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New hover fly records for Corsica: results from *Our Planet Reviewed in Corsica 2019-2021* (Diptera, Syrphidae)

Ximo MENGUAL¹, Thomas LEBARD² & Alexandre CORNUEL-WILLERMOZ³

¹ Museum Koenig, Leibniz-Institut zur Analyse des Biodiversitätswandels, Adenauerallee 127,
D – 53113 Bonn, Germany <x.mengual@leibniz-lib.de>

² Quartier Ginestrea, hameau de Piène-Haute, F – 06540 Breil-sur-Roya, France <thomas_lebard@yahoo.fr>

³ Office de l'Environnement de la Corse – Observatoire Conservatoire des Invertébrés de Corse,
14 avenue Jean-Nicoli, F – 20250 Corte, France <alexandre.cornuel-willermoz@oec.fr>

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Abstract. – In this study we present a commented and referenced species list of the Syrphidae (Diptera) collected during the surveys of the *Our Planet Reviewed in Corsica 2019-2021* programme. We studied a total of 2420 specimens belonging to 131 taxa, which were collected during the field campaigns between 2019 and 2022 using different methodologies: hand collecting, hand-net, interception traps, light traps, Malaise traps, sweep-netting, and coloured pan traps. The genera *Anasimyia* Schiner, 1864, *Brachyopa* Meigen, 1822, *Lapposyrphus* Dušek & Láška, 1967, *Lejops* Rondani, 1857, *Melangyna* Verrall, 1901, *Neocnemodon* Goffe, 1944, and *Parhelophilus* Girschner, 1897, are recorded from Corsica for the first time, and we also provide records for 30 species new to Corsica. Among the studied material, we present records for 17 threatened species in Europe and three endemics of Corsica. Furthermore, we report a new location for the Critically Endangered *Riponnensia daccordii* (Clausen, 1991) and corroborate that it is not extinct.

Résumé. – *Nouvelles données sur les syrphes pour la Corse : résultats de La Planète Revisitée en Corse 2019-2021 (Diptera, Syrphidae).* Nous présentons dans cet article une liste commentée et référencée des espèces de Syrphidae (Diptères) collectées lors des suivis du programme *La Planète Revisitée en Corse 2019-2021*. Nous avons étudié un total de 2420 spécimens appartenant à 131 taxons, qui ont été collectés lors des campagnes de terrain entre 2019 et 2022 en utilisant différentes méthodologies : assiettes colorées, collecte manuelle, filet à main, filet fauchoir, pièges d'interception, pièges lumineux et pièges Malaise. Les genres *Anasimyia* Schiner, 1864, *Brachyopa* Meigen, 1822, *Lapposyrphus* Dušek & Láška, 1967, *Lejops* Rondani, 1857, *Melangyna* Verrall, 1901, *Neocnemodon* Goffe, 1944, et *Parhelophilus* Girschner, 1897, sont mentionnés en Corse pour la première fois, et nous fournissons également des données pour 30 espèces nouvelles pour la Corse. Parmi le matériel étudié, nous présentons les données de 17 espèces menacées en Europe et trois endémiques de Corse. En outre, nous signalons une nouvelle station pour *Riponnensia daccordii* (Clausen, 1991), espèce en danger critique d'extinction, et corroborons qu'elle n'est pas éteinte.

Keywords. – Flower flies, hoverflies, new species records, *Riponnensia daccordii*, endemic, threatened species.

Known as hover flies or flower flies, member of the family Syrphidae Latreille, 1802 (Insecta, Diptera) are popular among nature-lovers and entomologists. The family comprises over 6300 described species worldwide (SKEVINGTON *et al.*, 2019), with more than 900 species occurring in Europe (VUJIĆ *et al.*, 2022; STÄHLS, 2022) — a number that grows every year (e.g., BOT *et al.*, 2022; ARACIL *et al.*, 2023). The family is divided into four subfamilies (MENGUAL *et al.*, 2015a), namely Eristalinae Newman, 1834, Microdontinae Rondani, 1845, Pipizinae Williston, 1885, and Syrphinae Latreille, 1802. Recent phylogenetic studies find support for the monophyly of these subfamilies, except for Eristalinae (YOUNG *et al.*, 2016; PAULI *et al.*, 2018; MORAN *et al.*, 2022; MENGUAL *et al.*, 2023).

