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NEW RECORDS OF HOVERFLIES (DIPTERA, SYRPHIDAE) FROM UKRAINE. VI

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New Records of Hoverflies (Diptera, Syrphidae) from Ukraine. VI. Prokhorov, A. V., Popov, G. V., Shparyk, V. Yu. & Vasilyeva, Yu. S. — Nine species of hoverflies of the subfamilies Eristalinae, Pipizinae and Syrphinae are recorded from Ukraine for the first time: *Cheilosia himantopus* (Panzer, 1798), *Orthonevra incisa* (Loew, 1843), *Neocnemodon verrucula* (Collin, 1931), *Pipiza luteibarba* Vujić, Radenković & Polić, 2008, *Trichopsomyia joratensis* (Goeldlin de Tiefenau, 1997), *T. lucida* (Meigen, 1822), *Dasysyrphus neovenustus* Soszyński, Mielczarek & Tofilski, 2013, *Platycheirus europaeus* Goeldlin de Tiefenau, Maibach & Speight, 1990, *P. sticticus* (Meigen, 1822). Distributions of these species are summarized and species diagnoses are provided.
Key words: syrphids, *Cheilosia*, *Dasysyrphus*, *Neocnemodon*, *Orthonevra*, *Pipiza*, *Platycheirus*, *Trichopsomyia*, new records, European fauna.

Introduction

The recent world fauna of hoverflies includes about 6300 species (Courtney et al., 2017; Skevington et al., 2019), of which over 900 species are known from Europe (Speight, 2020). Despite the fact that hoverfly research has been conducted in Ukraine for over 150 years (Nowicki 1864, 1873), species that have not been reported before are still regularly found (Prokhorov & Popov, 2017; Prokhorov et al., 2017, 2018 a–c, 2020 a, b). The exact number of species occurring in the Ukraine is unknown, but we expect it to be over 400. While compiling the checklist of Ukrainian syrphids several hoverfly species previously unknown from Ukraine of the genera *Cheilosia*, *Dasysyrphus*, *Neocnemodon*, *Orthonevra*, *Pipiza*, *Platycheirus*, and *Trichopsomyia* were collected by the authors and their colleagues.

The main aim of the present paper is to summarize new finds over the past years, re-examination of old collections and enrich the knowledge of the hoverfly fauna of the country. The current article continues the series of papers reporting the first records of the hoverflies from Ukraine (Prokhorov & Popov, 2017; Prokhorov et al., 2017, 2018 a–c, 2020 a, b).

Material and Methods

Most of the studied hoverfly specimens are deposited in the collection of the I. I. Schmalhausen Institute of Zoology, National Academy of Sciences of Ukraine, Kyiv. *Cheilosia himantopus* (Panzer, 1798) and *Platycheirus europaeus* Goeldlin de Tiefenau, Maibach & Speight, 1990 are deposited in the collection of Department of biology and ecology of Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk (Ukraine).

We follow mainly the morphological terminology of Cumming & Wood (2017), and partly of Speight (1987). Diagnoses are generally based on the keys by Bartsch et al. (2009 a, b), van Veen (2010), Speight & Sarthou (2017), and van Steenis et al. (2018).

All photographs were taken using a Canon PowerShot A640 camera mounted on Carl Zeiss Stemi 2000 binocular microscope; all images were subsequently combined with Helicon Focus (version 6.0.18) and processed in Adobe Photoshop CS6 by A. V. Prokhorov.

The authors worked in parallel with several European faunistic projects, including the IUCN assessments, so the species listed here were recently mentioned for Ukraine (van der Ent et al., 2021 a, b; Földesi, 2021 a, b; Mazánek et al., 2021; Rojo & Aracil, 2021; Ståhls & Tot, 2021; van Steenis, W. et al., 2021; Vujić & Milić, 2021). This was made to update data in all projects at the same time. In this paper, the authors dwell on the characteristics of these species in more detail. The authors recommend referring to the current article for the first indication of these species for Ukraine.

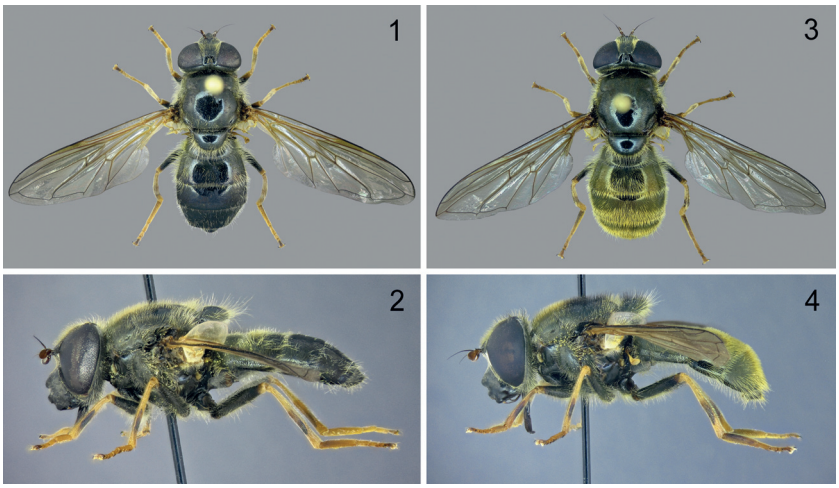
Subfamily Eristalinae
Tribe Rhingiini
Subtribe Cheilosiina

Cheilosia (*Cheilosia*) *himantopus* (Panzer, 1798) (figs 1, 2, 5–7)

Material examined. Ukraine. Ivano-Frankivsk Region: Rybne env., 48.938 N 24.583 E, Pavlivka River bank, 17.06.2022, 7 ♀ (V. Shparyk).

