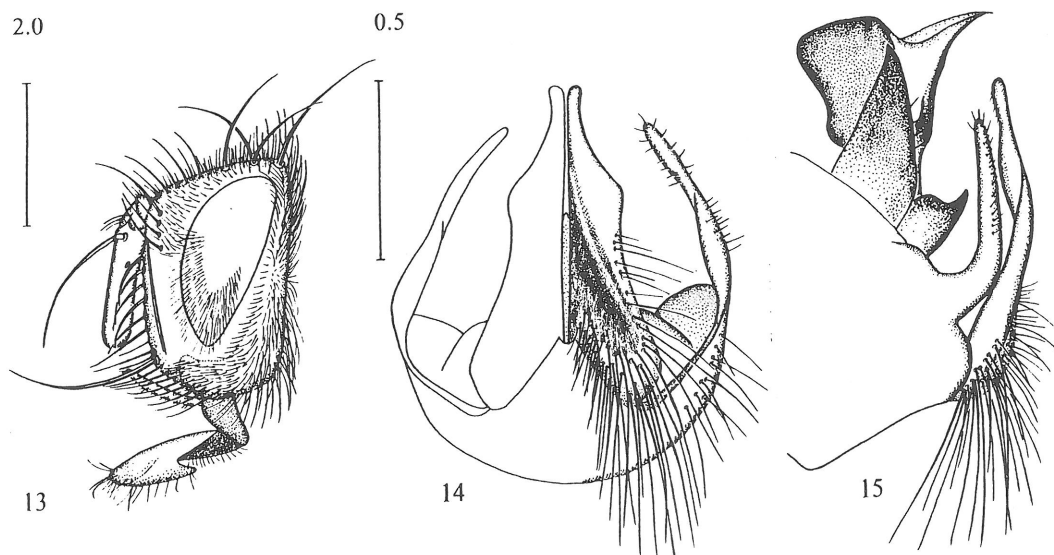


Fig. 13-15 Male of *Ctenophorinia frontalis* sp. n. Head in lateral view and postabdomen (partly) in caudal and lateral view. Hair omitted on left side of **fig. 14**. Syncercus, surstylus, acrophallus, praegonite (gonopod) and postgonite (paramere) are shown without dissection in lateral view in **fig. 15**.

Abdomen: Black in ground color, weakly reddish laterally on 3rd and 4th terga; dorsum rather densely greyish white or pale greyish yellow pollinose, posterior 2/5-1/3 of 3rd tergum and 1/3-1/4 of 4th black; mid dorsal longitudinal vitta well developed on 3rd tergum and rather weakly so on 4th; venter evenly and rather thinly pale yellowish white or pale grayish white pollinose. Hairs on dorsum dense and fine, rather long and erect, sparser and stronger on venter; syntergum 1+2 and 3rd terga with 1 pair rather strong median marginal setae; 4th and 5th terga each with a row of strong marginal setae. **Male genitalia** (**fig. 14, 15**): Syncercus in dorsal view weakly narrowed from base to apical 1/3, then evenly narrowed to apex, lateral portion shining and weakly bulged, in lateral view flat, nearly straight; surstylus in lateral view nearly parallel-sided, apex rounded, with sparse fine short hairs; distiphallus strongly widened apically.

Female. Differing from male as follows: In yellowish form fronto-orbital plate and thoracic dorsum more densely yellowish pollinose than in male. **Head:** Vertex 0.32-0.33 of head width, 0.95 of eye width; frontal vitta slightly narrower than fronto-orbital plate at middle (5:6); outer vertical seta fine but distinct; anterior reclinate orbital seta about as long as inner vertical seta; 2 strong reclinate orbital setae; antenna falling short of lower margin of face by about length of pedicel, 1st flagellomere about 4.7 times as long as pedicel and about 4.2 times as long as wide; palpus clavate, only slightly shorter than 1st flagellomere. **Legs:** Mid coxa with a row of 6-7 short strong apically blunt spines, the largest spine at most 1/2 as long as mid trochanter.

Remarks

This large *Ctenophorinia* species is very similar to *C. grisea*, but may be distinguished from it by the wide vertex and long and stout antenna in the male and shorter and stronger spines on mid coxa.

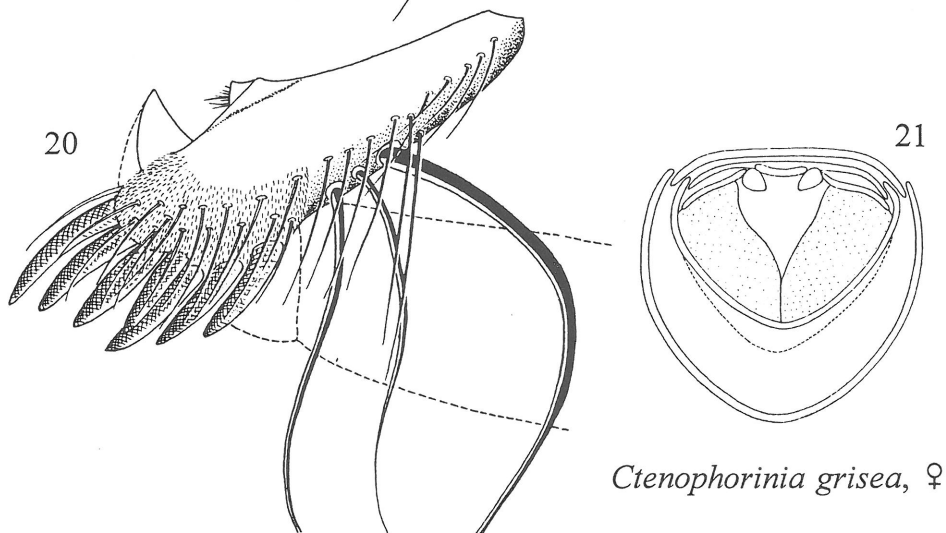
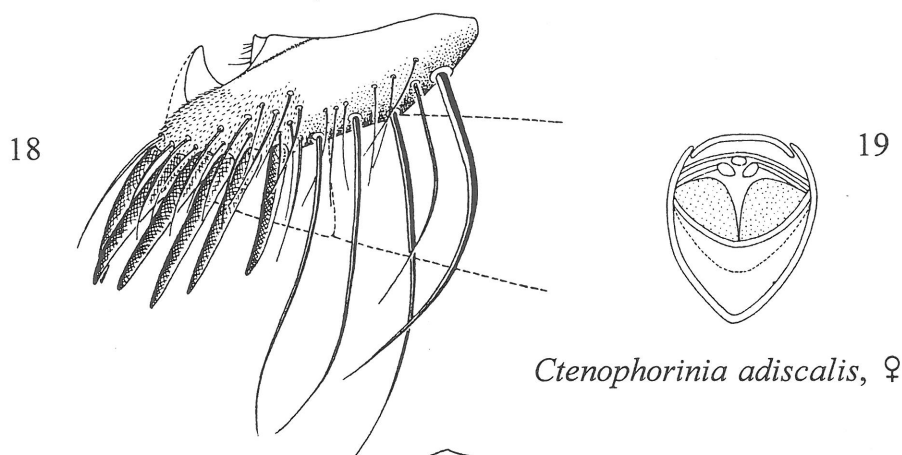
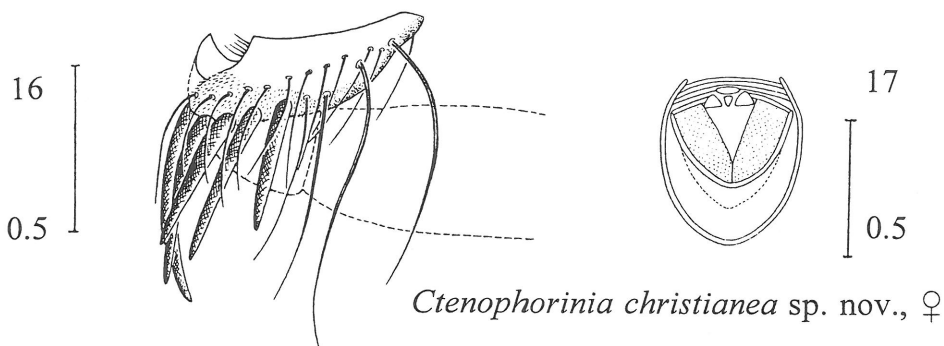


Fig. 16-21 Females of *Ctenophorinia* spp. Mid coxa in ventral view from behind and postabdomen in caudal view. Setae and hair omitted on postabdomen. 16, 17 *Ctenophorinia christianeae* sp. n.; 18, 19 *Ctenophorinia adiscalis* MESNIL, 1963; 20, 21 *Ctenophorinia grisea* MESNIL, 1967.

There are two forms of this species in colour of the pollinosity as in *C. christianae* and *C. grisea*; a pale greyish white form and a yellow (somewhat golden) form. These forms are rather different from each other in general appearance, but considered conspecific because of similarities in the male genitalia.

***Medina confinis* sp. n.**

Holotype: ♂. Locus typicus: RUSSIA: Ussuria: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993. On edge of broadleaf forest. Swept from flowers of *Anthriscus aemula*. Leg. C. LANGE and J. ZIEGLER. 3 paratypes (♀♀) with following data: RUSSIA: Ussuria: Primorskiy Kray: (26) Samarka 70 km N of Chuguyevka, Gordeyevskaya Mtn., 29.V.1993, 2♀♀, leg. C. LANGE and J. ZIEGLER; (33) Biological station 30 km SE of Chuguyevka (Sikhote Alin) 650 m, 01.VI.1993, 1♀, leg. C. LANGE and J. ZIEGLER. In broadleaf and mixed forests. Swept from shrubs and low vegetation. Holotype and one paratype in the collection of the DEI; one paratype in the collection of CZE and one paratype in collection of BLKU.

Description (fig. 22, 24)

Male: Large dark species. Body length ca. 6.5 mm. **Head** (fig. 22): Vertex greyish white pollinose, at the narrowest point 0.16 of head width and 0.38 of eye width; frontal vitta 1.3 times as wide as fronto-orbital plate at the middle; face almost equal in length to frons; parafacials bare, silvery white pollinose, in horizontal position 0.45 times as wide as 1st flagellomere at middle height, in the position of head profile about 0.2 as wide as 1st flagellomere at its narrowest point; gena in horizontal position 0.15 of eye height, in position of head profile about 0.1. Inner vertical seta slightly more than 1/3 of eye height; outer vertical seta weakly developed, about 1.3 times as long as postocular hairs; ocellar seta well developed; 2 postocellar setae, apices bent forward; 1 proclinate orbital seta; 3 reclinate orbital setae; 10 frontal setae, lowest seta nearly level with middle pedicel; occiput with whitish hair, several short black setulae present; vibrissa shorter than the face (0.8 times as long), arising slightly above level of lower facial margin which is flat and not visible in profile; facial ridge with 5 fine downcurved hair-like setae on lower 2/5. Antenna with 1st flagellomere about 3 times as long as pedicel, 3.8 times as long as wide. Arista with microscopic pubescence, thickened on basal 1/3; 2nd aristomere as long as wide. Palpus black, with greyish pollinosity, shorter than 1st flagellomere (0.8 times as long). Eye bare. **Thorax:** Black in ground colour, dorsum rather thinly silver white pollinose; 5 longitudinal vittae present on scutum, ending before transverse suture, 3 inner vittae narrow, outer vitta broad and rounded. Postsutural scutum dorsally black. Hair erect, long and black, rather sparse. Anatergite with several short black hairs. 3+3 acrostichal setae, 2+3 dorsocentral setae; 2 katepisternal setae. Scutellum black without pollinosity, subscutellum whitish grey pollinose; one pair each basal, lateral, and subapical setae present, apical seta absent; 2 pairs of preapical setae; basal and lateral setae subequal in length to each other; subapical setae strongest. **Wing:** Hyaline; lower calypter whitish yellow; tegula black, basicosta dark brown; halter yellow. Costal seta not differentiated. R4+5 with 1-2 setulae at base dorsally and ventrally. Length of vein M from R4+5 to crossvein dm-cu about 0.6 times distance between R4+5 and bend of vein M. Vein M from dm-cu crossvein to its bend 0.73-0.85 times as long as distance between the bend and wing margin extending along vein M. Cell R4+5 open. **Legs:** Black; fore tibia with 1 posterior seta. Mid tibia with 1 anterodorsal, 2 posterodorsal and 1 ventral setae. Hind tibia with 6 irregular anterodorsal, 3 posterodorsal and 3 ventral