Syrphids are known for being excellent mimics of aculeate hymenopterans (ROTHERAY & GILBERT, 2011), but also very important for their ecosystem services (DUNN *et al.*, 2020). Adults feed on pollen and nectar and are important pollinators in natural and agricultural ecosystems (SSYMANK & KEARNS, 2009; INOUE *et al.*, 2015; DOYLE *et al.*, 2020). Hover fly

larvae show a broad array of feeding modes (ROTHERAY, 1993; ROTHERAY & GILBERT, 2011; PÉREZ-LACHAUD *et al.*, 2014; FLEISCHMANN *et al.*, 2016, 2022) and act as biological control agents of arthropod pests (ARCAYA *et al.*, 2017; BELLEFEUILLE *et al.*, 2019; MOERKENS *et al.*, 2021) and also of certain weeds (RIZZA *et al.*, 1988; SHEPPARD *et al.*, 1995; GROSSKOPF, 2005). Moreover, saprophagous larvae serve as decomposers of organic matter (LARDÉ, 1989, 1990; MORALES & WOLFF, 2010) and have a relative significance as insects of forensic importance (MAGNI *et al.*, 2013; HEO *et al.*, 2020) and as myiasis agents (PÉREZ-BAÑÓN *et al.*, 2020).

More than one third of the European hover flies are threatened with extinction (VUJIĆ *et al.*, 2022) and recent studies show a strong decline in their abundance (GATTER *et al.*, 2020; BARENDREGT *et al.*, 2022). Now more than ever large-scale scientific studies are needed to understand the fluctuations and responses of the pollinator communities to environmental changes in Europe, and several European Commission-funded projects aim to provide such information, such as the EU Pollinator Monitoring Scheme (EUPoMS; see POTTS *et al.*, 2021), the Preparatory Action for EU Pollinator Monitoring Scheme and Indicators (SPRING project), the Horizon 2020 Europe research projects (PoshBee, Safeguard), and European National action plans for pollinators (see <https://wikis.ec.europa.eu/display/EUPKH/EU+Pollinator+Information+Hive>).

In the present study we report the new records of Syrphidae from Corsica resulting from the expeditions of the *Our Planet Reviewed in Corsica 2019-2021* programme (TOUROULT *et al.*, 2023). Although the discovery of new species records for Corsica was not among the main objectives of the programme, the amount of sampled material may provide a very accurate picture of the current fauna of this Mediterranean island and, hence, improve our knowledge on insects, their distribution and biology. Knowing that a large proportion of European hover flies are threatened and that Corsica houses several endemics, we believe that our study can help other European initiatives with pollinators and, wherever feasible, it will contribute to a better management of the territory through assessments and monitoring.

MATERIAL AND METHODS

Specimens were collected in the frame of the most recent edition of the *La Planète Revisitée* (*Our Planet Reviewed*) series of surveys (<https://www.mnhn.fr/fr/recherche-expertise/lieux/planete-revisitee>). Between 2019 and 2021, scientific field expeditions on the island of Corsica took place organised by the Muséum national d'Histoire naturelle (MNHN, Paris, France), the Office français de la biodiversité, and the Collectivité de Corse (see <http://laplaneterevisitee-corse.mnhn.fr>). A detailed protocol on the survey strategy, sampled localities, workflow and methodologies used during the field campaigns can be found in TOUROULT *et al.* (2023). In 2022, Thomas Lebard continued the field work within the frame of *Our Planet Reviewed* and visited Corsica for more sampling. Simplemapp (SHORTHOUSE, 2010) was used to create a map with the 267 sampling localities where hover flies were collected (fig. 1).

The studied and reported material can be divided into two parts or sections: those specimens collected by hand-net by Thomas Lebard, and all other samples originated from the field campaigns using several methodologies, such as hand-collecting, interception traps, light traps, Malaise traps, pan traps, and sweep-netting (see TOUROULT *et al.*, 2023). For the latter samples, the Diptera coordinator (Marc Pollet, Research Institute for Nature and Forest – INBO, Brussels, Belgium) sent the subsamples to the first author after sorting the specimens to family. The sampling methodology is indicated for each studied specimen (see Supplementary material). Species records will ultimately be disclosed and distributed in the frame of the Inventaire national du patrimoine naturel (<https://inpn.mnhn.fr/>) and, in the case of this specific