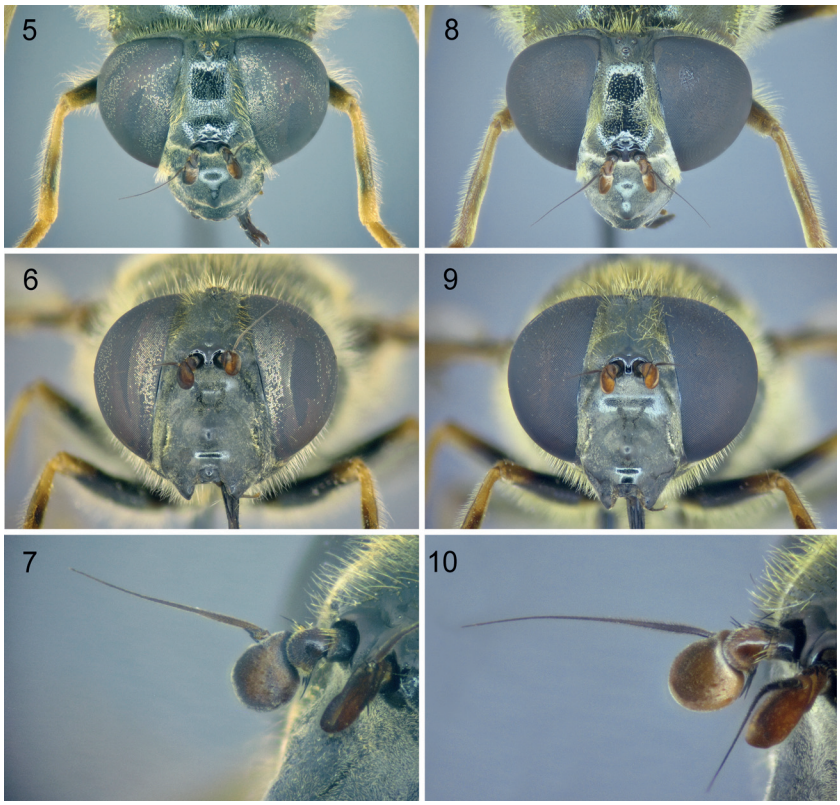
Distribution. Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, France, Germany, Greece, Hungary, Italy, Liechtenstein, Montenegro, the Netherlands, North Macedonia, Poland, Serbia, Slovakia, Slovenia, Sweden, Switzerland; Georgia, Turkey (Wolff, 1998; van de Weyer, 2002; De Groot & Govedič, 2008; Bartsch et al., 2009 b; Mazánek, 2009; Nedeljković et al., 2009; Reemer et al., 2009; Tóth, 2011, 2014; Saribiyik, 2014; Speight et al., 2018; Speight, 2020; Mielczarek & Żóralski, 2021; Ståhls & Tot, 2021; Bot et al., *in prep*.); Ukraine (**first record**).

Diagnosis. *Cheilosia himantopus* belongs to *Cheilosia* species group C (*sensu* Becker, 1894), which is characterized by the following features: pubescent eyes, face without pile, scutellum without setae, legs with pale parts. *Cheilosia himantopus* is most similar to *C. canicularis* (Panzer, 1801) (figs 3, 4, 8–10) in having a large size (12–15 mm), lower half of the eye without pile and hairs on anepisternum and sternites with wavy tip. Both sexes differ by length of the arista hairs, at most equaling half the thickness of arista at base (fig. 7)



Figs 1–4. *Cheilosia himantopus* (1, 2) and *C. canicularis* (3, 4) females: 1, 3 — habitus, dorsal view; 2, 4 — habitus, lateral view.

(in *C. canicularis*, length of the arista hairs slightly longer than thickness of arista at base, as on fig. 10). The male of *C. himantopus* differs further from *C. canicularis* by having outer tarsomere of fore leg dark, while the whole fore leg tarsus in C. canicularis is yellow, and there are small differences in the shape of the genitalia (Stuke & Claussen, 2000). From *C. canicularis*, the **female** of *C. himantopus* differs by: hind margin of tergite 3 not completely obscured by macrotrichia (figs 1, 2) (in *C. canicularis*, hind margin of tergite



Figs 5–10. *Cheilosia himantopus* (5–7) and *C. canicularis* (8–10) females: 5, 8 — head, dorsal view; 6, 9 — head, frontal view; 7, 10 — right antenna, lateral view.

3 completely bscured by dense, adpressed macrotrichia, as on figs 3, 4); hind third of tergite 4 with sparse, erect pile (figs 1, 2) (in *C. canicularis*, hind third of tergite 4 with dense, semi-erect pile, as on figs 3, 4) (Stuke & Claussen, 2000; Bartsch et al., 2009 b; van Veen, 2010). Biological feature of *C. himantopus*: main flight period in April–June (in *C. canicularis*, main flight period in July–September) (Smit et al. 2001; Speight, 2020). The larva of both species have been reared from *Petasites hybridus* (L.) G. Gaertn., B. Mey. & Scherb. (Stuke & Claussen, 2000).

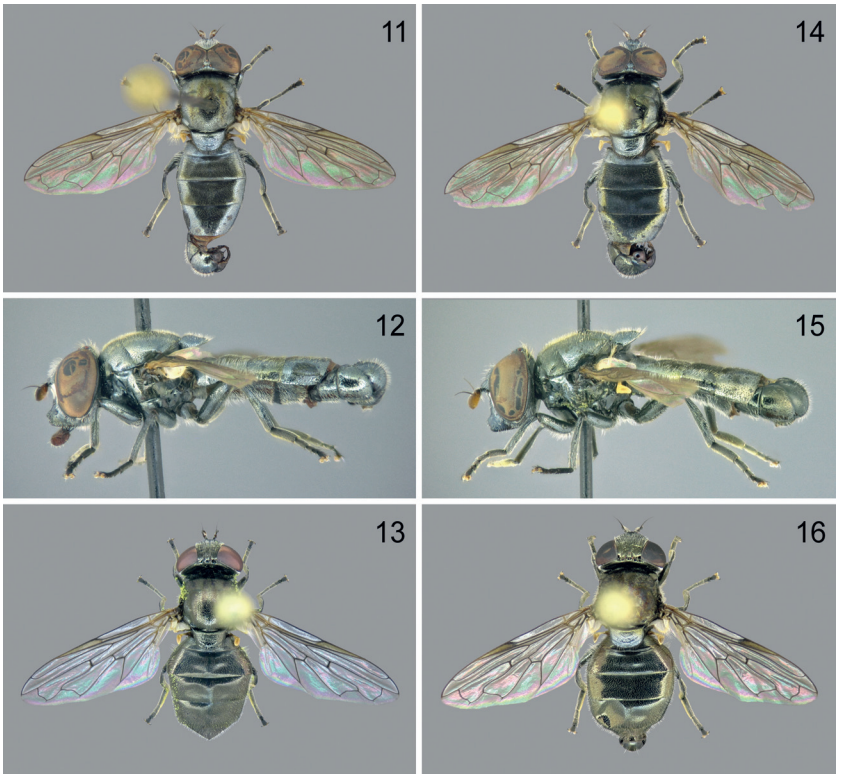
Tribe Brachyopini
Subtribe Brachyopina

Orthonevra incisa (Loew, 1843) (figs 11–13, 17–19)

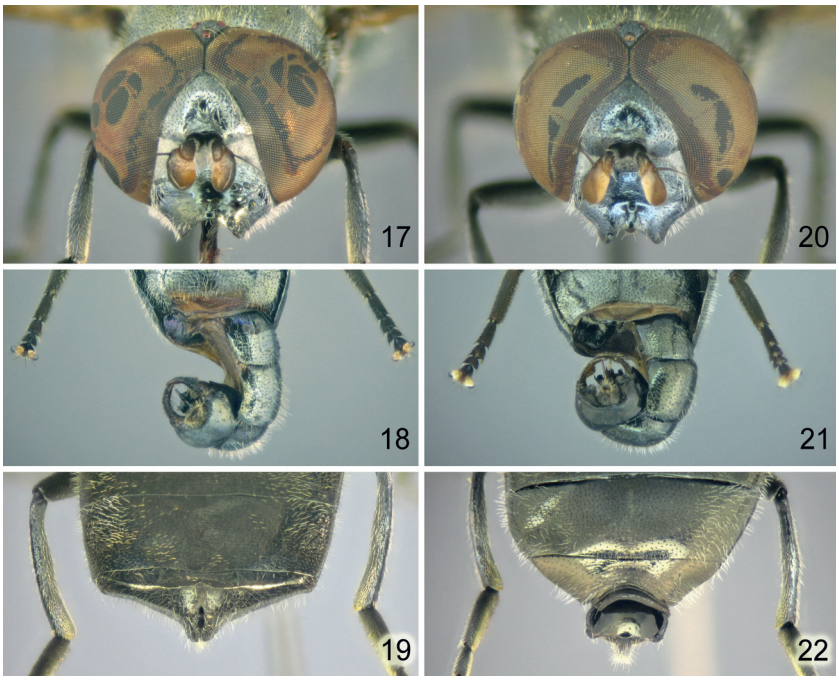
Material examined. Ukraine. Kyiv Region: Nova Buda env.: 50.68365 N 29.703609 E, overgrown damp road in mixed forest, 23.04.2016, 1 ♂; 50.684214 N 29.708405 E, swampy glades in mixed forest, on flowers of *Caltha palustris*, 5.05.2021, 2 ♀ (A. Prokhorov).