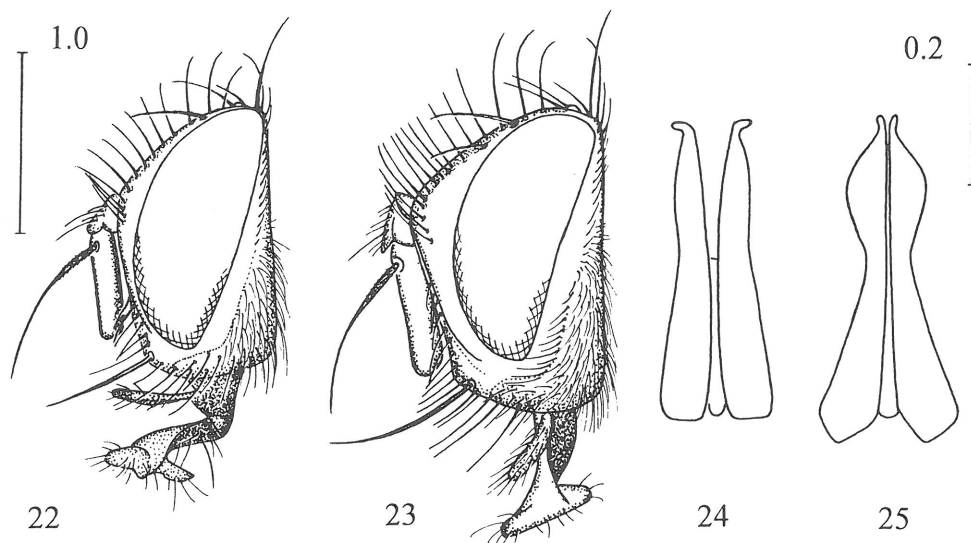
*Medina confinis* sp. nov.*Medina collaris**M. confinis**M. collaris*

Fig. 22-25 Males of *Medina* spp. Head in lateral view and cerci in caudal view. 22, 24 *Medina confinis* sp. n.; 23, 25 *Medina collaris* FALLÉN, 1820. Hair omitted on cerci.

setae. Fore claws almost equal in length to 5th tarsomere, 0.65 times as long as 4th and 5th tarsomeres together. **Abdomen:** Black, dorsum with bands of grey pollinosity. 3rd and 4th terga laterally yellow in ground color; mid dorsal longitudinal vitta present. Hair fine, long and black, longest on ventral and lateral portion; 1 pair median marginal, several laterodiscal and 1-2 each lateral marginal setae on syntergum 1+2 and 3rd tergum; 2 pairs of median discal setae on 3rd tergum; a row of 18 marginal and 2 pairs of median discal setae on the 4th tergum; 5th tergum with two rows of discal setae and a row of marginal setae. **Male genitalia** (fig. 24): Cerci divergent, bent laterally at apices, apical portion not broadened.

Female: Similar to ♂. Differences: Body length 5.5 mm. **Head:** Vertex at the narrowest point 0.25-0.27 of head width and 0.65-0.75 of eye width; 1st flagellomere 3.3-4.2 times as long as pedicel; palpus on apex slightly swollen; 2 proclinate and 2 reclinate orbital setae present, anterior seta of both stronger than posterior ones; 7 frontal setae; parafacials in horizontal position 0.6-0.7 as wide as 1st flagellomere at middle height, in position of head profile (at its narrowest point) 0.3-0.4; 1st flagellomere 3.1-3.5 times as long as pedicel; 1st flagellomere longer than in male. **Legs:** Fore claws shorter than 5th tarsomere.

Remarks

This species seems to be related to *M. collaris* FALLÉN (fig. 23, 25) and its allies, such as *M. fucisquama* MESNIL and *M. abdominalis* MESNIL. In the structure of the male genitalia this species is similar to *M. fucisquama*, but the cercus is not narrowed near middle. This species also resembles *M. abdominalis*, but the male cerci are not narrowed toward apex and the female lacks dense rows of short comb-like spinules on abdominal venter.

Oswaldia intermedia sp. n.

Holotype: ♂. Locus typicus: RUSSIA: Ussuria: Primorskiy Kray: (26) Samarka, 70 km N of Chuguvevka, 30.V.1933, leg. C. LANGE and J. ZIEGLER (DEI). Paratypes: same data as holotype: 2♂♂ 2♀♀; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 10-11.VI.1993, leg. C. LANGE and J. ZIEGLER, 1♂; same locality and collectors as preceding, 14.VI.1993, 1♂; (39) Zapovednik "Kedrovaya Pad" W of Vladivostok, leg. KASPARYAN 1981 (ZMAS): 01.VII. (1♀), 03.VII. (7♀♀), 05.VII. (3♀♀), 06.VII. (3♀♀) and 07.VII. (3♀♀). In broadleaf forests. Swept from low vegetation together with *Oswaldia muscaria* (FALLÉN). Holotype and four paratypes (3♂♂ 2♀♀) in the collection of the DEI; one paratype in the collection of CZE, one paratype in the collection of SMNS and 17 paratypes in the collection ZMAS.

Description (fig. 26-31)

Male: Dull yellowish rather slender form, similar to *O. muscaria*. Body length: 5.3-7.1 mm. **Head** (fig. 26): Densely pale yellowish grey pollinose, parafacial and face sometimes white; frontal vitta brown; antenna and arista black. Vertex 0.26-0.29 of head width; frontal vitta slightly widened anteriorly, about 2 times as wide as fronto-orbital plate at middle; parafacial bare, well narrowed below, about 2/5 as wide as 1st flagellomere at middle height in horizontal position; gena narrow, 0.15-0.18 of eye height in horizontal position; face well concave, lower margin weakly produced forward, not extending beyond vibrissal angle; occiput rather weakly bulged. Inner vertical seta strong, about 2/3 of eye height; outer vertical seta fine hair-like, about 1/2 as long as inner seta; ocellar seta about 3/4 as long as inner vertical seta; 2 reclinate orbital setae, anterior seta stronger than posterior one and about as long as inner vertical seta; 6-7 frontal setae, lowest seta nearly level with apex of pedicel; fronto-orbital plate with rather sparse short fine hairs; vibrissa nearly level with lower margin of face; facial ridge with fine short setulae on lower 1/3-2/5; occiput with a row of fine black setulae. Antenna falling only slightly short of lower margin of face; 1st flagellomere about 4-4.5 times as long as pedicel, 3.2-3.5 times as long as wide. Arista thickened on basal 1/4-1/5; 2nd aristomere as long as wide. Palpus dark brown, sometimes paler apically, short, nearly cylindrical, slightly more than 1/2 length of 1st flagellomere. Eye bare. **Thorax:** Black in ground color; densely pale yellowish grey pollinose on dorsum, dark greyish on pleura; 4 rather broad longitudinal vittae on presutural area of scutum, median 2 vittae sometimes fused with each other to form a broad median vitta, broadly black from transverse suture to posterior 1/2 between intra-alar areas on postsutural scutum. Postpronotal lobe with 3 setae arranged in triangle; 1(rarely 2)+2-3 acrostichal setae; 2+3 dorsocentral setae; 0+3 intra-alar setae; 2(rarely 1)+1 katapisternal setae; anatergite bare. Scutellum black, pale yellowish grey pollinose on apical 1/3; distance between bases of subapical scutellar setae about 2/3 that between basal and subapical setae of corresponding side; apical scutellar seta absent. **Wing:** Hyaline, slightly and evenly tinged with pale brown; basicosta black; lower calypter pale brownish. Second costal sector haired below, sometimes sparsely so; relative lengths of costal sectors 2nd, 3rd and 4th approximately as 2:5:2.5; vein M from dm-cu crossvein to its bend about 1.5 times as long as distance between the bend and wing margin extending along vein M. **Legs:** Black; pulvilli pale yellowish. Fore tibia with 2 posterior setae; mid tibia with 2 anterodorsal, 2 posterodorsal and 1 ventral setae; hind tibia with a row of 7-8 anterodorsal, 2-3 posterodorsal and 2 ventral setae, with 2 preapical dorsal setae. Claws and pulvilli long. **Abdomen:** Black in ground color; dorsum densely pale yellowish grey pollinose, with tessellate appearance, the pollinosity faded posteriorly on each tergum, venter greyish white pollinose. Syntergum 1+2 excavated to posterior 1/2 dorsally;

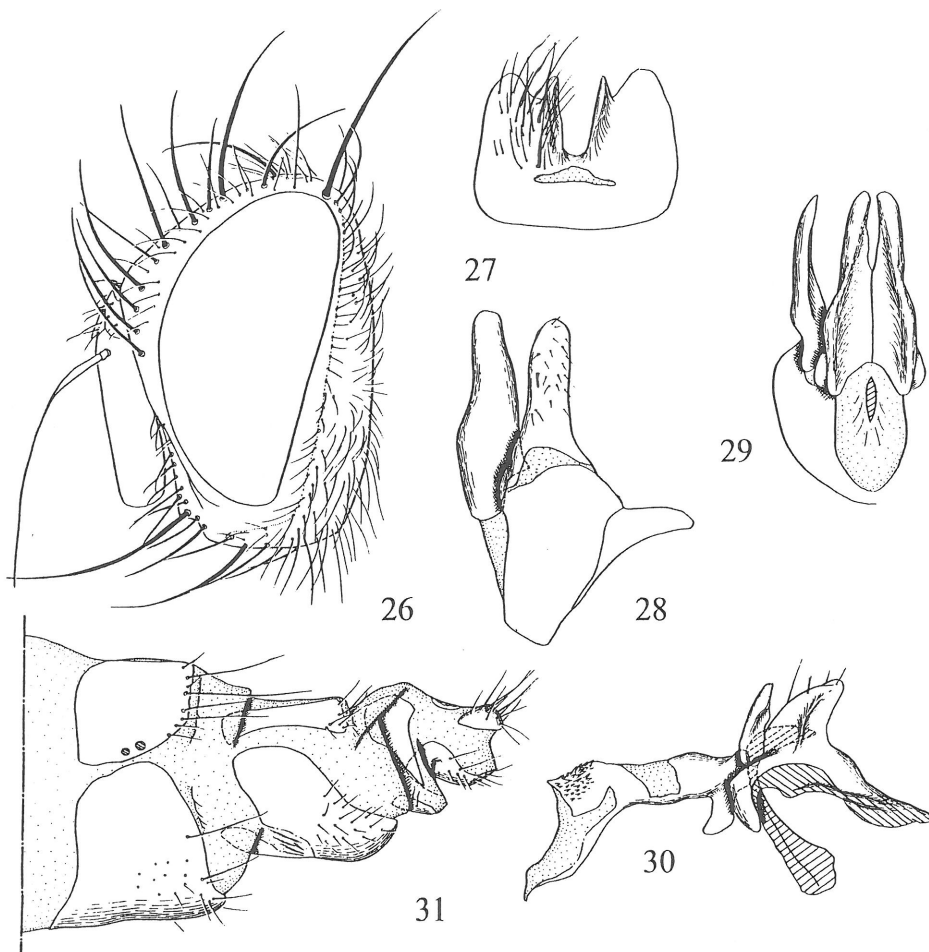


Fig. 26-31 Head and genitalia of *Oswaldia intermedia* sp. n. **26** Male head in lateral view. **27** Male 5th abdominal sternum. **28, 29** Epandrium, surstyli and cerci in lateral and caudal view. **30** Hypandrium, praegonite, postgonite and aedeagus in lateral view. **31** Female postabdomen.

hairs fine rather long and sparse, recumbent on discal portion of 3rd and 4th terga and erect on sides and on 5th tergum, with 1 pair strong median marginal and 1 each strong lateral marginal setae; 3rd tergum with 1 pair rather strong median discal, 1 pair strong median marginal and 1 each lateral marginal setae; 4th tergum with 1 pair strong median discal, 1-2 each rather short lateral discal and a row of strong marginal setae; 5th tergum with regularly set rows of median and marginal setae; 5th sternum with strong posteroventral extension of posterior lobe nearly reaching to level of posterior margin of the lobe (fig. 27). **Male genitalia** (fig. 28-30): Cerci narrowly separated from each other on apical 2/5; surstylus in lateral view weakly narrowed to blunt apex, with dense fine short hairs; distiphallus strongly widened apically.

