The Flies (Diptera) of the Park “Theophania” (Kyiv). 1. Calliphoridae and Rhinophoridae

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Verves Yu. G. The Flies (Diptera) of the Park “Theophania”, Kyiv. 1. Calliphoridae and Rhinophoridae. Summary. 827 specimens of 33 species of calliphorids and 4 specimens of 3 species of rhinophorids were collected in the Memorial Park of Landscape Art “Theophania” in 2012. Of them, Calliphora loewi and Stomorhina lunata are recorded from Kyiv city and 17 calliphorid and 3 rhinophorid species from the Park for the first time. As a result, 34 calliphorid and 3 rhinophorid species are known for the park “Theophania” and 45 calliphorid species for Kyiv city.

Key words: Calliphoridae, Rhinophoridae, Park “Theophania”, new records.

Introduction

In Ukraine, 71 species of the blowflies (Calliphoridae) were recorded so far; 43 species are known from Kyiv City in its current boundaries, and 17 species are found to occur in the Landscape Art Memorial Park “Theophania”. Of the Rhinophoridae, 15 species are recorded for Ukraine and 6 (Melanophora roralis, Paykullia maculata, Phyto melanocephala, Rhinomorinia sarcophagina, Rhinophora lepida, Tricogena lumbricosa) are found to occur in Kyiv City.

The faunistic data of the results of field collections of author and observations in 2012 (April-October) in the “Theophania” park are presented. The faunistic data are given after Bilanovskiy (Билановский, 1931; Белановский, 1951), Fan (2002), Hall (1965), James (1970, 1977), Kurahashi (1989), Rognes & Pape (2007), Schumann (1986), Verves (2004, 2005a, b) and Verves & Khrokalo (2010). Some additional references on the distribution of certain species are given in the text below. Generic position of Calliphoridae species follows Rognes (1991, 1998) and Verves & Khrokalo (Вервес и Хрокало, 2006); the genera of Rhinophoridae are given after Pape (1998). The first records for the “Theophania” park are asterisked (*). Ukrainian administrative regions (“oblasts”) and localities in each region and Kyiv City are alphabetically ordered.

The “Theophania” is a park located at the southern outskirts of Kyiv. Its total area is about 1.5 km² (0.58 sq mi). From 1992, Theophania was declared as government designated park, which belongs to the conservatory of the National Academy of Science of Ukraine. The area was reconstructed in 2004–2008. This park includes cultural landscaping, such as woodland, grassland, pond and canal features. An old oak grove is the basis of floristic wood associations.
Material and methods

The flies were collected mainly by means of a hand net and killed then by ethyl acetate in glass tubes. In total, 827 specimens (504♂, 323♀) of Calliphoridae and 4 specimens (3♂, 1♀) of Rhinophoridae have been collected in 2012 by autor. Species were identified according to Grunin (1970) and Rognes (1987, 1991, 1992, 1998, 2002, 2010). Collected specimens are deposited in the collection of the Center for Megalopolis Ecomonitoring and Biodiversity Research, Kyiv.

Results

In this study, 33 species of Calliphoridae and three species of Rhinophoridae were collected in the park “Theophania”. Of them, Calliphora loewi and Stomorhina lunata are recorded for the first time from Kyiv and 17 calliphorid and 3 rhinophilid species are recorded from the park “Theophania” for the first time. As a result, 34 calliphorid and 3 rhinophilid species are found to occur in the park “Theophania” and 45 calliphorid species for Kyiv City.

Calliphoridae

Bellardia bayeri (Jacentkovsky, 1937)


Material examined. Mesophitic old oak grove, oak leaves, flowers of Phalacroloma septentrionale (Fernald. & Wiegand) Tzvelev, 11.05–6.07.2012, 1♂, 3♀ (Verves leg.).

Distribution. Holarctic: Europe northwards to Norway, including British Is.; Asia: Japan (Honshu), Russia (West Siberia), Ukraine: Cherkasy, Chernivtzi, Kyiv and Lugansk Regions.

Bellardia pubicornis (Zetterstedt, 1838)

Verves, 2012.

Material examined. Near buildings, oak leaves, flowers of Anemone ranunculoides L., 11.05.2012, 1♀ (Verves leg.).