Distribution. Hungary, Poland, Romania; Russia (Western Siberia); Turkey (Stackelberg, 1953; Bańkowska, 1963 (as *Chrysogaster*); Peck, 1988; Stănescu & Pârvu, 2005; Tóth, 2011, 2014; Barkalov & Mutin, 2018; Mielczarek & Żóralski, 2021; van Steenis et al., 2021; Wakkie, 2021); Ukraine (**first record***).

*The species is listed on the GBIF website (*Orthonevra incisa*…, 2022), where four specimens from Ukraine (May 1943) are presented by South African National Biodiversity Institute and KwaZulu-Natal Museum. Two of them are recorded from Kherson Region, near delta of Dnipro River, 46.6N 32.6E. Since we cannot verify this data, we present our specimens as new to the fauna of Ukraine.



Figs 11–16. *Orthonevra incisa* (11–13) and *O. brevicornis* (14–16): 11, 14 — males, dorsal view; 12, 15 — males, lateral view; 13, 16 — females, dorsal view.



Figs 17–22. *Orthonevra incisa* (17–19) and *O. brevicornis* (20–22): 17, 20 — male head, frontal view; 18, 21 — male abdomen, terminal part, ventral view; 19, 22 — female abdomen, terminal part, dorsoposterior view.

Diagnosis. *Orthonevra incisa* (Loew, 1843) belongs to the species group with entirely black legs. This species is very similar to *Orthonevra brevicornis* (Loew, 1843) (figs 14–16, 20–22) in having postpedicel is almost circular (1–1.5 times longer than wide) with pale ventral part.

The **male** of *Orthonevra incisa* differs from *O. brevicornis* by the narrower frontal triangle (fig. 17), (in *O. brevicornis*, the frontal triangle wider, as on fig. 20); postpedicel with dorsal and ventral sides rounded (fig. 12, 17) (in *O. brevicornis*, postpedicel slightly broadened to apex, as on fig. 15, 20); surstylus not broadened on basal half (fig. 18) (in *O. brevicornis*, surstylus distinctly broadened on basal half, as on fig. 21) (Stackelberg, 1953; van Veen, 2010).

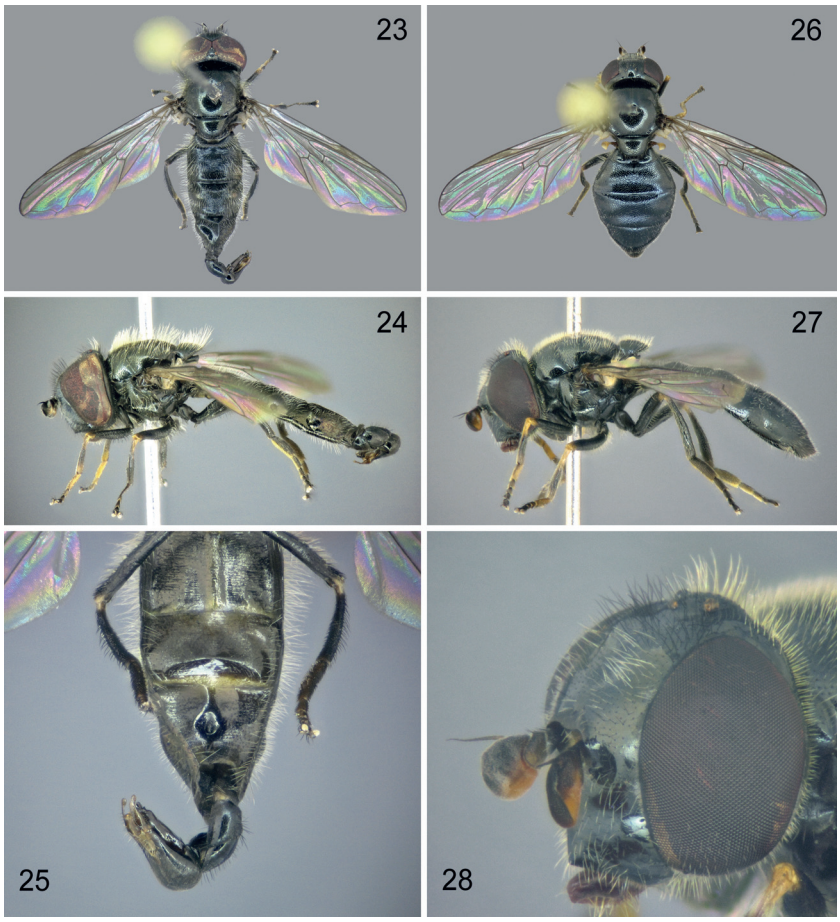
The **female** of *Orthonevra incisa* can be easily distinguished from *O. brevicornis* by the abdominal tergite 5 with deep incision at hind margin (fig. 19) (in *O. brevicornis*, abdominal tergite 5 without incision, as on fig. 22), postpedicel with dorsal and ventral sides rounded with a slightly pointed top (in *O. brevicornis*, postpedicel slightly broadened to apex, as in male).

Orthonevra incisa is also very similar to *O. plumbago* (Loew, 1840), but according to Stackelberg (1953) differs from it by almost circular postpedicel (in *O. plumbago*, postpedicel about 2 times longer than wide, as in fig. 11 in the mentioned paper). The more or less reliable distinguishing feature by which *O. incisa* can be easily separated from both closely related species, is the entirely pollinose sternum 1 (in *O. brevicornis* and *O. plumbago*, all sterna shiny) (Ricarte et al., 2022).

Subfamily Pipizinae

Neocnemodon verrucula (Collin, 1931) (figs 23–28)

Material examined. Ukraine. Kyiv Region: Mygalky env.: Teteriv River floodplain: 50.656771 N 29.497553 E, 21.04.2018, 1 ♀; 50.657344 N 29.499463 E, 28.04.2019, on flowers of *Salix* sp., 1 ♀, 4.05.2020, on flowers of *Salix* sp., 1 ♀; 50.655066 N 29.494565 E, edge of Teteriv River floodplain forest, 24.04.2020, 1 ♀,



Figs 23–28. *Neocnemodon verrucula*: 23, 26 — male (23) and female (26), habitus, dorsal view; 24, 27 — male (24) and female (27), habitus, lateral view; 25 — male abdomen, ventral view; 28 — female head, anterolateral view.