Female (fig. 31): Differing from male as follows: Vertex 0.31-0.32 of head width; frontal vitta nearly parallel sided, about 1.5 times as wide as fronto-orbital plate at middle; inner vertical seta about 4/5 of eye height; outer vertical seta stronger, 2/3 of inner; pre- and post-orbital setae; 4-5 frontal

setae; hairs on fronto-orbital plate sparse; parafacial at most only slightly narrower than 1st flagellomere at middle height; gena 0.16-0.18 of eye height; antenna falling short of lower margin of face by about 3/4 length of pedicel, 1st flagellomere about 3 times as long as pedicel and about 4.5 times as long as wide; palpus more broadly pale reddish on apical portion; mid tibia with 3 ad setae; claws and pulvilli short; abdominal hairs recumbent.

Remarks

This species resembles *O. muscaria*, but is different from it in having very narrow gena and vertex and usually 1+2 acr setae. The Japanese species *O. hirsuta* also seems to be related to this species in the structure of the male genitalia, although *O. hirsuta* is fairly different in the chaetotaxy of the thorax and abdomen.

Paratryphera grandis sp. n.

Holotype: ♂. Locus typicus: RUSSIA: Ussuria: Khabarovskiy Kray: Shivki Valley N of Boitsovo 26 km N of Bikin, 27.V.1993. On edges of an oak forest (*Quercus mongolica*). Swept from low vegetation, leg. C. LANGE and J. ZIEGLER. Holotype in the collection of the DEI.

Description (fig. 32-35)

Male: Large species with haired parafacial. Body length ca. 9.5 mm. **Head** (fig. 32): Densely pale yellowish grey pollinose, darkened on upper fronto-orbital plate; antenna and arista black. Vertex about 0.25 of head width; frontal vitta widened anteriorly, subequal in width to fronto-orbital plate at middle; parafacial narrowed below, subequal in width to 1st flagellomere at middle height in horizontal position; gena about 0.4 of eye height in horizontal position; occiput rather well bulged. Inner vertical seta about 3/5 of eye height; outer vertical seta absent; ocellar seta strong, slightly longer than 2/3 of inner vertical seta; 1 reclinate orbital seta, subequal in length to ocellar seta; 10-12 long frontal setae, lowest seta inserted nearly level with apex of pedicel; fronto-orbital plate with rather dense long fine hairs which descend to upper 1/2 of parafacial; vibrissa level with lower margin of face; facial ridge with some fine setulae on lower 1/3; occiput with 2-3 rows of black hairs. Antenna falling short of lower margin of face by about 1/2 length of pedicel; 1st flagellomere about 3.5 times as long as pedicel, about 2.8 times as long as wide. Arista thickened on basal 2/5; 2nd aristomere about 3 times as long as wide. Palpus reddish yellow, darkened on basal 1/2, clavate. Eye dense haired. **Thorax:** Black in ground color, densely greyish pollinose, dorsum slightly brownish, with 4 rather broad black longitudinal vittae, inner vittae fused with each other on postsutural scutum. Postpronotal lobe with 4 setae, 3 basal setae set in a straight line; 3+4 dorsocentral setae; 2+1 katapisternal setae; katapimeron sparsely haired; distance between bases of two subapical scutellar setae slightly less than twice that between basal and subapical setae of corresponding side; lateral scutellar seta absent. **Wing:** Hyaline, slightly and evenly tinged with pale yellow; basicosta black; lower calypter pale brown. Second costal sector haired below; relative lengths of costal sectors 2nd, 3rd and 4th approximately as 2:5.5:2.5; vein M from dm-cu crossvein to its bend about 2 times as long as distance between the bend and wing margin. **Legs:** Black, pulvilli pale brownish. Fore tibia with 2 posterior setae; mid tibia with 1 anterodorsal and 3 posterodorsal setae, upper seta fine, and 1 ventral setae; hind tibia with a row of sparsely set anterodorsal, 3 posterodorsal and 2-3 ventral setae. Claws and pulvilli very long. **Abdomen:** Black in ground color, densely greyish pollinose, dorsum of 3rd tergum and posterior 1/3 of 4th brownish; mid dorsal longitudinal vitta well developed on 3rd to 5th terga; venter evenly pale greyish white pollinose. Hair on dorsum dense fine rather long and erect, strong and bristle-like on mid dorsal

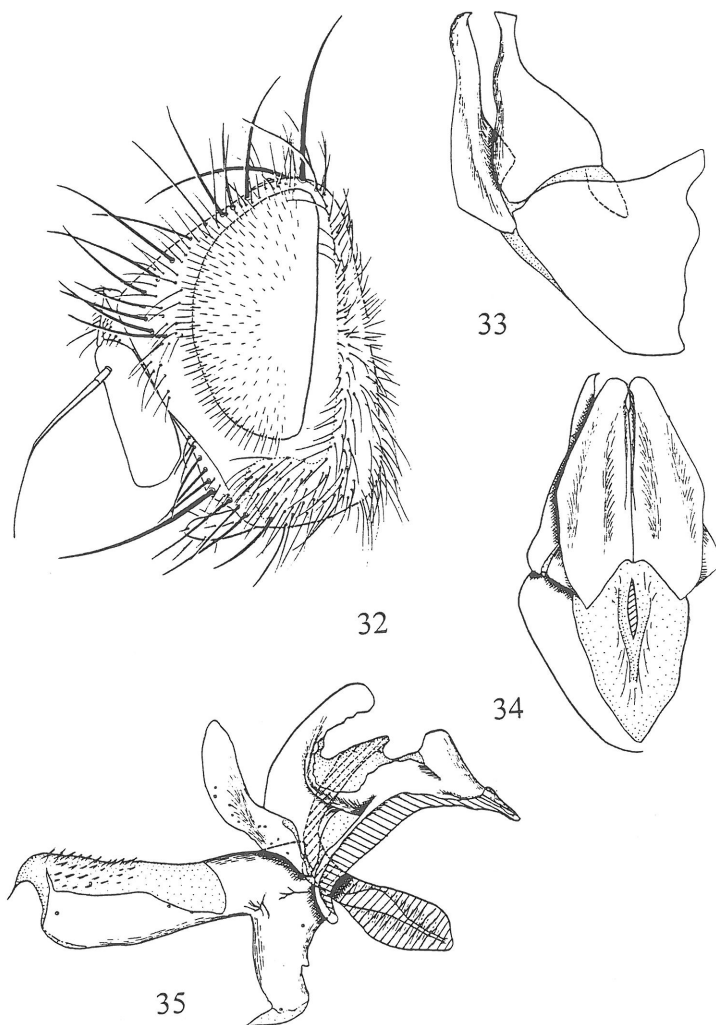


Fig. 32-35 Male head and genitalia of *Paratryphera grandis* sp. n. 32 Head in lateral view (holotype). 33, 34 Epandrium, surstyli and cerci in lateral and caudal view. 35 Hypandrium, prae- and postgonite and aedeagus in lateral view. Hair omitted on postabdomen.

portion of each tergum and sparser and stronger on venter; syntergum 1+2 with 1 pair rather short median marginal and 1 each strong lateral marginal setae; 3rd terga with 4 rather short irregularly set median discal, 1 pair strong median marginal and 1 strong lateral marginal setae; 4th tergum with 2 pairs rather short median discal and a row of strong marginal setae; 5th tergum with rows of discal and marginal setae. **Male genitalia:** Cerci fused with each other, in dorsal view triangular, apical portion blunt, median longitudinal area weakly shallowed, with long hairs; surstylus in lateral view strongly narrowed to apex, apical portion slightly elongate, without hair. Epiphallus strong.

Female: Unknown.

Remarks

This species is easily recognized by its broad vertex, haired parafacial and large size. In the structure of the male genitalia this species is characterized by the strong epiphallus, well developed gonopod and dense and long hairs on the cerci (fig. 32-35).

Erythrocerca longicornis (BRAUER and BERGENSTAMM, 1891)

Redescription of *Paraneaera longicornis* BRAUER and BERGENSTAMM, 1891: 355. Holotype (♂) in Naturhistorisches Museum Wien. Locus typicus: "Askold" (label); "Askold Insul. Dr. Schnabl." (description); "Insel Askold bei Wladivostok" (HERTING, 1974: 139) = RUSSIA: Ussuria: (42) Primorskiy Kray: Zaliv Petra Velikogo, Askold Is. SE of Vladivostok.

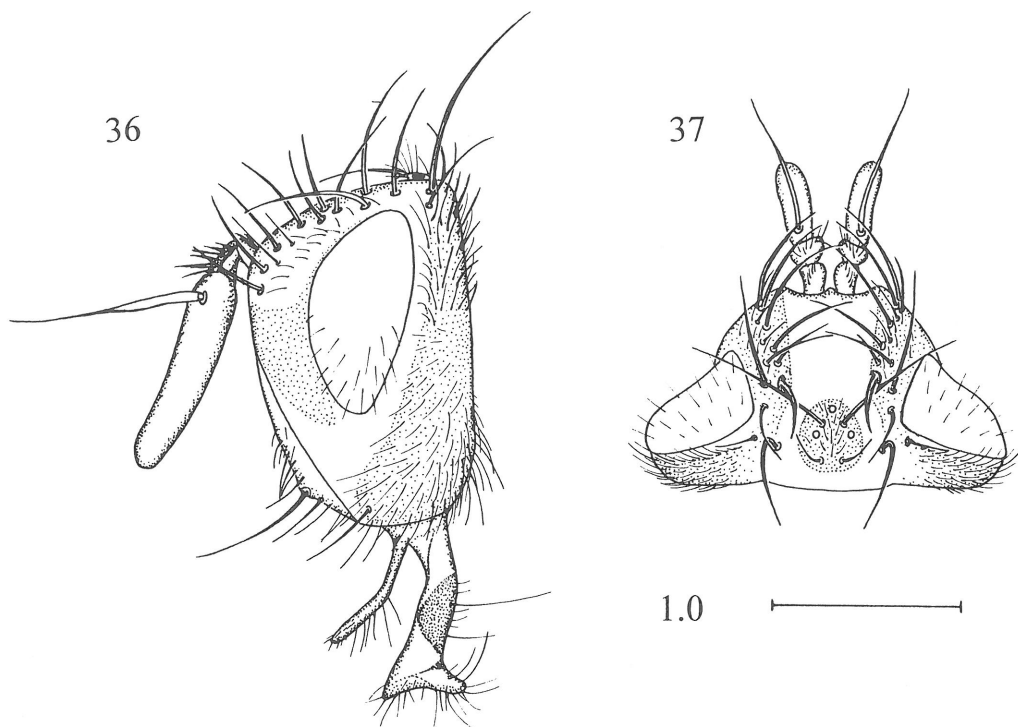


Fig. 36, 37 Male head of *Erythrocerca longicornis* (BRAUER and BERGENSTAMM, 1891) in lateral and dorsal view (holotype).