Distribution. Palaearctic: Austria, Finland, Italy, Norway, Poland, Russia (Kola Peninsula), Sweden, Switzerland, United Kingdom (Scotland). Ukraine: Kyiv City (Verves, 2012).

Bellardia stricta (Villeneuve, 1926)*

Material examined. Near buildings, oak leave, 15.06.2012, 1♀ (Verves leg.).

Distribution. Palaearctic: Europe northwards to Norway, Finland, and Kola Peninsula, including British Is.; Asia: China (Heilongjiang), Russia (South Siberia & Primorye), Transcaucasia. Ukraine: Cherkasy, Chernigiv, Chernivtzi, Crimea, Khmelnytsky, Kyiv, Poltava, Sumy, Volyn, Zakarpattya and Zaporizhya Regions.

Cynomya mortuorum (Linnaeus, 1761)*

Material examined. Border of park ground road, 1.06.2012, 1♂ (Verves leg.).
**Distribution.** Palaearctic: Europe northwards to Norway, including British Is., Faroe Is., Novaya Zemlya and Iceland; Asia: China (Gansu, Heilongjiang, Jilin, Liaoning, Neimenggu, Ningxia, Qinghai, Shanxi, Sichuan), Japan, Kazakhstan, Middle Asia, Mongolia, Russia (Siberia, Far East), Tibet, Transcaucasia; Neartic: Greenland, USA (Alaska); Oriental Region: China (Yunnan), Pakistan (North West Frontier). Ukraine: Cherkasy, Chernigiv, Chernivtsi, Crimea, Dnipropetrovsk, Ivano-Frankivsk, Kyiv, Lugansk, Poltava, Sumy, Zaporizhya, Zhytomyr and Volyn Regions.

**Lucilia ampulacea** Villeneuve, 1922

Collected in the “Theophania” park in 2008 (Verves & Khrokalo, 2010).

**Material examined.** Border of the hygrophitic old oak park, leaves, 31.07., 2.08.2012, 2 ♀ (Verves leg.).

**Distribution.** Palaearctic: Europe northwards to Northern Germany, Estonia and Leningrad Region, including British Is.; Asia: Afghanistan, China (Gansu, Heilongjiang, Jilin, Liaoning, Neimenggu, Shaanxi, Shandong, Xinjiang), Japan (all parts), Kazakhstan, Korea, Middle Asia, Mongolia, Russia (Siberia and Far East), Transcaucasia; North Africa: Algeria. Oriental Region: India (Karnataka, Kerala, West Bengal), Pakistan (Punjab). Ukraine: Cherkasy, Chernigiv, Kyiv, Lugansk and Zakarpattya Regions.

**Lucilia caesar** (Linnaeus, 1758)

Collected in the “Theophania” park in 2008 (Verves & Khrokalo, 2010).

**Material examined.** Near buildings, lake and stream shores, borders of old oak grove, ground, leaves and flowers of *Solidago canadensis* L., 11.05.–3.10.2012, 49 ♂, 13 ♀ (Verves leg.).

**Distribution.** Palaearctic: Europe, northwards to Norway, including British Is.; Asia: Afghanistan, China (all parts), Iran, Israel, Japan (all parts), Kazakhstan, Korea, Middle Asia, Mongolia, Syria, Turkey, Russia (Siberia, Far East), Transcaucasia; North Africa: Algeria, Canary Is., Egypt, Morocco. Ukraine: Cherkasy, Chernigiv, Chernivtsi, Crimea, Donetz, Kharkiv, Khmelnytsky, Kherson, Kyiv, Lugansk, Lviv, Odesa, Poltava, Sumy, Ternopil, Vinnytsya, Volyn, Zakarpattya, Zaporizhya and Zhytomyr Regions.

**Lucilia illustris** (Meigen, 1826)*

**Material examined.** Park near buildings, shores of lakes and stream; ground, flowers of *Phalacrocloma septentrionale* (Fernald. & Wiegand) Tzelev, *P. annuus* (L.) Dumort, *Solidago canadensis* L., 2.07.–12.09.2012, 10 ♂, 3 ♀ (Verves leg.).


**Lucilia silvarum** (Meigen, 1826)

Collected in the “Theophania” park in 2008 (Verves & Khrokalo, 2010).