29.04.2021, 4 ♂; Nova Buda env., 50.684214 N 29.708405 E, swampy glades in mixed forest, 5.05.2021, on flowers of *Caltha palustris*, 3 ♀ (A. Prokhorov).

Distribution. Belgium, Denmark, Finland, Germany, Great Britain, Latvia, the Netherlands, Norway, Poland, Sweden; Russia (European parts, Siberia, Far East); Mongolia (Bańkowska, 1963 (as *Cnemodon*); Peck, 1988; Verlinden, 1991; Kuznetsov, 1993; Wolff, 1998; Nielsen, 1999 (as *Heringia*); Stubbs & Falk, 2002 (as *Heringia*); Bartsch et al., 2009 b; Reemer et al., 2009 (as *Heringia*); Haarto & Kerppola, 2014; Barkalov & Mutin, 2018; Speight, 2020; Rojo & Aracil, 2021; Wakkie, 2021 (as *Heringia*)); Ukraine (**first record**).

Diagnosis. The **male** of *Neocnemodon verrucula* (Collin, 1931) (figs 23–25) is similar to males of other *Neocnemodon* species in having hind trochanter with a long projection and third antennal segment usually no longer than wide (very occasionally 1.5 times longer than wide) (Bartsch et al., 2009 b). *N. verrucula* is easily distinguished from *N. latitarsis* (Egger, 1865) and *N. fulvimanus* (Zetterstedt, 1843) by sternite 3 not having a keel (fig. 25) (in other species, sternite 3 with a small central keel). From *N. brevidens* (Egger, 1865), *N. pubescens* (Delucchi & Pschorn-Walcher, 1955), *N. vitripennis* (Meigen, 1822) and *N. larusi* (Vujić, 1999) it differs by sternite 4 with a small, central knob (fig. 25) and thorax with mainly pale pile (in other species, sternite 4 without central knob and thorax with pale and/or dark pile (Bartsch et al., 2009 b).

The **female** of *Neocnemodon verrucula* (figs 26–28) is similar to other species of the genus in having postpedicel usually less than 1.5 times longer than broad (fig. 28) and, except *N. brevidens*, frons with spots of pubescent lacking or less distinct, together covering less than quarter of width of frons (in *N. brevidens*, frons with spots of pubescent together covering more than 1/3 of width of frons). *N. verrucula* differs from other species by eyes with short and sparse pilosity (fig. 28) (in other species, eyes with dense (short or long) pilosity); frons from depression to base of antennae with almost exclusively pale pile (fig. 28) (in other species, frons from depression to base of antennae with extensive intermixture of black pile (Bartsch et al., 2009 b).

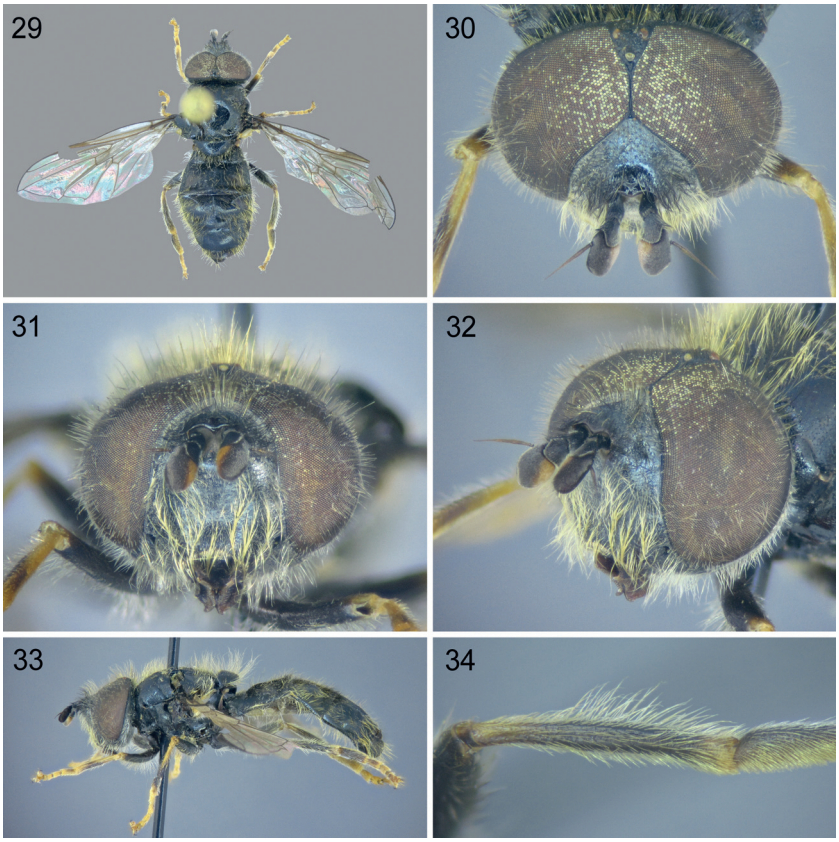
Pipiza luteibarba Vujić, Radenković & Polić, 2008 (figs 29–34)

Material examined. Ukraine. Chernivtsi Region: Grushivtsi env., 48.594196 N 26.786242 E, edge of oak forest, 4.05.2008, 1 ♂ (N. Lishchuk).

Distribution. Austria, Czechia, Greece (Samos), Serbia (Vujić et al., 2008; Vujić et al., 2013; Speight, 2020; Vujić & Milić, 2021; Wakkie, 2021); Ukraine (**first record**).

This European localized endemic is regarded as endangered at the global and European level (Vujić & Milić, 2021).

Diagnosis. Species of the *Pipiza luteitarsis* group to which *P. luteibarba* belongs are characterized by lacking a pair of ventral longitudinal ridges at the distal end of hind femora (in other Palaearctic *Pipiza* species, distal end of hind femora ventrally with a pair of distinct, longitudinal ridges) and ventral part of the postpedicel reddish (in other *Pipiza* species, postpedicel dark). In