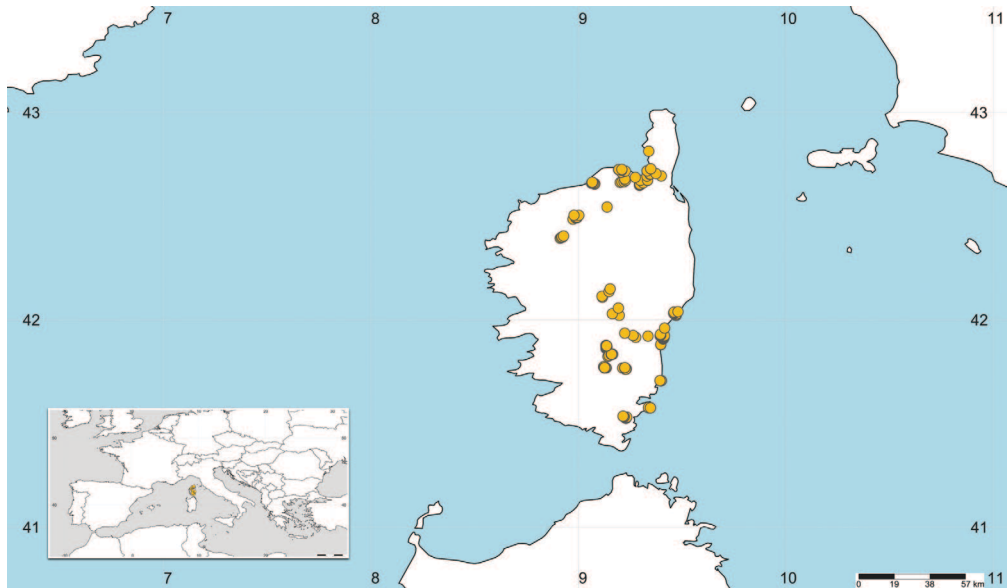


Fig. 1. – Map of Corsica with the sampling localities during the field campaigns of *La Planète Revisitée (Our Planet Reviewed)*.

survey, via the collections portal of the MNHN (https://science.mnhn.fr/institution/mnhn/item/search/form?lang=fr_FR).

For the morphological identification of the hover fly individuals, several literature works were used. For the genus identification we used the keys of VAN VEEN (2010) and SPEIGHT (2020a). For the identifications at the species level we also used VAN VEEN (2010) as a general reference, together with SPEIGHT & SARTHOU (2017) and the following additional references:

Anasimyia Schiner, 1864 (CLAUSSEN & TORP, 1980); *Brachyopa* Meigen, 1822 (PELLMANN, 1998); *Callicera* Panzer, 1809 (SPEIGHT, 1991; SMIT, 2014); *Ceriana* Rafinesque, 1815 (VAN STEENIS *et al.*, 2016); *Claussenia* Vujčić & Ståhls, 2013 (VUJIĆ *et al.*, 2013); *Doros* Meigen, 1803 (SPEIGHT, 1988); *Eumerus* Meigen, 1822 (VAN DER GOOT, 1968; DOCZKAL, 1996; SPEIGHT *et al.*, 2021); *Merodon* Meigen, 1803 (VUJIĆ *et al.*, 2021; and references therein); *Myolepta* Newman, 1838 (REEMER *et al.*, 2004); *Neocnemodon* Goffe, 1944 (BARTSCH, 2009); *Paragus* Latreille, 1804 (GOELDIN DE TIEFENAU, 1976; GOELDIN DE TIEFENAU & LUCAS, 1981; MARCOS-GARCÍA, 1986; MARCOS-GARCÍA & ROJO, 1994; SOMMAGGIO, 2002); *Pelecocera* Meigen, 1822 (VAN ECK & MENGUAL, 2021; LAIR *et al.*, 2022); and *Riponnensia* Maibach, Goeldlin de Tiefenau & Speight, 1994 (CLAUSSEN, 1991; BOT *et al.*, 2023).

RESULTS

In this section we exclusively report the species collected in the frame of the programme *Our Planet Reviewed in Corsica 2019-2021* (TOUROULT *et al.*, 2023). Besides the hand-net, other methodologies that yielded specimens are hand collecting, interception traps (Polytrap™), light traps, Malaise traps, blue, yellow, pink and white pan traps, and sweep-netting.