**Material examined.** Park near buildings, ground, 25.06.2012, 1 ♂, 1 ♀ (Verves leg.).

**Distribution.** Holarctic: Europe, northwards to Norway, including British Is.; Asia: China (Gansu, Heilongjiang, Ningxia, Qinghai), Israel, Japan (all parts), Mongolia, Russia (South Siberia, Primorye), Transcaucasia; North America: Canada (Alberta), USA (Arizona, California, Louisiana, Maine, Idaho, Ohio, Oklahoma, South Carolina, Virginia, Washington, Wisconsin). Ukraine: Cherkasy, Chernigiv, Chernivtsi, Crimea, Dnipropetrovsk, Ivano-Frankivsk, Kherson, Kyiv, Lugansk, Mykolaiiv, Poltava, Sumy, Volyn, Zakarpattya and Zaporizhya Regions.

**Morina doronici** (Scopoli, 1763)*

**Material examined.** Border of park path, flowers of *Phalacrocloma septentrionale* (Fernald. & Wiegand) Tzelev, 6.07.2012, 1 ♂ (Verves leg.).

**Distribution.** Palearctic: Europe: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Norway, Poland, Russia (Leningrad Region), Slovakia, Spain, Switzerland, Sweden, the Netherlands. Ukraine: Cherkasy, Chernigiv, Kyiv and Sumy Regions.

**Pollenia amentaria** (Scopoli, 1763)


**Distribution.** Palearctic: Europe, including British Is.; Asia: Afghanistan, Transcaucasia, Turkey; North Africa:
**Pollenia angustigena** Wainwright, 1940 *

*Material examined.* Borders of old oak grove, leaves, ground, walls of buildings, 27.04–3.10.2012, 2 ♂, 5 ♀ (Verves leg.).

*Distribution.* Holarctic: Europe: Andorra, Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Norway, Poland, Portugal, Russia (European part), Slovakia, Spain, Sweden, Switzerland, the Netherlands, Ukraine, United Kingdom; North Africa: Madeira Is.; North America: Canada (British Columbia, Ontario, Quebec), USA (California, Idaho, Michigan, Nevada, New York, New Jersey, Ohio, Utah, Virginia, Washington, Wisconsin). Ukraine: Cherkasy, Kyiv, Mykolaiv, Poltava, Sumy, Zakarpattya and Zhytomyr Regions.

**Pollenia atramentaria** (Meigen, 1826)


*Material examined.* Near buildings, leaves, 25.06.2012, 1 ♂, 1 ♀ (Verves leg.).

*Distribution.* Palaearctic: Europe: Andorra, Austria, Belarus, Czech Republic, France, Germany, Italy, Lithuania, Poland, Russia, Slovakia, Switzerland, The Netherlands, Ukraine; Asia: Transcaucasia; North Africa: Algeria. Ukraine: Cherkasy, Kyiv and Poltava Regions.

**Pollenia griseotomentosa** (Jacentkovský, 1944)


*Material examined.* Old oak grove, at leaves and trunks, 25.04–6.07.2012, 1 ♂, 2 ♀ (Verves leg.).

*Distribution.* Palaearctic: Europe: Andorra, Belarus, Czech Republic, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Norway, Poland, Russia (Ivanovo and Leningrad Regions); Slovakia, Spain, Switzerland, The Netherlands, Ukraine, United Kingdom; Asia: Georgia. Nearctic: Canada (Ontario), USA (Maine, Washington, Wisconsin). Ukraine: Cherkasy, Chernigiv, Chernivtsi, Crimea, Khmelnitsky, Kyiv, Poltava, Zakarpattya and Zhytomyr Regions.

**Pollenia hungarica** Rognes, 1987 *


*Distribution.* Palaearctic: Europe: Austria, Belarus, Czech Republic, Finland, France, Germany, Hungary, Italy, Latvia, Norway, Poland, Russia (European part), Serbia, Slovakia, Sweden, Switzerland. Ukraine: Cherkasy, Chernigiv, Chernivtsi, Kherson, Kyiv, Odesa, Poltava, Sumy, Volyn and Zakarpattya Regions.