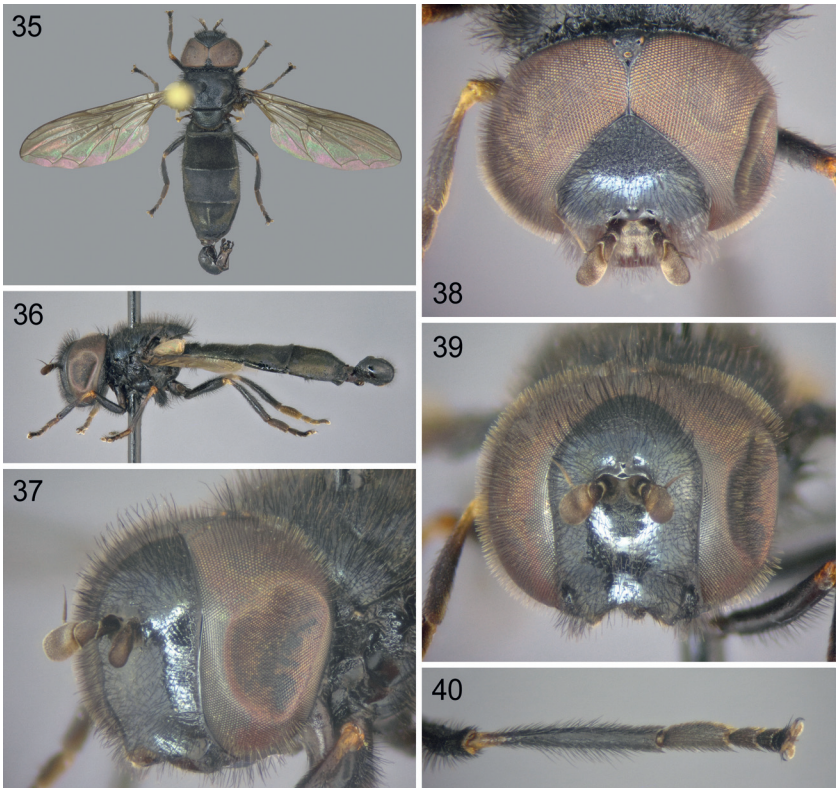
Figs 29–34. *Pipiza luteibarba* male: 29 — habitus, dorsal view; 30 — head, dorsal view; 31 — head, frontal view; 32 — head, anterolateral view; 33 — habitus, lateral view; 34 — right hind leg, dorsal view.

the male genitalia, lower gonocercus of hypandrium is very short, about 1/3 length of theca (in other *Pipiza* species, hypandrium always has long lower gonocercus, in lateral view it is about 3/4 length of theca) (Vujić et al., 2008; Vujić et al., 2013). The other known European species of the *Pipiza luteitarsus* group are *P. accola, P. luteitarsis,* and *P. quadrimaculata.*

The **male** of *Pipiza luteibarba* differs from *P. quadrimaculata* (Panzer, 1802) male by antennae inserted in upper half of the head (lateral view) (in *P. quadrimaculata*, antennae inserted just below middle of the head) and abdomen elongated (in *P. quadrimaculata*, abdomen broadly ovoid). From the most similar *P. accola* Violovitsh, 1985 and *P. luteitarsis* Zetterstedt, 1843, *P. luteibarba* can be distinguished by face with pale pile (figs 31–33) (in other species, face predominantly with black pile; however, we have some specimens of *P. accola* in which face predominantly with pale pile); postpedicel elongated, almost 1.5 times longer than wide (figs 32–33) (in other species, postpedicel short, oval, wider than long); tarsi yellow, only metatarsus of hind legs darkened (figs 29, 33) (in other species, tarsi of all legs partly darkened or at least of middle and hind legs); tergite 2 with long hairs that stick out (in other species, tergite 2 without long hairs sticking out); basal part of surstylus with well-developed semicircular lobe (in other species, basal part of surstylus with reduced (*P. luteitarsis*) or with small basal semicircular lobe, as in *P. accola*). The genitalia of *P. luteibarba* have been prepared and compared with figures in Vujić et al. (2013).

Trichopsomyia joratensis (Goeldlin de Tiefenau, 1997) (figs 35–40)
= *carbonaria* auctt. nec Meigen, 1822 (misidentification)

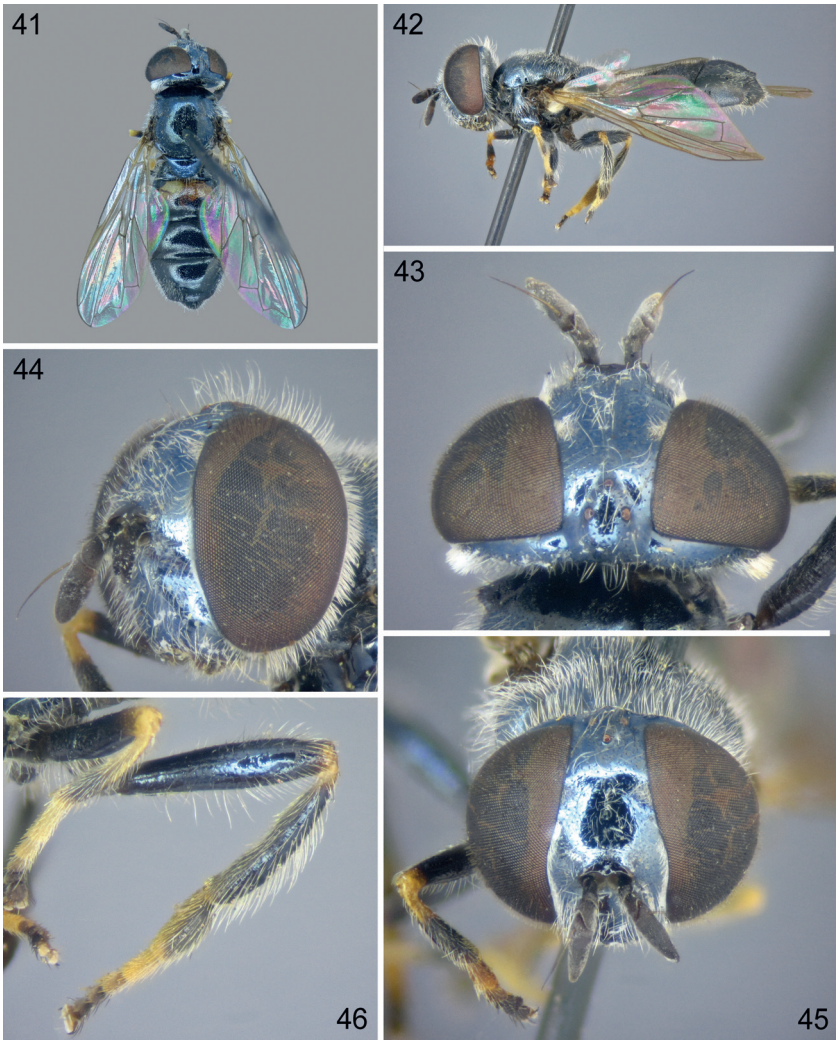
Material examined. Ukraine. Ivano-Frankivsk Region: Vorokhta env., 48.157958 N 24.535381 E, Chornohora Mts., Carpathian National Nature Park, Pozhyzhevska Mt., 27.06.2008, 1 ♂ (V. Shparyk).



Figs 35–40. *Trichopsomyia joratensis* male: 35 — habitus, dorsal view; 36 — habitus, lateral view; 37 — head, anterolateral view; 38 — head, anterodorsal view; 39 — head, frontal view; 40 — left hind leg, dorsal view.