For each collected species we provide the literature references for Corsica, the number of specimens divided by sex (see Supplementary material), known distribution (based on SPEIGHT, 2020b and IUCN, 2023), the IUCN status (after IUCN, 2023), and some remarks. For each literature reference or record, we cite the name of the taxon as published in the original publication, either if it is a synonym or an old combination. Studied specimens with

their metadata are listed in Supplementary material. A total of 2420 specimens belonging to 131 taxa were collected during the field campaigns between 2019 and 2022. Due to the preservation condition or the impossibility to distinguish the female sex among close species several specimens were left without species identification, namely individuals of the genera *Chrysotoxum* Meigen, 1803, *Eumerus*, *Myolepta*, *Neocnemodon*, *Paragus*, and *Platycheirus* Lepeletier de Saint-Fargeau & Audinet-Serville, 1828.

Authors were requested to organize the list by subfamilies, but the subfamilial division of this group will change soon (see MORAN *et al.*, 2022). Thus, the species are listed in alphabetic order.

Anasimyia contracta Claussen & Torp, 1980

Material examined. – 3 males, 1 female.

Distribution. – British Isles, Europe, Turkey, and European parts of Russia.

IUCN status. – Least Concern.

Remarks. – New species and new genus for Corsica.

Baccha elongata (Fabricius, 1775)

References. – BECKER *et al.* (1910); KUNTZE (1913) as *Baccha obscuripennis* Meigen, 1822; DIRICKX (1994) as *Baccha obscuripennis* and *B. elongata*; SPEIGHT *et al.* (2018, 2020).

Material examined. – 21 males, 15 females.

Distribution. – British Isles, Europe, Azores, and European parts of Russia.

IUCN status. – Least Concern.

Remarks. – Based on our own research using morphological and molecular characters, we do consider *Baccha obscuripennis* a junior synonym of *B. elongata* following previous authors (SPEIGHT, 2020b; MENGUAL *et al.* (2020)).

Brachyopa pilosa Collin, 1939

Material examined. – 1 male, 1 female.

Distribution. – Europe, Great Britain, and European parts of Russia.

IUCN status. – Least Concern.

Remarks. – New species and new genus for Corsica.

Brachypalpoides lentus (Meigen, 1822)

References. – KUNTZE (1913) as *Xylota lenta*; DIRICKX (1994); SPEIGHT *et al.* (2020).

Material examined. – 1 male.

Distribution. – British Isles, Europe, Middle East, and European parts of Russia.

IUCN status. – Least Concern.

Callicera aurata (Rossi, 1790)

Material examined. – 9 females.

Distribution. – British Isles, Europe, Turkey, southern parts of European Russia, and the Caucasus Region.

IUCN status. – Vulnerable under criterion B2ab(ii,iii,iv).

Remarks. – New species for Corsica.

Callicera fagesii Guérin-Méneville, 1844

Material examined. – 3 females.

Distribution. – Central and Southern Europe, especially in the Mediterranean Basin.

IUCN status. – Endangered under criterion B2ab(ii,iii,iv).

Remarks. – New species for Corsica.

Callicera macquartii Rondani, 1844

Material examined. – 2 females.

Distribution. – Central and Southern Europe, especially in the Mediterranean Basin

IUCN status. – Endangered under criterion B2ab(ii,iii,iv).

Remarks. – New species for Corsica.

Ceriana conopsoides (Linnaeus, 1758)

References. – BECKER *et al.* (1910) as *Ceria conopsoides*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male, 2 females.

Distribution. – Europe, Northern Africa, Russia (including Central and Eastern parts), and China.

IUCN status. – Least Concern.

Ceriana vespiformis (Latreille, 1809)

References. – BECKER *et al.* (1910) as *Ceria vespiformis*; DIRICKX (1994); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 16 males, 9 females.

Distribution. – Mediterranean Basin, including Middle East, the Balkan Peninsula up to Romania.

IUCN status. – Least Concern.

Chalcosyrphus (Xylotina) nemorum (Fabricius, 1805)

References. – KUNTZE (1913) as *Xylota nemorum*; DIRICKX (1994).

Material examined. – 19 males, 14 females.

Distribution. – British Isles, Europe, Russia, and Japan; also from Alaska to Nova Scotia and south to California in the Nearctic.

IUCN status. – Least Concern.

Remarks. – This is the second published record of this species from Corsica; being the first 110 years old. In recent literature, *C. nemorum* is not listed from Corsica (SPEIGHT, 2018; SPEIGHT *et al.*, 2018, 2020).