Body length: ca. 6 mm. **Head** (fig. 36, 37): Vertex grayish pollinose, at the narrowest point 0.40 of head width and 1.38 of eye width; frontal vitta 2 times as wide as fronto-orbital plate at middle; face 1.35 times as long as frons in profile; parafacial bare, gray pollinose, in horizontal position 1.3 as wide as 1st flagellomere at middle height, in position of head profile 1.1 as wide as 1st flagellomere at the narrowest point. Gena in horizontal position 0.7 times as wide as eye height, in position of head profile 0.55. Inner vertical seta subequal in length as the eye height; outer vertical seta about 0.5 as long as inner vertical seta; ocellar seta strong and semiproclinate; 1 pair postocellar setae; 2 strong reclinate orbital setae, anterior seta stronger than posterior one; 5-6 frontal setae, fronto-orbital plate with fine hair-like setae, the posterior of

these strongest; lowest frontal seta nearly level with base of arista; occiput with rows of fine black setulae and on upper half whitish hair; vibrissa shorter than the face (0.5), arising slightly above level of lower facial margin which is not visible in profile; facial ridge with a small number of hair-like setae on lower 1/3. Antenna with 1st flagellomere about 7 times as long as pedicel, 4.5 times as long as wide. Arista bare, thickened on basal 0.45, 2nd aristomere as long as wide. Palpus yellow, shorter than 1st flagellomere (0.6 times as long). Eye rather sparsely haired with long hair. **Thorax:** Black in ground colour, dorsum grey pollinose; 4 diffuse longitudinal vittae present. Hair erect, black and rather thin. Prosternum haired; Proepisternum, katepimeron and anatergite bare. 3+3 acrostichal setae, (2)3+4 dorsocentral setae, 1+4 intralar setae, 3 supra-alar setae, 1 presutural seta. Postpronotal lobe with 3 setae in straight line, 1 posthumeral seta, 2 notopleural setae and 3 katepisternal setae. Scutellum black, grey pollinose; one pair each strong basal, lateral, subapical and preapical setae present, apical seta hair-like and rather parallel; basal and subapical setae strongest and subequal in length. **Wing:** Hyaline; tegula black, basicosta light brown; halter yellow. Costal seta present, 2 times as long as costal setulae. R4+5 with 3 setulae at base dorsally and 1 setula ventrally. Dm-cu crossvein attached to vein M nearly 0.6 way between r-m crossvein and its bend. Cell R4+5 open. **Legs:** Black. Fore tibia with 1 posterior and 1 posterodorsal seta. Mid tibia with 1 anterodorsal, 2 posterodorsal and 1 ventral setae. Hind tibia with a row of rather irregular anterodorsal setae, 2 strong posterodorsal, 2 short anteroventral and 3 strong dorsal preapical setae. Fore claws short, 1/2 times as long as 5th tarsomere. **Abdomen:** Black, with grey pollinosity, rather dense laterally. Mid dorsal longitudinal vitta present, rather diffuse. Hair fine, black and semi-erect, rather sparse. 1 pair median marginal and 1 each lateral marginal setae on Syntergum 1+2. A row of about 10 marginal setae, some irregular median discal setae and 1 lateral discal seta on 3rd tergum. A rather irregular row of about 10 marginal setae and 8 median discal setae on 4th tergum. 5th tergum with irregular setae on the posterior half. Abdominal terga 3rd:4th:5th dorsal almost as long as 1:1:0.75. Male genitalia not dissected.

Campylocheta similis sp. n.

Holotype: ♂. Locus typicus: RUSSIA: Ussuria: Primorskiy Kray: (33) Sikhote-Alin, Biological Station 30 km SE Chuguevka, 650 m, 01.VI.1993, leg. C. LANGE and J. ZIEGLER. Paratypes: RUSSIA: (17) Khabarovskiy Kray: Boitsovo N of Bikin, Kamenistaya Griva Hill, 27.V.1993, 1♀, leg. C. LANGE and J. ZIEGLER and (26) Primorskiy Kray: Samarka 70 km N of Chuguyevka, Gordeyevskaya Mtn., 29.V.1993, 1♀, leg. C. LANGE and J. ZIEGLER. On edges of broadleaf and mixed forests. Swept from low vegetation. On sprayed sugar solution (as artificial "honey dew"), too. Holotype and one paratype in the collection of the DEI; second paratype in the collection of CZE.

Description (fig. 38-42)

Male: Rather slender greyish species, similar to *C. bisetosa*. Body length: 6.3-6.5 mm. **Head** (fig. 38): Densely pale greyish pollinose; frontal vitta black when seen from behind, pale greyish in frontal view; antenna and arista brown-black. Vertex 0.24-0.25 of head width; frontal vitta nearly parallel-sided, about 2 times as wide as fronto-orbital plate at middle; parafacial narrowed below, about 5/8 as wide as 1st flagellomere at middle height in horizontal position; gena about 0.43 of eye height in horizontal position; occiput rather weakly bulged. Inner vertical seta about as long as eye height; outer vertical seta fine but distinct, slightly more than 1/2 length of inner seta; 2 postocellar setae; ocellar seta subequal in length to frontal setae; 7 frontal setae, 2 upper setae weakly reclinate, lowest seta nearly level with apex of scape; fronto-

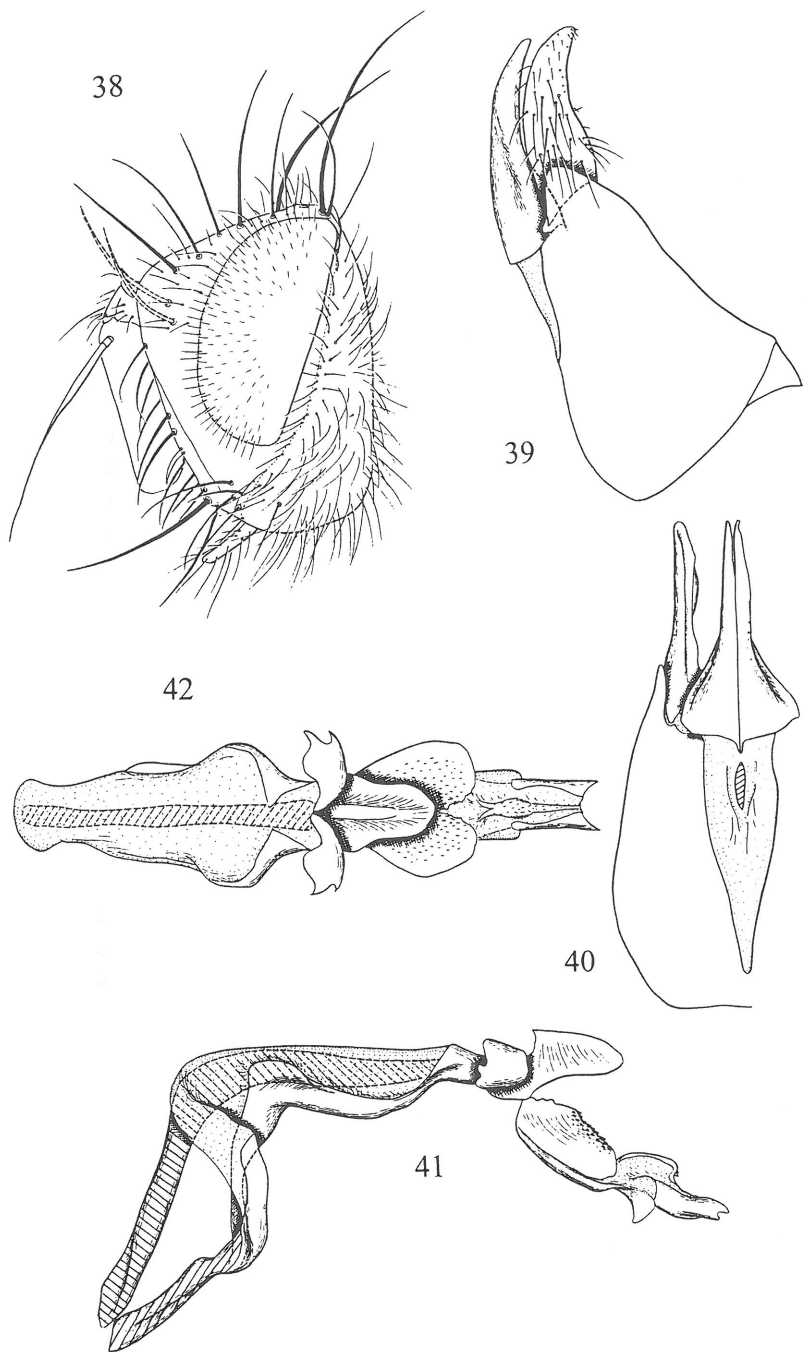


Fig. 38-42 Male head and genitalia of *Campylocheta similis* sp. n. **38** Head in lateral view (holotype). **39**, **40** Epandrium, surstyli and cerci in lateral and caudal view. **41**, **42** Hypandrium, prae- and postgonite and aedeagus in lateral and dorsal view.

orbital plate with sparse fine hairs, only a few hairs present just below lowest frontal seta; vibrissa level with lower margin of face; facial ridge with strong downcurved setae on lower 4/5; gena with fine long black hairs on anterior 1/2, 2-3 of them strong bristle-like; occiput with 2-3 rows of fine black hairs and white pile. Antenna falling short of lower margin of face by about 3/4 length of pedicel; 1st flagellomere about 5.2 times as long as pedicel, about 3 times as long as wide. Arista thickened on basal. Palpus reddish yellow, nearly cylindrical, very weakly widened apically. Eye dense haired. **Thorax:** Black in ground colour, rather thinly greyish pollinose; dorsum with 4 rather diffuse broad brown longitudinal vittae, outer vitta indistinct on postsutural scutum; 2+2 acrostichal setae; 3+3 dorsocentral setae; 2+1 katepisternal setae; anatergite bare. Scutellum black, brownish pollinose; lateral scutellar seta absent; distance between bases of two subapical scutellar setae slightly more than twice that between basal and subapical setae of corresponding side. **Wing:** Hyaline, slightly tinged with pale brown on anterior portion, distinctly tinged with brown along r-m and dm-cu crossveins, weakly so along vein M from its bend to apex; basicosta pale brownish yellow; lower calypter white. Relative lengths of costal sectors 2nd, 3rd and 4th approximately as 1:4:1.5; dm-cu crossvein attached to vein M nearly 1/2 way between r-m crossvein and its bend; last section of vein CuA1 slightly less than twice length of dm-cu crossvein. **Legs:** Black, tibiae reddish yellow; pulvilli pale brownish. Fore tibia with 2 posterior setae; mid tibia with 3 anterodorsal setae, upper seta fine, 2 posterodorsal and 2 ventral setae, upper ventral seta short; hind tibia with 2 preapical dorsal setae. Claws and pulvilli long. **Abdomen:** Black in ground colour; dorsum rather thinly greyish pollinose on anterior 2/5-2/3 of 3rd and 4th terga and anterior 3/5 of 5th, posterior portion dark brown; posterior brown portion of 3rd and 4th terga triangularly expanded to anterior portion; mid dorsal longitudinal vitta weakly developed on 3rd and 4th terga; venter evenly greyish pollinose. Hair on dorsum rather dense fine long and suberect, long and strong on side of each tergum; Syntergum 1+2 with 1 pair strong lateral marginal setae; 3rd tergum with 1 pair rather short median discal, 1 each short and fine lateral discal, 1 pair rather short median marginal and 2 strong lateral marginal setae; 4th tergum with 1 pair strong median discal, 1 short and fine lateral discal, 1 pair strong median marginal and 2-3 strong lateral marginal setae; and 5th tergum with rows of strong discal and marginal setae.