**Pollenia labialis** Robineau-Desvoidy, 1863


*Material examined.* Borders of old oak grove, leaves, walls of building, 4.04–8.06.; 2 ♂, 4 ♀ (Verves leg.).


**Pollenia mayeri** Jacentkovský, 1941


*Distribution.* Palaearctic: Europe: Belarus, Czech Republic, Germany, Hungary, Poland, Romania, Russia (Leningrad Region), Slovakia, the Netherlands. Ukraine: Cherkasy and Kyiv Regions.

**Pollenia moravica** (Jacentkovský, 1941) *

*Material examined.* Old oaks near buildings, at leaves and trunks, 12.06–13.07.2012, 3 ♂ (Verves leg.).

*Distribution.* Austria, Croatia, Czech Republic, Hungary, Poland (Szpila & Draber-Motlík, 2008), Romania, Serbia, Slovakia. Ukraine: Cherkasy and Kyiv Regions (Verves, 2013a).

**Pollenia pediculata** Macquart, 1834


*Distribution.* Holartic: Europe, including British Is.; Asia: China (Qinghai, Xinjiang), Cyprus, Gaza Strip, Iran, Israel, Jordan, Kazakhstan, Lebanon, Madeira, [North] Yemen, Syria, Tibet, Turkey, Turkmenistan, West Bank (Rognes, 2002); North Africa: Egypt, Madeira; North America: Canada, USA; Oriental Region: India (Jammu & Kashmir), Pakistan; Australasian/Oceanian Region: New Zealand. Ukraine: Cherkasy, Chernigiv, Crimea, Dnipropetrovsk, Ivano-Frankivsk, Kherson, Kyiv, Liov, Lugansk, Mykolaiv, Odesa, Poltava, Sumy, Vinnytsya, Zaporizhzhya and Zhytomyr Regions.

**Pollenia rudis** (Fabricius, 1794)


*Distribution.* Holartic: Europe, including British Is.; Asia: most countries, from Turkey, Israel and Saudi Arabia to Russia (Siberia, Far East), Japan, and China (Qinghai) (see Rognes, 2002); North Africa: Algeria, Azores, Canary Is., Egypt, Morocco, Tunisia; North America: Canada (P. E. I., Quebec), USA; Oriental Region: India (Jammu &
**Pollenia vagabunda** (Meigen, 1826)


**Material examined.** Humid old oak grove, leaves and ground, 24.04–2.08.2012, 1♂, 4♀♀ (Verves leg.).


**Pollenia vera** Jacentkovský, 1936

**Material examined.** Humid old oak grove, at leaves and flowers of *Anemone ranunculoides* L. & *Ficaria verna* Huds., 11–27.04.2012, 8♂, 4♀♀ (Verves leg.).

**Distribution.** Palaearctic: Europe: Austria, Bulgaria, Czech Republic (Moravia), Greece, Hungary, Moldova, Poland, Romania, Serbia, Slovakia. Ukraine: Cherkasy (Verves, 2005), Chernivtsi (Verves, 2005a), Kyiv (Verves, 2013b) and Kharkiv (Grunin, 1970) Regions.

**Phormia regina** (Meigen, 1826)*

**Material examined.** Park near buildings, ground, 15.06.2012, 1♂ (Verves leg.).

**Distribution.** Holartic (absent in Scandinavia); Oriental Region: Pakistan (Sind); Australasian/Oceanian Region: Hawaii. Ukraine: Cherkasy, Chernigiv, Chernivtsi, Crimea, Kherson, Kyiv, Lugansk, Sumy and Zakarpattya Regions.

**Protocalliphora azurea** (Fallén, 1817)


**Material examined.** Old oak grove, borders of roads, leaves and ground, 24.04–31.07.2012, 4♀♀ (Verves leg.).

**Distribution.** All parts of the Palaearctic Region; Oriental Region: China (Guizhou, Yunnan, Zhejiang) and Pakistan. Ukraine: Cherkasy, Chernigiv, Chernivtsi, Dnipropetrovsk, Kherson, Kyiv, Lugansk, Poltava, Volyn and Zaporizhya Regions.