Distribution. Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Czechia, Denmark, Finland, France, Germany, Hungary, Italy, Montenegro, the Netherlands, Norway (?), Poland, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland (Bańkowska, 1963 (as *Pipiza carbonaria*); Peck, 1988 (as *carbonaria*); Verlinden, 1991 (as *carbonaria*); Dirickx, 1994 (as *Pipiza carbonaria*); Holinka & Mazánek, 1997 (as *carbonaria*); Stănescu & Pârvu, 2005 (as *carbonaria*); Bartsch et al., 2009 b; Reemer et al., 2009; Tóth, 2011; Haarto & Kerppola, 2014; van Steenis et al., 2015; Nielsen & Gammelmo, 2017; Speight et al., 2018; van Steenis et al., 2018; Vujić et al., 2018; Speight, 2020; Wakkie, 2021; Mielczarek & Żóralski, 2021; van der Ent et al., 2021); Ukraine (**first record**).

Diagnosis. The **male** of *Trichopsomyia joratensis* differs from other European species of the genus, *T. flavitarsis* (Meigen, 1822) and *T. lucida* (Meigen, 1822), by postpedicel approximately 1.5 times longer than wide (fig. 37) (in other species, postpedicel at least two times longer than wide), face half as wide as width of the head (fig. 39) (in other species, face about 2/5 times as wide as width of the head) (van Steenis et al., 2018; Speight, 2020).



Figs 41–46. *Trichopsomyia lucida* female: 41 — habitus, dorsal view; 42 — habitus, lateral view; 43 — head, dorsal view; 44 — head, anterolateral view; 45 — head, anterodorsal view; 46 — left hind leg, lateral view.

Trichopsomyia lucida (Meigen, 1822) (figs 41–46)

Material examined. Ukraine. Donetsk Region: Donetsk, Kalmius River valley, 1.07.1998, 1 ♀ (Yu. Abalyosheva).

Distribution. Belgium, Czech Republic, France, Germany, Great Britain, Latvia, the Netherlands, Serbia, Spain, Switzerland; ?Turkey (Peck, 1988; Verlinden, 1991; Kuznetsov, 1993; Vujić et al., 2001; Mazánek, 2009; Nedeljković et al., 2009; Reemer et al., 2009; Ball et al., 2011; Saribiyik, 2014; Ricarte & Marcos-García, 2017; Speight et al., 2018; van Steenis et al., 2018; Speight, 2020; van der Ent et al., 2021; Wakkie, 2021); Ukraine (**first record**).

Diagnosis. The **female** of *Trichopsomyia lucida* can be distinguished from *T. flavitarsis* and *T. joratensis* by hind tibia with pale pile (fig. 46) (in other species, hind tibia with black pile, as on fig. 40); vein M_1 approaches vein R_{4+5} distinctly at an acute angle (fig. 41) (in other species, vein M_1 approaches vein R_{4+5} almost at a right angle, fig. 35); frons with a pair of distinct, silvery-gray pollinose spots (fig. 43) (in other species, frons without such spots). *Trichopsomyia lucida* can be distinguished from *T. joratensis* also by face about 2/5 times as wide as width of the head (fig. 45) (in *T. joratensis*, face half as wide as width of the head, as on fig. 39) (van Steenis et al., 2018; Speight, 2020).

Subfamily Syrphinae
Tribe Bacchini

Platycheirus europaeus Goeldlin de Tiefenau, Maibach & Speight, 1990 (figs 47, 48)

Material examined. Ukraine. Ivano-Frankivsk Region: Rybne env., 48.938 N 24.583 E, Pavlivka River bank, 9.05.2019, 1 ♂ (V. Shparyk); Kyiv Region: Nova Buda env., 50.684214 N 29.708405 E, swampy glades with *Caltha palustris* in mixed forest, 16.05.2021, 3 ♂, 1 ♀ (A. Prokhorov).

Distribution. Austria, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greece, Hungary, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland; Russia (northern and central European part, Siberia, Far East); Japan (Maibach et al., 1992; Dirickx, 1994; Holinka & Mazánek, 1997; Wolff, 1998; Nielsen, 1999; Reemer,

Figs 47–48. *Platycheirus europaeus* male: 47 — habitus, dorsal view; 48 — tarsus of the right leg, ventral view.

2000; Stubbs & Falk, 2002; van de Weyer, 2002; Vujić et al., 2002; Stănescu & Pârvu, 2005; Pakalniškis et al., 2006; De Groot & Govedič, 2008; Karpa, 2008; Bartsch et al., 2009 a; Reemer et al., 2009; Tóth, 2011, 2014; Williams et al., 2011; Polev, 2013; Haarto & Kerppola, 2014; Ôhara et al., 2014; Ricarte & Marcos-García, 2017; Barkalov & Mutin, 2018; Speight et al., 2018; Speight, 2020; Mielczarek & Żóralski, 2021; Prokhorov, 2021); Ukraine (**first record**).

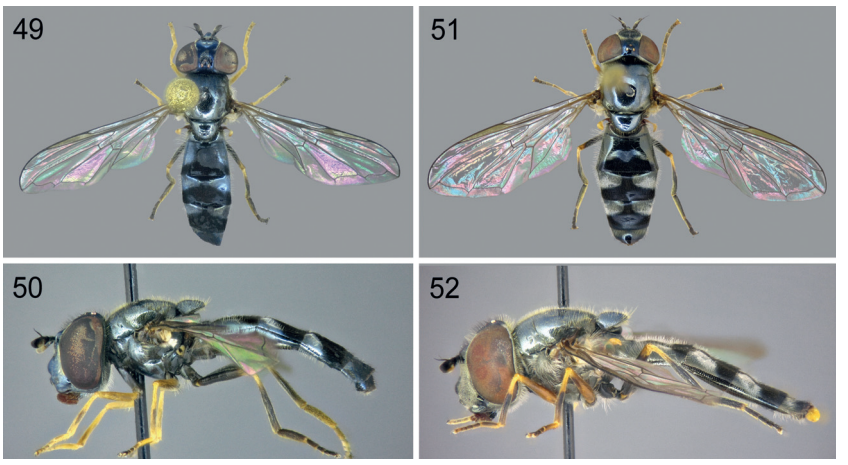
Diagnosis. The detailed diagnosis of the species see in Prokhorov (2021).

Platycheirus sticticus (Meigen, 1822) (figs 49, 50, 53–55)