Male genitalia (fig. 39-42): Syncercus in lateral view weakly curved ventrally; surstylus in lateral view weakly narrowed and curved ventrally on apical 1/4, apex pointed, with dense long hairs.

Female: Differing from male as follows: **Head:** Densely dull yellowish grey pollinose; vertex about 0.3 of head width; frontal vitta about 1.5 times as wide as fronto-orbital plate at middle; all head setae strong; inner vertical seta slightly longer than eye height; outer vertical seta short but strong, about 2/5 as long as inner seta; 1 reclinate orbital seta; 2 strong proclinate orbital setae, anterior seta stronger than posterior seta and slightly stronger than ocellar seta; 5 frontal setae; parafacial only slightly narrower than 1st flagellomere at middle height; antenna falling short of lower margin of face by about length of pedicel, 1st flagellomere slightly less than 3.5 times as long as pedicel and about 3 times as long as wide; arista thickened on basal 1/3. **Thorax:** Dorsum pale brownish pollinose, with 4 rather distinct and narrow black longitudinal vittae; anatergite with several minute hairs. **Legs:** Mid tibia with 4 anterodorsal setae, lowest seta fine; claws and pulvilli short. **Abdomen:** Dorsum rather densely pale brownish grey pollinose, with tessellate appearance; 3rd and 4th terga each with 2-3 strong lateral discal setae.

Remarks

This species seems to be related to *C. bisetosa*, but may easily be distinguished from it by its shorter antenna.

Thelaira solivaga (HARRIS, 1780)

A key is provided for Central European species of *Thelaira* by TSCHORSNIG and HERTING (1994: 84) and for Palaearctic species by MESNIL (1944-1975: 1337-1338). The use of these keys for East Palaearctic specimens may cause some difficulties in distinguishing males of *T. solivaga* and *T. leucozona* (PANZER, 1809). Some distinguishing characters mentioned by the authors (l.c.) are variable, i.e., outer vertical seta are weak and the abdomen colour is not constant. The abdomen of *T. solivaga* ♂♂ from Ussuria is darker than in Central European specimens. These specimens are very similar to such from England and of *Thelaira solivaga americana* BROOKS, 1945 (see MESNIL, 1944-75). They may be distinguished more reliably by the structure of the male genitalia (fig. 43 and 44). The characters of male genitalia of *T. solivaga* are more similar to those of *T. nigripes* (FABRICIUS, 1794) and *Phenicellia haematodes* (MEIGEN, 1824) as shown in fig. 45, 46.

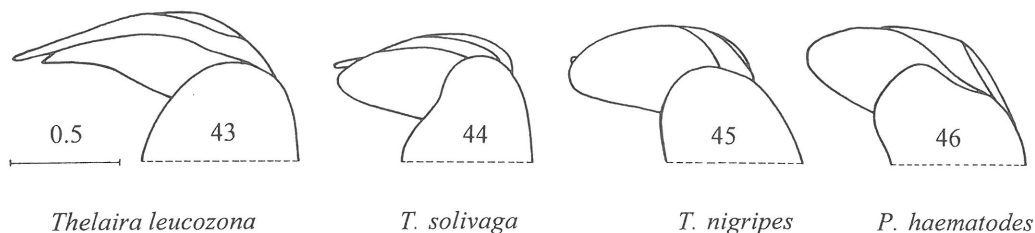
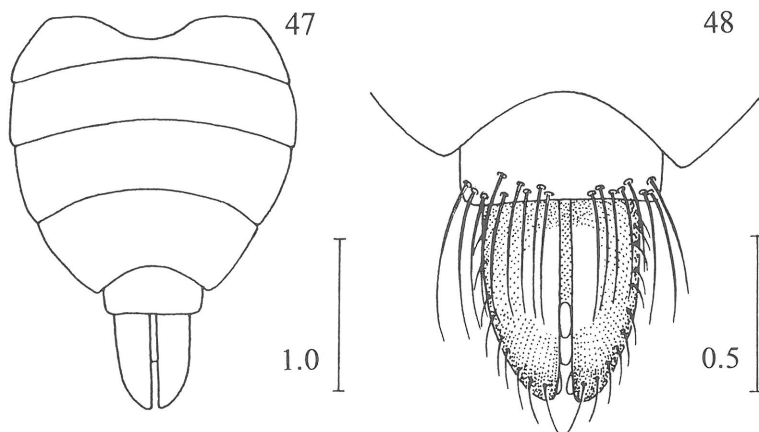


Fig. 43-46 Male genitalia of Palaearctic *Thelaira* spp. and *Phenicellia* sp. in lateral view. 43 *Thelaira leucozona* (PANZER, 1809), 44 *Thelaira solivaga* (HARRIS, 1780), 45 *Thelaira nigripes* (FABRICIUS, 1794) and 46 *Phenicellia haematodes* (MEIGEN, 1824). Hair omitted.



Riedelia bicolor, ♀

Fig. 47, 48 Female abdomen of *Riedelia bicolor* MESNIL, 1942, in dorsal view from behind and post-abdomen in dorsal view. Setae and hair mostly omitted.

Riedelia bicolor MESNIL, 1942

The previously unknown female of this East Palaearctic species was obtained in Ussuri and we find it very similar to the male. The female terminalia are strongly modified and very characteristic (fig. 47, 48): 6th abdominal tergum is produced posteriorly and followed by an elongate and strongly sclerotized 7th tergum which forms a part of semi-tubular ovipositor; the 7th tergum bears strong and erect setae marginally.

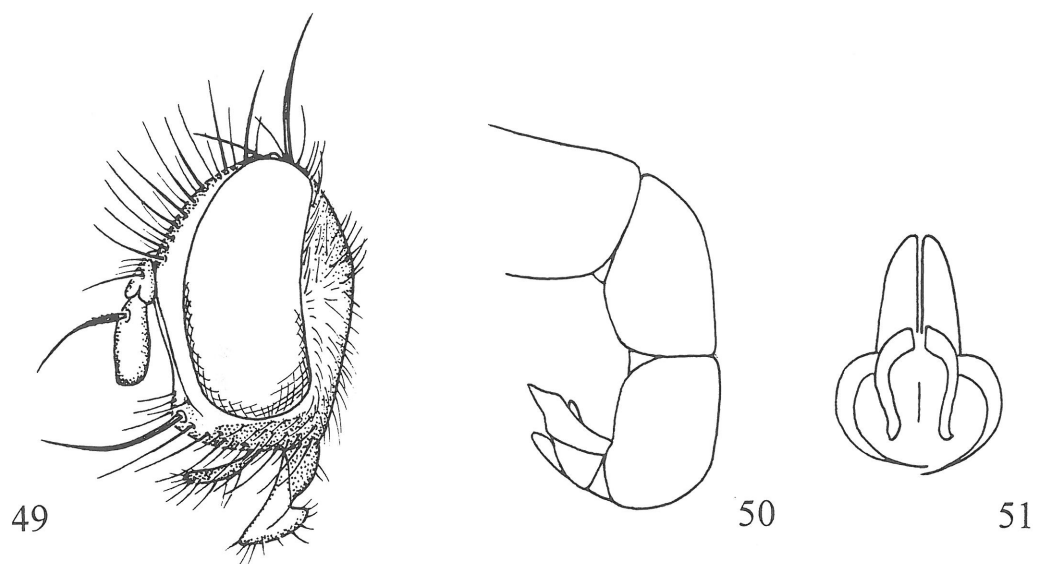
Hemyda hertingi sp. n.

This new species is dedicated to Dr BENNO HERTING, Stuttgart, who kindly left us the description of this species.

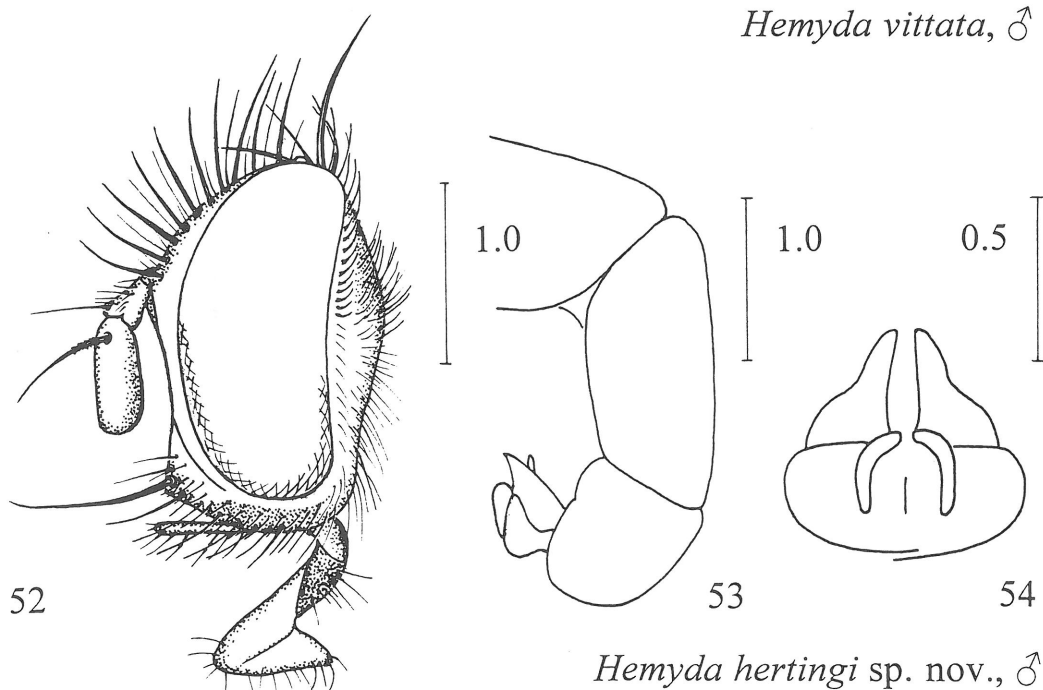
Holotype: ♂. Locus typicus: RUSSIA: Ussuria: Primorskiy Kray: (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 14.VI.1993. In broadleaf forest swept from low vegetation. Leg. C. LANGE und J. ZIEGLER. 5 paratypes (♂♂) with the same data. Further paratypes (4♂♂, 10♀♀) with following data: RUSSIA: Primorskiy Kray: (20) Tamga 17 km NE of Lesozavodsk, 24.V.1993, 1♂; (21) Sikhote Alin Zapovednik, 04.VIII.1978, 1♂, leg. SHERBAKOV (ZMAS); (26) Samarka 70 km N of Chuguyevka, 30.V.1993, 1♂, leg. C. LANGE und J. ZIEGLER; (31) Ussuriysky Zapovednik 33 km SE of Ussuriysk, 11.VI.1993, 1♀; 14.VI.1993, 6♂♂, leg. C. LANGE und J. ZIEGLER. (37) Anisimovka 70 km E of Vladivostok, Sukhodol Vall., 06.VI.1993, 1♀; 09.VI.1993, 1♀, leg. C. LANGE und J. ZIEGLER; (37) Tigrovaya Vall. near Partizansk, 04.VIII.1926, 1♂, leg. KUZNETZOV (ZMAS); (38) "Suchanskiy Rudnik" near Partizansk, 22.IX.1931, 2♂♂, leg. PALSHIKOV (ZMAS); (39) Zapovednik "Kedrovaya Pad" W of Vladivostok, 25.VII.1926, 1♀, leg. KUZNETZOV (ZMAS); 16.VII.1980, 1♀, leg. MICHAILOVSKAYA (IBPV). TAIWAN: "Gebiet des Shisha-Stammes, Formosa" (= "Area of the Shisha-people, Taiwan"); leg. H. SAUTER, V.-VI.1912 (DEI); Puri, 27.V.1981, leg. M. IWASA (BLKU). In broadleaf forests and on their edges. Swept from shrubs and low vegetation. In a Malaise trap, too. Holotype and five paratypes in the collection of the DEI; two paratypes in the collection of SMNS, five paratypes in the collection of ZMAS, one paratype in collection of IBPV, three paratypes in the collection of CZE and two paratypes in collection of BLKU.