**Protocalliphora rognesi** Thompson & Pape, 1993*

**Material examined.** Old oak grove, borders of roads, leaves and ground, 1.06–26.07.2012, 2♂, 1♀♀ (Verves leg.).

**Distribution.** Widespread in the Holarctic. Ukraine: Cherkasy, Crimea, Dnipropetrovsk, Kyiv, Lugansk and Volyn Regions.

**Protophormia terraenovae** (Robineau-Desvoidy, 1830)


**Material examined.** Building, at wall, 12.06.2012, 1♂ (Verves leg.).

**Distribution.** Widespread in Holarctic, including Arctic territories; Oriental Region: Pakistan; Neotropic: Argentina, Chile (Magallanes); Antarctic: South Georgia Is. Ukraine: Cherkasy, Chernigiv, Chernivtsi, Crimea, Donetsk, Kharkiv, Kherson, Khmelnyzky, Kyiv, Lviv, Odesa, Poltava, Sumy, Vinnytsya, Volyn, Zakarpattya, Zaporizhya and Zhytomyr Regions.

**Eurychaeta palpalis** (Robineau-Desvoidy, 1830)

Collected in the “Theophania” park in 2008 (Verves & Khrokalo, 2010).

**Material examined.** Borders of old oak grove, leaves, 21.05., 1, 4♀♀ (Verves leg.).

**Distribution.** Palaearctic: Europe, including United Kingdom (England only); Asia: Armenia, Russia (West Siberia). Ukraine: Cherkasy, Chernigiv, Chernivtsi, Crimea, Ivano-Frankivsk, Kharkiv, Kyiv, Poltava, Sumy, Vinnytsya, Volyn, Zakarpattya & Zhytomyr Regions.

**Stomorhina lunata** (Fabricius, 1805)*

**Material examined.** Park, flowers of *Solidago canadensis* L., 12.09.2012, 1♂ (Verves leg.).

**Distribution.** Palaearctic: Southern and Mid-Europe, including United Kingdom; Asia: Armenia, Azerbaijan, China (Sichuan, Xizang), Cyprus, Georgia, Iran, Iraq, Israel, Jordan, Kyrgyzstan, Lebanon, [North] Yemen, Saudi Arabia, Syria, Tajikistan, Turkey, Turkmenistan, Uzbekistan; North Africa: Algeria, Canary Is., Egypt, Madeira Is., Morocco, Spanish North Africa; Nearctic Region: Bermuda Is.; Oriental Region: China (Yunnan), India (Assam, Tamil Nadu, Uttaranchal, West Bengal), Malaysia (Malaya), Nepal, Pakistan (Baluchistan), Taiwan; widespread in Afrotropical and Madagascan Regions. Ukraine: Cherkasy, Crimea, Kyiv, Odesa and Poltava Regions.

**Rhaphiophoridae**

**Melanophora roralis** (Linnaeus, 1758)

**Material examined.** Park, near stream, leaf, 9.08.2012, 2♂ (Verves leg.).

**Distribution.** Holarctic: Europe, including British Is., up to Norway; North Africa: Azores; Algeria; North America: USA; Afrotropical: Cape Verde Is; Neotropic: Argentina, Brazil, Chile, Jamaica, St. Thomas Is. Ukraine: Cherkasy, Chernigiv, Crimea, Kyiv, Poltava, Zaporizhya and Zhytomyr Regions.

**Phyto melanocephala** (Meigen, 1824)

**Material examined.** Park near building, flowers of *Solidago canadensis* L., 1.10.2012, 1♂ (Verves leg.).

**Distribution.** Palaearctic: Southern and Middle Europe, including British Is. Ukraine: Cherkasy, Chernigiv, Chernivtsi, Crimea, Kyiv, Kherson, Odesa, Sumy and Zaporizhya Regions.
**Rhinophora lepida** (Meigen, 1824)

**Material examined.** Park near building, flowers of *Phalacroloma annuus* (L.) Damort, 6.07.2012, 1 ♀ (Verves leg.).

**Distribution.** Palearctic: Europe, including United Kingdom (south of England), Ukraine; Chernksy, Chernigiv, Ivano-Frankivsk, Kherson, Kyiv, Lugans, Mykolaiiv, Poltava, Sumy, Vinnytsya and Zaporozhzhya Regions.

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**References**