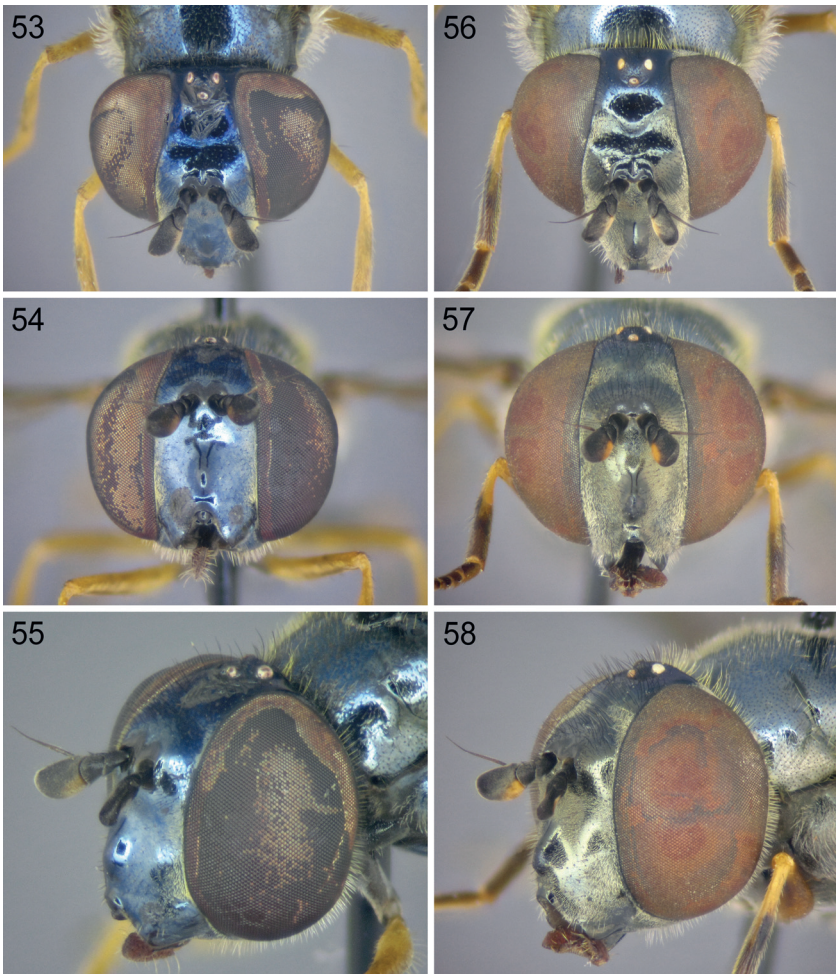
Material examined. Ukraine. Kyiv Region: Irpin env., 50.502558 N 30.283498 E, glades in Lyubka River floodplain forest, 23.07.2020, 1 ♀ (A. Prokhorov).

Distribution. Belgium, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Ireland, Italy, Latvia, ?Luxembourg, the Netherlands, ?Norway, Poland, Romania, Serbia, Slovak Republic, Spain, Sweden; Russia (European parts, Siberia, Southern Far East); (Bańkowska, 1963; Peck, 1988; Verlinden, 1991; Kuznetsov, 1993; Dirickx, 1994; Belcari et al., 1995; Holinka & Mazánek, 1997; Carrières, 2001 a; Stubbs & Falk, 2002; Stănescu & Pârvu, 2005; Speight, 2008; Bartsch et al., 2009 a; Reemer et al., 2009; Tóth, 2011; Haarto & Kerppola, 2014; Ricarte & Marcos-García, 2017; Barkalov & Mutin, 2018; Speight et al., 2018; Vujić et al., 2018; Speight, 2020; Wakkie, 2021); Ukraine **(first record)**.

Diagnosis. The species is morphologically similar to representatives of *Platycheirus albimanus* or *ambiguus* species groups, in which not yellow spots are developed on the abdominal tergites, but whitish-grayish spots with a metallic sheen (fig. 49). The **female** of *Platycheirus sticticus* differs from other similar European species of *albimanus*/*ambiguus* group (sensu Bartsch et al., 2009 a) by posterior anepisternum with lower part shining (in other species, lower part of posterior anepisternum microtrichose), and sternite 2 with very short pilosity (in other species, sternite 2 with relatively long pilosity at least anteriorly). From *P. ambiguus* (Fallén, 1817), it also can be distinguished by tergites 3 and 4 each with a not joined silvery spots (in *P. ambiguus*, tergites 3 and 4 without visible individual spots, but each with a faint silvery pollinose band). *Platycheirus sticticus* differs from *P. albimanus* (Fabricius, 1781) (figs 51, 52,



Figs 49–52. *Platycheirus sticticus* (49, 50) and *P. albimanus* (51, 52) females: 49, 51 — habitus, dorsal view; 50, 52 — habitus, lateral view.



Figs 53–58. *Platycheirus sticticus* (53–55) and *P. albimanus* (56–58) females: 53, 56 — head, anterodorsal view; 54, 57 — head, frontal view; 55, 58 — head, anterolateral view.

56–58) also by the frons with very small pollinose spots along eye margin (figs 54, 55), which sometimes reduced (in *P. albimanus*, frons with distinct triangular pollinose spots along eye margin, as on figs 57, 58), fore femur with black bristle near apex (lacking in *P. albimanus*), and tergite 5 is less than 2 times wider than long, (in *P. albimanus* tergite 5 is much more than 2 times wider than long). From *P. laskai* Nielsen, 1999, *P. sticticus* can be distinguished by the shape of tergite 3, in which the width noticeably exceeds the length (fig. 49) (in *P. laskai*, tergite 3 almost square) (van Veen, 2010; Bartsch et al., 2009 a).

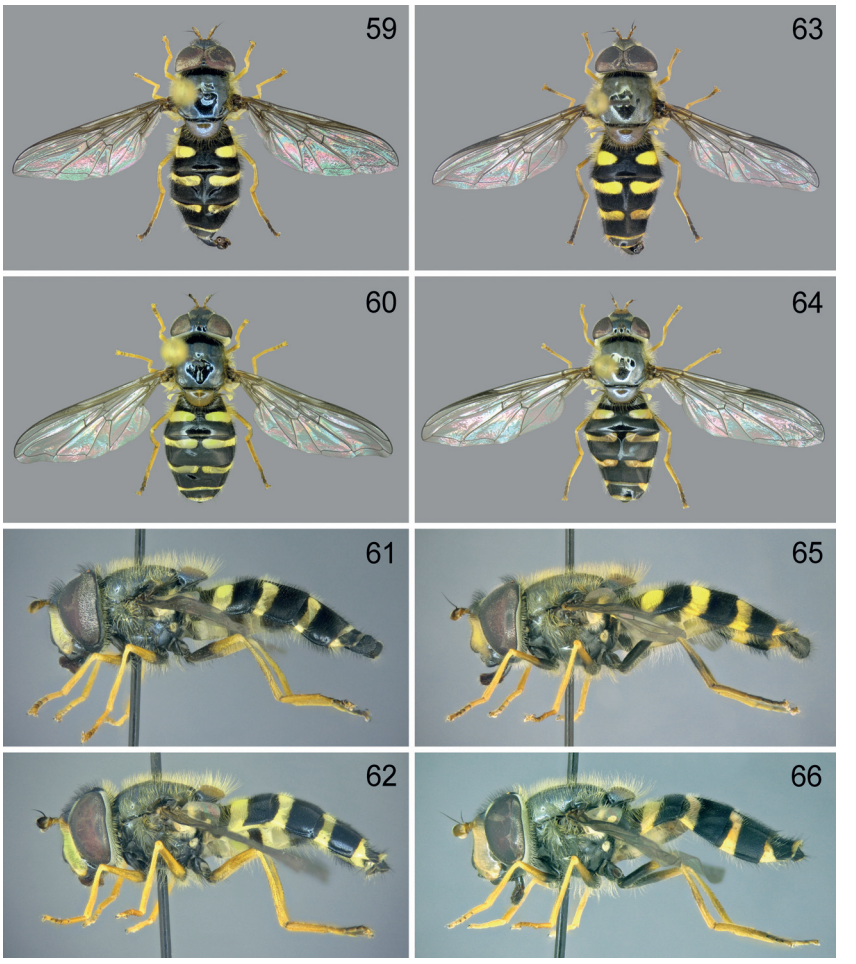
Regarding the pilosity of sternite 2, we can say that our specimen has short pile, but not so short that the species can be easily distinguished by this feature from all specimens of *P. albimanus*, for example. When comparing our specimen with specimens of *P. albimanus*, it is clearly visible that the *P. sticticus* body is generally more shiny and less pubescent, the abdominal pollinose spots are also more shiny and not as whitish-grayish as in *P. albimanus* (fig. 51), with a more bluish tinge (fig. 49) especially when viewed from behind.