Description (fig. 52-54, 58-60, 69)

Male: A black species with yellowish 3rd and 4th abdominal terga; similar to *Hemyda vittata*. Body length 8.0-10.0 mm. **Head** (fig. 52): Vertex and upper parafacial densely golden yellow pollinose, lower parafacial, face, gena and occiput densely whitish pollinose; upper fronto-orbital plate, narrow upper occiput and median occipital plate black, somewhat shining. Frons at its narrowest point 0.26-0.29 of head width and 0.7-0.8 of single eye width; face 1.05-1.2 times as long as frons in profile; frontal vitta broad, widened posteriorly, about 3 times as wide as fronto-orbital plate at middle; ocellar triangle large, occupying nearly posterior 2/3 of frons; parafacial in horizontal position 0.55-0.65 times as wide as 1st flagellomere at middle height, in position of head profile 0.20-0.35 times as wide as 1st flagellomere at its narrowest point; gena in horizontal position 0.09-0.13 of eye height, in position of head profile 0.03-0.09. Inner vertical seta 0.4-0.5 of eye height; outer vertical seta only slightly longer than postocular hairs; ocellar seta strong; 4 postocellar setae, apices strongly bent forward; proclinate and reclinate orbital setae absent; 8-10 frontal setae, lowest seta nearly level with base of pedicel, several weak setae and long hairs present among them; parafacials bare; occiput with densely whitish pile and several short black setulae on upper portion; vibrissa 0.75-0.90 times as long as face, arising near the level of lower facial margin which is not visible in profile; facial ridge with 2-4



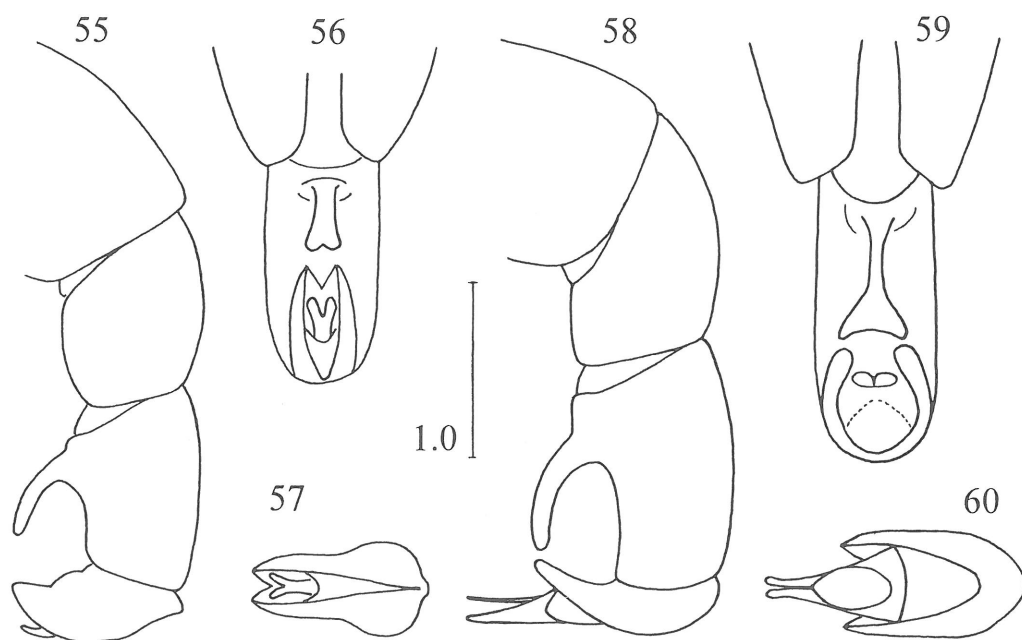
Hemyda vittata, ♂



Hemyda hertingi sp. nov., ♂

Fig. 49-54 Males of *Hemyda* spp. Head in lateral view, postabdomen in lateral and caudal view. 49-51 *Hemyda vittata* (MEIGEN, 1824) and 52-54 *Hemyda hertingi* sp. n. Setae and hair omitted on postabdomen.
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fine setae just above vibrissa. Antenna with 1st flagellomere 2.7-3.2 times as long as pedicel and 2.6-3.3 times as long as wide. Arista with microscopic pubescence, thickened on nearly basal 2/5; 2nd aristomere almost 2.0 times as long as wide. Palpus black or dark brown, thickened apically, subequal in length to or slightly longer than 1st flagellomere (1.0-1.1). Eye bare, kidney-shaped in lateral view. **Thorax:** Black in ground colour, dorsum greyish pollinose on postpronotal lobe, notopleural region, narrow posterior portion of presutural area along transverse suture and intra-alar region of postsutural scutum, pleura broadly silvery grey pollinose. Hair erect and black; 1-2+1-2 acrostichal setae; 3+3 dorsocentral setae; 0+2 intra-alar setae; 2 supra-alar setae; 2-3 postpronotal setae arranged in a straight line; 1+1 katepisternal setae. Scutellum black, with 3 pairs of marginal setae, basal, subapical and apicals, lateral setae absent; basal and subapical setae strong, subequal in length; apical setae strong, crossing suberectly. **Wing:** Hyaline, evenly tinged with pale brown; lower calypter whitish; tegula black; basicosta yellow to light brown; halter yellow. Costal seta not differentiated; costa setulose below from base to apex of 3rd costal sector; vein R4+5 with 3-6 very fine setulae at base dorsally and ventrally; vein M from dm-cu crossvein to its bend about 1.6 times as long as distance between the bend and wing margin extending along vein M; cell r4+5 open. **Legs:** Black or dark brown. Fore tibia with 2 weak posterior setae. Mid tibia with 2 anterodorsal, 2 posterodorsal and 1 ventral setae. Hind tibia with 3 anterodorsal, 3 posterodorsal and 3 ventral setae, and with 2 preapical dorsal setae. Fore claws shorter than 4th and 5th tarsomeres together, 1.3-1.5 times as long as 5th. **Abdomen:** Broadly yellow, without pollinosity, black on mid dorsal longitudinal area of syntergum 1+2 to 3rd tergum and entire 4th and 5th terga.



Hemyda vittata, ♀

Hemyda hertingi sp. nov., ♀

Fig. 55-60 Females of *Hemyda* spp. Postabdomen in lateral, caudal and in ventral view in front. 55-57 *Hemyda vittata* (MEIGEN, 1824) and 58-60 *Hemyda hertingi* sp. n. Setae and hair omitted.

Third tergum 1.7-1.8 times wider as long; 5th tergum strongly curved anteroventrally. Hairs black, spinulose and decumbent on the 3rd and 4th terga, fine and erect on 5th and 6th; setae relatively variable; discal setae absent, some laterodiscal setae on syntergum 1+2 and (seldom) on 3rd tergum; 1 pair median and 2-3 each lateral marginal setae on syntergum 1+2; 1-2 pairs median and 4-6 each lateral marginal setae on 3rd tergum; a row of 8-12 marginal setae on 4th tergum and 4-8 hair-like marginal setae on 5th. **Male postabdomen** (fig. 53, 54): Syntergum 6+7th in lateral view shorter than the 5th tergum.

Female: Similar to ♂. Differences: Body length 8.0-9.5 mm. **Head:** Frons and parafacial silvery white pollinose; frons at its narrowest point 0.30-0.35 of head width and 0.85-0.95 of eye width; 1st flagellomere 3.0-3.4 times as long as pedicel and 2.6-3.0 times as long as wide; 1 lateroclinale prevertical seta; 2 proclinate orbital seta; outer vertical setae undeveloped, hair-like, about as long as postocular hairs. **Legs:** Fore claws shorter than 5th tarsomere. **Abdomen:** 3rd tergum black on posterior portion. **Female postabdomen** (fig. 59, 60): Syntergum 6+7 longer than 5th tergum, with a triangular fork ventrally.

Remarks

This new species is close to *Hemyda vittata*, but may be easily distinguished from it by the narrower vertex, longer face and golden yellow pollinose head in the male. The male and female genitalia of this species are much different from those of *H. vittata* as shown in fig. 49-60. Two paratypes from Taiwan, one of which Dr HERTING once labelled as a paratype of a new species, do not differ from specimens from Ussuria. The third specimen from Taiwan, Dr HERTING once labelled as the holotype of a new species in the collection of DEI but did not publish, differs from our specimens in having more slender 1st flagellomere (about 3.5 times as long as wide and 4.0 times as long as pedicel), more sparse hairs on fronto-orbital plate, fewer frontal setae (only 7) and almost bare facial ridge above the vibrissa. Moreover, the fore claws are longer and wing cell r4+5 is closed at wing margin. The wings are evenly brown and darker than our specimens. The 2nd abdominal tergum is completely yellow without black medio-dorsal stripe. We think that these differences are possibly included in individual variation of the same species.

4.3. Zoogeographical remarks

Among 362 tachinid species recorded from Ussuria, 317 species (87.6%) are Palearctic in distribution (tab. 5). About 63 percent of them (199 species) are commonly found in the Eurosiberian area. Many of these species are widespread and classified as holo- and transpalearctic, Eurosiberian, Siberian or Eastsiberian in biogeographical distribution types (see fig. 62). Of the 199 species distributed in Ussuria and the Eurosiberian subregion, we found 172 species (86%) in Germany also. This indicates the faunal uniformity of the Eurosiberian subregion. The species distributed Eurosiberian seems to have originated in the northern cool temperate zone and mostly widespread after the Pleistocene.

About 32.6 percent (118 species) of the Palearctic species seems to be restricted to rather narrow areas in the Far East and they seem to represent the Manchurian faunal element in the Palearctic fauna (see fig. 61, 62). As for the phylogenetic point of view, some of them have close relatives in the Eurosiberian areas and the others in northeastern Oriental Region. The former species are considered the eastern counterparts of Eurosiberian species which adapted

and diversified to the Far East after the Pleistocene: e.g., *Parasetigena takaoi*, *Paratrixa takanoi*, *Oswaldia intermedia*, *Smidtia* spp., *Gonia ussuriensis*, *Zophomyia nitens*, *Campylocheta* spp. and *Dufouria nova*. On the other hand the latter species may be considered to have been derived from ancestors which had occurred in the southeast Palaearctic or northeastern Oriental Region. It is possible that these ancestors survived in the areas during the glacial era and later extended their distribution to the north or south and in some cases to the west: e.g., *Ctenophorinia* spp., *Meigenia velutina*, *Dolichocoxys rossica*, *Prodegeeria japonica*, *Phytorophaga nigri-ventris*, *Biomeigenia* spp., *Compsiluroides flavipalpis*, *Metadrinomyia proclinata*, *Calozenillia tamara*, *Euhygia brevicornis*, *Tachina* (*Servillia*) spp., *Linnaemya amicorum*, *L. bella*, *Lyphosia barbata*, *Janthinomyia elegans*, *Trichoformosomyia sauteri*, *Dexiomimops rufipes*, *Parerigone aurea* and *Zambesomima hirsuta*. A good example of this group of species is the subgenus *Servillia* of the genus *Tachina*. *Servillia* is very diverse in China, Japan and Ussuria with a few species extending to western Europe and mountainous areas of Southeast Asia. A similar distribution pattern to *Servillia* can be seen in the tribe Theclini of the lycaenid butterflies, although a few species of the Theclini extend to the Nearctic Region.

About 12.4 percent of the Ussurian tachinids (45 species) are distributed in more than one faunal region. Most of them are considered mainly Oriental in their distribution and they are found in Ussuria as well as in Japan: e. g. *Exorista hyalipennis*, *Uromedina atrata*, *Mikia tepens*, *Linnaemya atriventris*, *Demoticoidea pallidus*, *Sumpigaster sumatrensis*, *Hamaxia incongrua*, *Dexia fulvifera*, *Perigymnosoma globulum* and *Calyptromyia barbata*. Most of them were not recorded from Northeast China and Korea. It is not certain if they really do not occur in Korean Peninsula and Northeast China because of the lack of sufficient knowledge on the tachinid fauna in these areas. At present they show a disjunct distribution between Southeast and Northeast Asia. They seem to have originated in the Oriental Region and extend their distribution northwards.

We only found a small number of Holarctic species. Of these, *Thelaira solivaga* was recorded for the first time in Ussuria, and that is worth mentioning. It is found in three disjunct areas: West Palaearctic, East Asia and North America. The American specimens, the specimens from England and from Ussuria are very similar and differ from Central European specimens only in colour. MESNIL (1944-75: 1340) knew this species only from Europe and North America. He thought that *Thelaira solivaga* was a species with an amphiatlantic distribution type. That would correspond to a disjunction during the Tertiary period. This, however, now seems to be unlikely. On the contrary, this disjunction occurred more recently. The discovery of *T. solivaga* in Ussuria suggests, that the disjunct distribution of this species was caused by the glacial events of the Pleistocene (fig. 62, 73).

The Ussurian tachinid fauna is mainly Palaearctic in faunal element, but partly contains distinct stenochorous species that spread over Ussuria and its neighbouring areas (see fig. 62). Some Oriental species are also represented in Ussuria contrasting to a mainly cool temperate northern climate. Thus, the Ussurian tachinid fauna shows a diverse and peculiar mixture of stenochorous species, Palaearctic and Oriental faunal elements.

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Table 5: The zoogeographical analysis of the Ussurian fauna of tachinid flies (362 species)

1. Number of species distributed in more than one faunal region or subregion:	45	12,4%
[cosmopolitan]	□	
semicosmopolitan	1	
[Holarctic-Indoaustralasian]	□	
Holarctic-Oriental	1	
Holarctic	8	
disjunct Holarctic	2	
[Palaearctic-Indoaustralasian]	□	
Palaearctic-Palaeotropical	1	
Palaearctic-Afrotropical	2	
Palaearctic-Oriental	3	
South Palaearctic-Indoaustralasian	2	
South Palaearctic-Palaeotropical	2	
South Palaearctic-Oriental	1	
[East Palaearctic-Indoaustralasian]	□	
East Palaearctic-Oriental	1	
East Palaearctic-Oriental	4	
Manchurian-Oriental	17	
2. Number of species distributed only in the Palaearctic:	317	87,6%
2.1. Species distributed in more than one faunal subregion:	164	45,3%
Holo- and transpalaearctic	121	
probably disjunct Palaearctic	43	
2.2. Species distributed in only one of the Palaearctic faunal subregions or in a part of it:	153	42,3%
[Mediterranean]	□	
[Eremian]	□	
Manchurian:	118	32,6%
Manchurian (Manchurian faunal subregion)	64	
stenochorous (in Manchurian faunal province)	54	
Eurosiberian:	35	9,7%
Eurosiberian	13	
disjunct Eurosiberian	13	
[European]	□	
Siberian	7	
East Siberian	2	
Number of widespread species with a mainly E-W-distribution:	208	57,5%
Number of widespread species with a mainly S-N-distribution:	98	27,1%

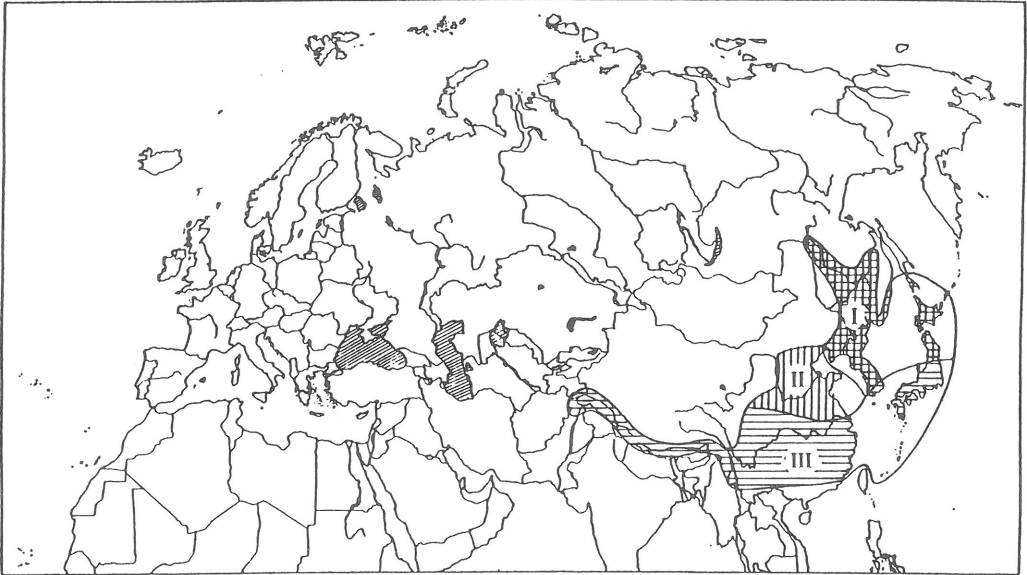


Fig. 61 Map of Manchurian Subregion. Included are the Manchurian faunal province (I), the North China faunal province (II) and the Eastasian crescent (III) (S slope of Himalaya, SW China Mountain area, Central China area and S Japan).

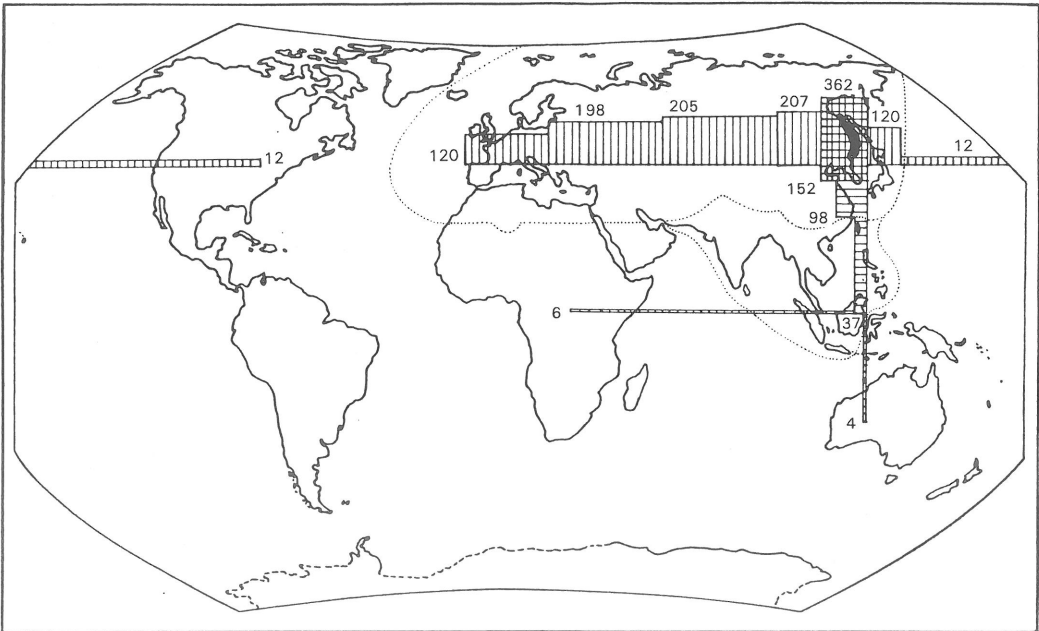


Fig. 62 Distribution types of Ussurian tachinid flies and their schematized E-W and N-S direction (with numbers of species). Dotted line showing the border of the Palaearctic and the Oriental Region.
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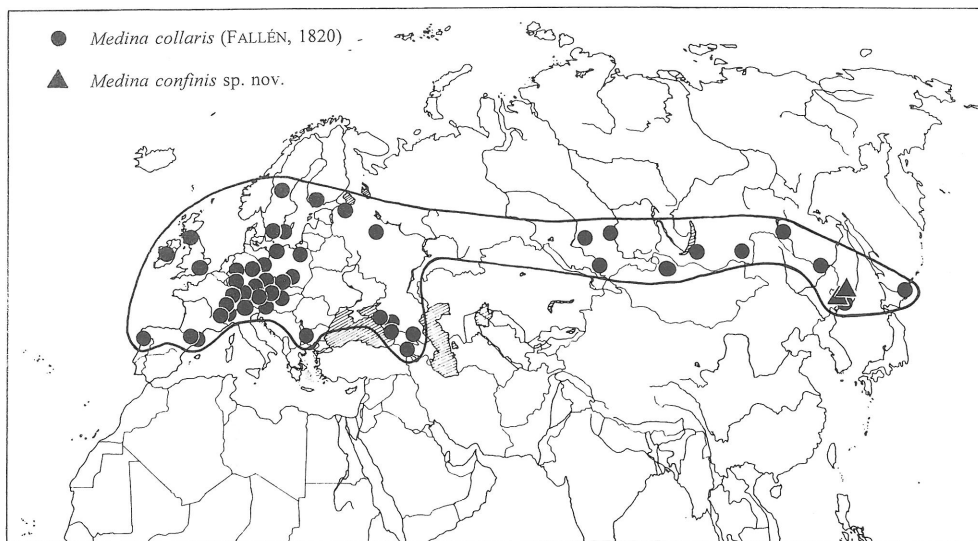


Fig. 63 Known distribution of the transpalearctic species *Medina collaris* (FALLÉN, 1820) and collecting areas of *Medina confinis* sp. n. in Ussuria [data from databases of TSCHORSNIG and ZIEGLER].

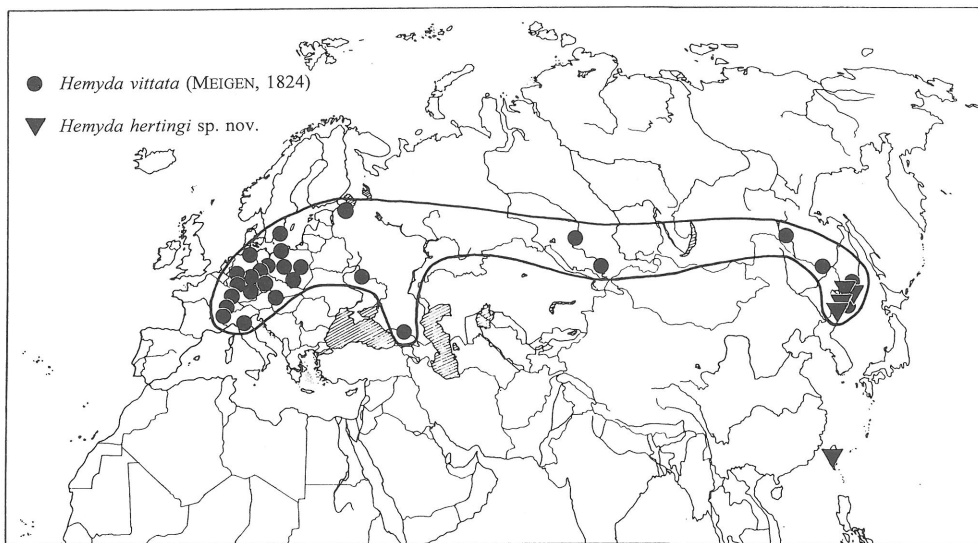


Fig. 64 *Hemyda vittata* (MEIGEN, 1824) - a mainly Siberian faunal element and collecting areas of *Hemyda hertingi* sp. n. in Ussuria and Taiwan [data from databases of TSCHORSNIG and ZIEGLER].