Tribe Syrphini

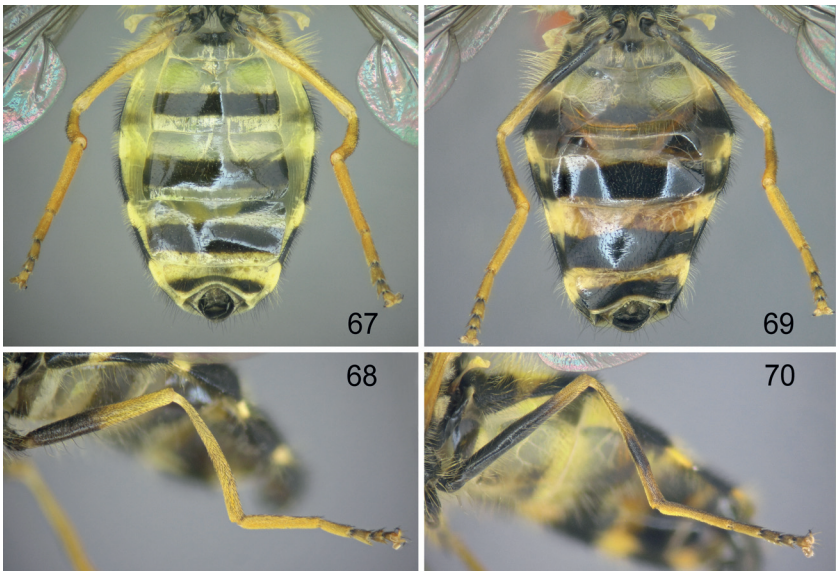
Dasysyrphus neovenustus Soszyński & Mielczarek, 2013 (figs 59–62, 67, 68)

Material examined. Ukraine. **Lviv Region**: Ivano-Frankove env., 49.919882 N 23.694835 E, Roztocze Nature Reserve, edge of mixed forest, 31.05.2008, 1 ♀ (A. Lishchuk); **Rivne Region**: Mosty, 50.305611 N 26.191243 E, Zbytynka River bank, 23.05.2019, on flowers of *Achillea* sp., 1 ♀ (A. Prokhorov); Hrabun env., 51.545978 N 27.200158 E, glades in mixed forest (with flowering *Ledum palustre*) near raised bog, 29.05.2021, 1 ♀ (A. Prokhorov); **Kyiv Region**: Dibrova env., 50.194443 N 30.203628 E, 30.04.2010, 1 ♀ (M. Zaika); Potashnia env., 50.714263 N 29.737106 E, Tal River floodplain forest, 21.05.2015, 1 ♂; Irpin env., 50.502987 N 30.280007 E, Lyubka River floodplain forest, 25.04.2019, 1 ♂; Kotsiubynske env., 50.471860 N 30.307640 E, clearing in mixed forest, 17.04.2016, 6 ♂, 3 ♀, 29.04.2020, 1 ♀; Mygalky env.: 50.656597 N 29.500061 E, mixed forest near Teteriv River floodplain, 28.04.2018, 2 ♀; 50.656767 N 29.497360 E, Teteriv River floodplain, 13.04.2020, 1 ♀, 4.05.2020, on flowers of *Salix* sp., 1 ♀; 50.655066 N 29.494565 E, edge of Teteriv River floodplain forest, 23–24.04.2020, 3 ♂; 50.652546 N 29.488046 E, Teteriv River floodplain forest, 15.05.2020, on flowers of *Cardamine* sp., 1 ♀; 50.651726 N 29.488654 E, boundary between mixed forest and Teteriv River floodplain forest, 17.05.2020, 1 ♀; Nova Buda env., 50.684214 N 29.708405 E, swampy glades in mixed forest, 5.05.2021, on flowers of *Caltha palustris*, 2 ♂ (A. Prokhorov).

Distribution. Czechia, Finland, France, Germany, Great Britain, Ireland, the Netherlands, Norway, Poland, Slovakia, Sweden, Switzerland; Russia (Northwest European part, Baikal Lake) (Soszyński et al., 2013; Barkalov & Mutin, 2018; Speight, 2020; Mazanek et al., 2021); Ukraine (**first record**).



Figs 59–66. *Dasysyrphus neovenustus* (59–62) and *D. venustus* (63–66): 59, 63 — male habitus, dorsal view; 60, 64 — female habitus, dorsal view; 61, 65 — male habitus, lateral view; 62, 66 — female habitus, lateral view.



Figs 67–70. *Dasysyrphus neovenustus* (64, 65) and *D. venustus* (66, 67): 67, 69 — female abdomen, ventral view; 68, 70 — male left hind leg, lateral view.

The species is probably underrecorded because it is only recently described, before that is it likely to be identified as *Dasysyrphus venustus* (Meigen, 1822).

Diagnosis. *Dasysyrphus neovenustus* is very similar in appearance to *D. venustus* (figs 63–66, 69, 70), especially in dorsal and lateral view (figs 59–62). Ventrally, it clearly differs by black rectangular band on posterior part of sternite 2 (fig. 67) (in *D. venustus*, sternite 2 with a small irregular oval or triangular spot, which is usually transversely elongated, as on fig. 69). Also the *D. neovenustus* male can be separated from the male of *D. venustus* by: hind femora black from base to half of their length (fig. 68) (in *D. venustus*, hind femora black from base to 3/4 of their length, as on fig. 70); hind tibia yellow (fig. 68) (in *D. venustus*, hind tibia dark at mid-length, as on fig. 70); pterostigma yellowish (figs 59, 60) (in *D. venustus*, pterostigma brownish, as on figs 63, 64). According to Soszyński et al. (2013), the female of *D. neovenustus* differs from *D. venustus* female by frons with small and weakly marked pollinose spots (in *D. venustus*, frons with distinct pollinose spots). However, some of our specimens of *D. neovenustus* have the frons with normal developed pollinose spots. As the study of our specimens shows, the most stable features are the black band on sternite 2 and color of the pterostigma.

Dasysyrphus neovenustus occurs earlier in the spring than *D. venustus* (Soszyński et al., 2013), and this coincides with our observations. According to our data, the earliest record of *D. neovenustus* was on April 13, while the earliest record of *D. venustus* was on April 23.

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