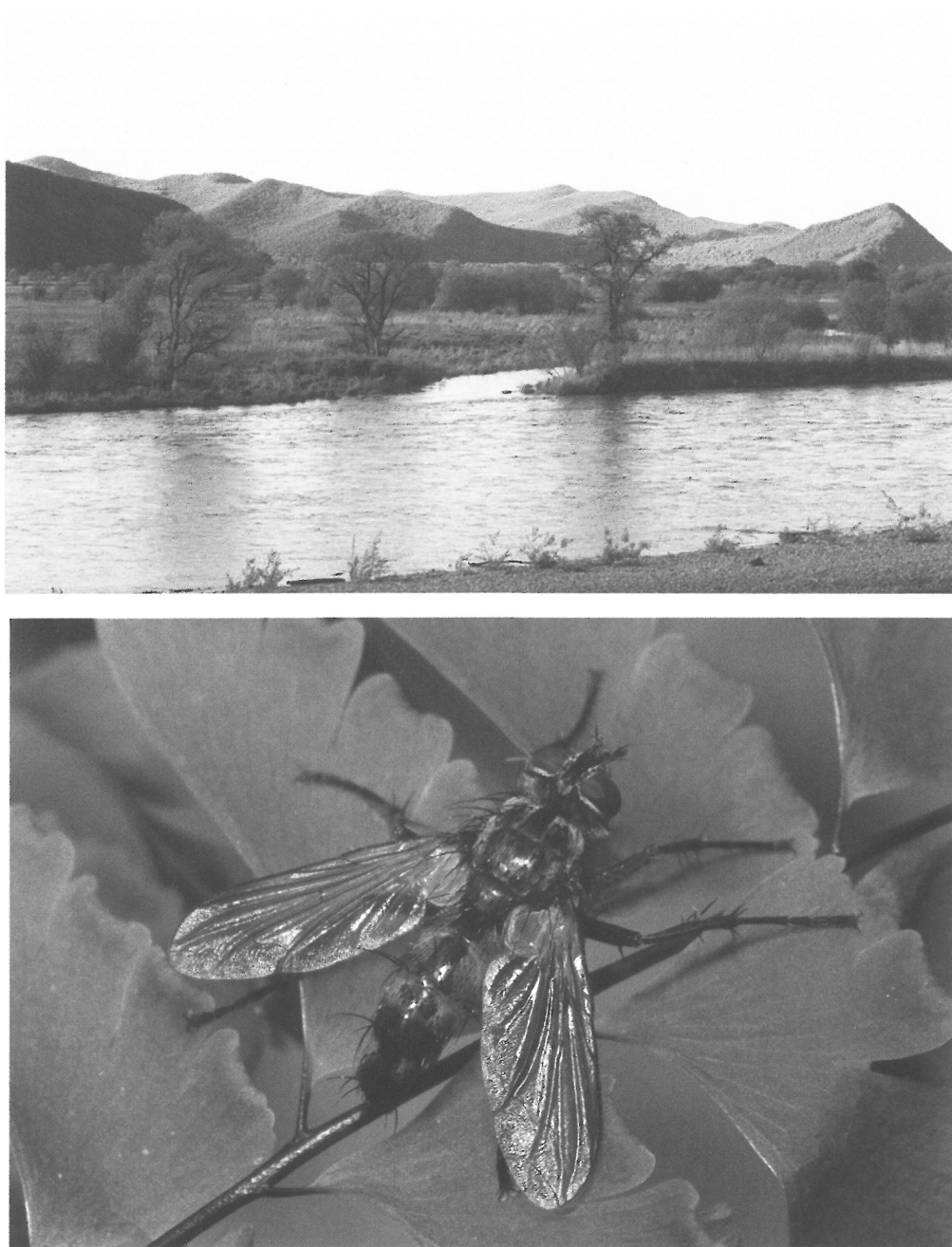


Fig. 65 Banks of the Zhuravlyevka River near Samarka 70 km northern of Chuguyevka. Hills in the background with intact forests at an elevation between 200 m and 450 m (photo ZIEGLER). - **Fig. 66** *Zambesomima hirsuta* MESNIL, 1967 is known only from northern Japan and from southern part of the Russian Far East. This female is sitting on a leaf of *Adiantum pedatum* (photo ZIEGLER).



Fig. 67 Female of *Gonia ussuriensis* (ROHDENDORF, 1928) in the Ussuriysky Zapovednik on flowers of *Anthriscus aemula*. This species is only known from northern Japan and Ussuria. The yellow antennae are very characteristic (photo ZIEGLER). - **Fig. 68** Female of *Tachina trigonophora* (ZIMIN, 1980) in the Ussuriysky Zapovednik on a leaf of *Quercus mongolica*. This nice species is only known from Korea and Ussuria (photo ZIEGLER).

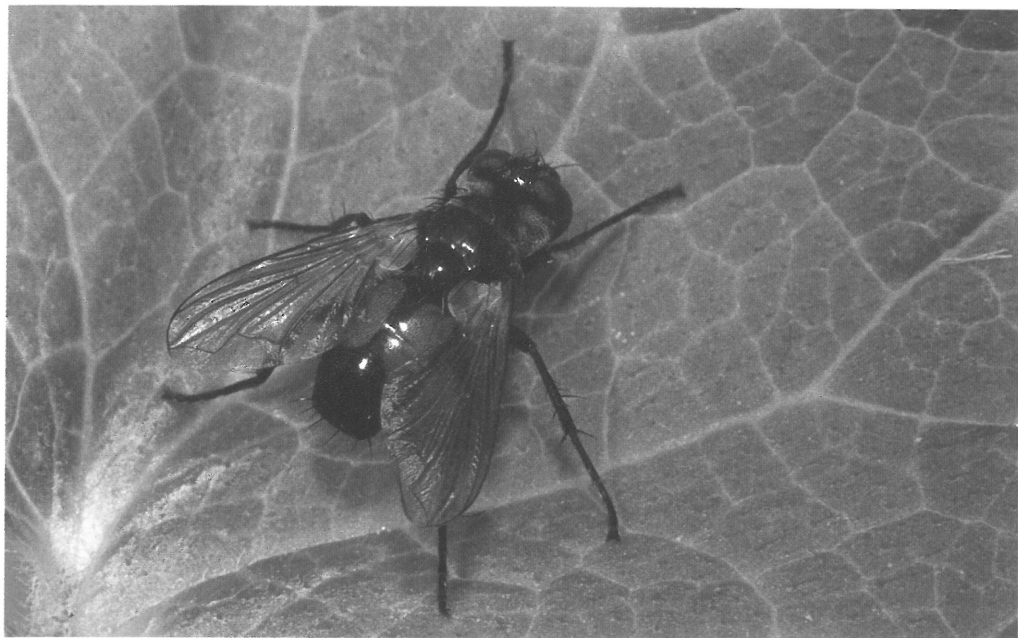


Fig. 69 This female of *Hemyda hertingi* sp. n. is now a paratype. Sitting on a leaf of *Geranium* sp. near Anisimovka (photo ZIEGLER). - **Fig. 70** Male of a dark form of *Phasia hemiptera* (FABRICIUS, 1794) near Anisimovka on flowers of *Crataegus maximoviczii* (photo ZIEGLER).



Fig. 71 *Istocheta maladerivora* (BORISOVA-ZINOVJEVA, 1963) near Boitsovo. A male on a leaf of *Filipendula palmata*. This is an stenochorous species from the Russian Far East. It is active under bad weather conditions without sunshine and during low temperatures, too (photo ZIEGLER). - **Fig. 72** *Ctenophorinia grisea* MESNIL, 1967 from Ussuria has no grey body colour. We collected in this area only a form with a nice golden green pollinosity. This female is sitting on leaves of *Ulmus* sp. (near Mezhdurechje). *C. grisea* is known from northern Japan (in a grey and a green form) and from the southern part of the Russian Far East (photo ZIEGLER).

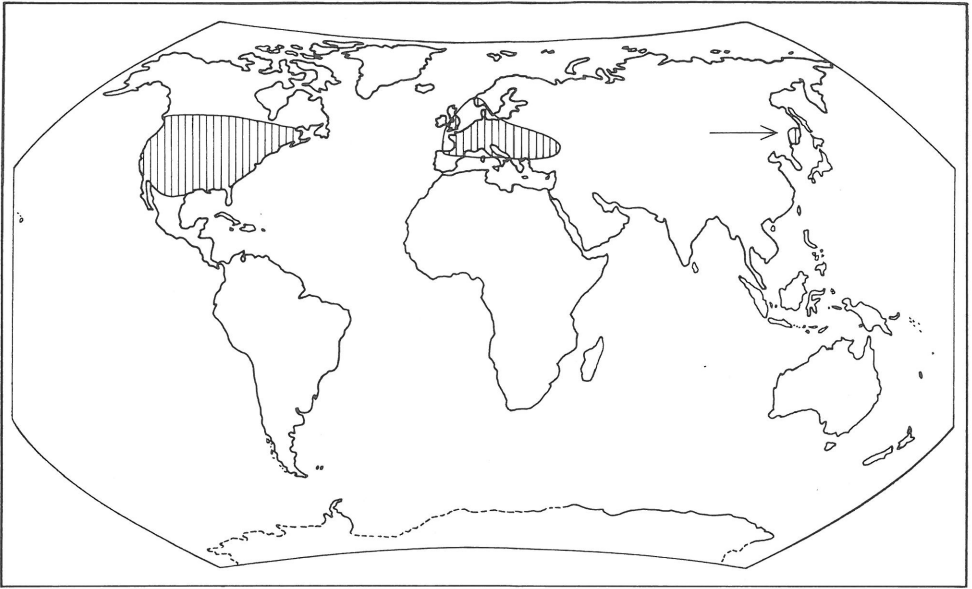


Fig. 73 Known distribution of *Thelaira solivaga* (HARRIS, 1780), showing a disjunct Holarctic distribution type.

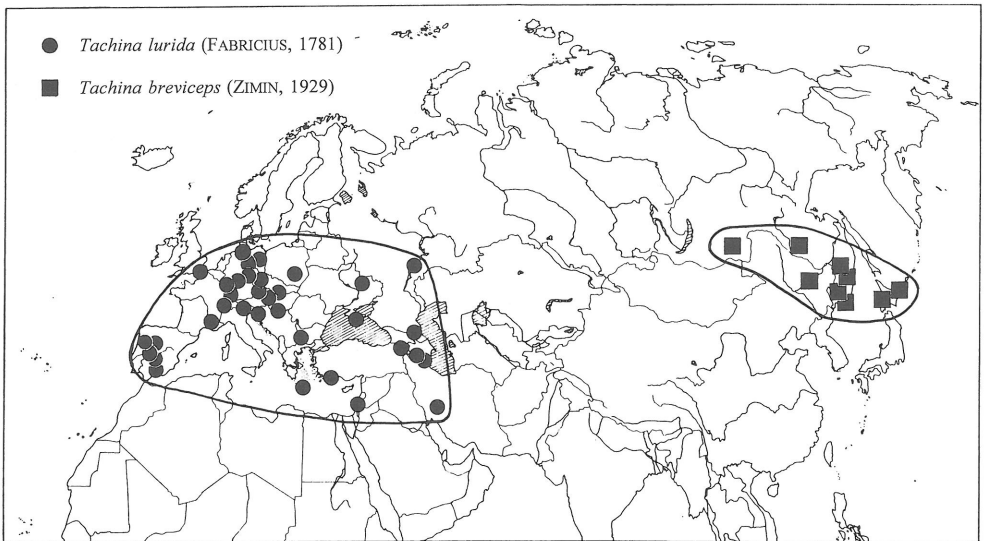


Fig. 74 Distribution of *Tachina lurida* (FABRICIUS, 1781) - an expansive Mediterranean faunal element and known distribution of the very similar species *Tachina breviceps* (ZIMIN, 1929) - only found in East Siberia and in the northern part of the Manchurian Subregion [data from databases of TSCHORSNIG and ZIEGLER]

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