Chalcosyrphus (Xylotodes) piger (Fabricius, 1794)

References. – BIGOT (1861) and VILLENEUVE (1912) as *Xylota fulviventris* Bigot, 1861; BECKER *et al.* (1910) as *Xylota fulviventris* and *X. nigerrima* Becker, 1910; KUNTZE (1913) as *Xylota nigerrima*; VAN DER GOOT (1961) as *Zelima fulviventris*; HIPPA (1968) as *Xylotomima pigra* because he considered *Xylotomima fulviventris* as a junior synonym of *X. pigra*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 2 males.

Distribution. – Europe, Russia (including Russian Far East); and from British Columbia to Quebec, south to California, Mexico and Florida in the Nearctic.

IUCN status. – Least Concern.

Cheilosia (Cheilosia) aerea Dufour, 1848

References. – BECKER *et al.* (1910) as *Chilosia zetterstedti* Becker, 1894; DIRICKX (1994) as *Cheilosia zetterstedti*; SPEIGHT *et al.* (2020).

Material examined. – 1 male, 2 females.

Distribution. – Central and Southern Europe, European parts of Russia, and Caucasus Region.

IUCN status. – Least Concern.

Cheilosia (Cheilosia) proxima (Zetterstedt, 1843)

Material examined. – 2 females.

Distribution. – British Isles, Europe, Russia (including Central and Eastern part of Russia).

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Cheilosia (Convocheila) laticornis Rondani, 1857

References. – BECKER *et al.* (1910) as *Chilosia latifacies* Loew, 1857; DIRICKX (1994) as *Cheilosia latifacies*; SPEIGHT *et al.* (2020).

Material examined. – 1 male, 1 female.

Distribution. – Europe, south European Russia, Ukraine, the Caucasus Region, Kirghizstan, Afghanistan, Turkey, Israel, and Northern Africa.

IUCN status. – Least Concern.

Cheilosia (Eucartosyrphus) scutellata (Fallén, 1817)

References. – KUNTZE (1913) as *Chilosia scutellata*; DIRICKX (1994); LEBARD *et al.* (2019); SPEIGHT *et al.* (2020).

Material examined. – 11 males, 22 females.

Distribution. – Europe, Turkey, Northern Africa, Russia (including the Russian Far East).

IUCN status. – Least Concern.

Chrysotoxum bicinctum (Linnaeus, 1758)

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 6 males, 5 females.

Distribution. – Europe, Northern Africa, Turkey, Caucasus Region, and European parts of Russia eastwards until Central Siberia.

IUCN status. – Least Concern.

Chrysotoxum cisalpinum Rondani, 1845

References. – SCHINER (1857); BECKER *et al.* (1910); VAN DER GOOT (1961); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male, 3 females.

Distribution. – Mediterranean Europe, central France, Bulgaria, Tajikistan, and Uzbekistan.

IUCN status. – Vulnerable under criterion B2ab(iii).

***Chrysotoxum elegans* Loew, 1841**

References. – BECKER *et al.* (1910); SPEIGHT *et al.* (2020).

Material examined. – 5 males, 1 female.

Distribution. – Europe, European parts of Russia, Turkey, and the Caucasus Region.

IUCN status. – Near Threatened under criterion B2ab(ii,iii,iv).

***Chrysotoxum intermedium* Meigen, 1822**

References. – SCHINER (1857); KUNTZE (1913); DIRICKX (1994).

Distribution. – Unclear.

IUCN status. – Least Concern.

Remarks. – The species name *C. intermedium* very likely comprises more than one taxon (SPEIGHT, 2018), and the species limits between *C. intermedium* and *C. lessonae* Giglio-Tos, 1890 are not clear yet (SPEIGHT & LEBARD, 2022). We identified the studied specimens using SPEIGHT & SARTHOU (2017) and named them *C. intermedium* A and *C. intermedium* B (see below). Following SPEIGHT & LEBARD (2022), the species concept of *C. intermedium* A corresponds globally to *Chrysotoxum lessonae* in SOMMAGGIO (2001) and VUJIĆ *et al.* (2017) and to the *C. lessonae* aggregate of SPEIGHT & LEBARD (2022). Similarly, *C. intermedium* B corresponds globally to *Chrysotoxum intermedium* in SOMMAGGIO (2001) and VUJIĆ *et al.* (2017) and to the *C. intermedium* aggregate of SPEIGHT & LEBARD (2022). We opted to name these two taxa *intermedium* A and *intermedium* B because the use of *C. lessonae* or *C. lessonae* aggregate would imply a new species record for Corsica; and although we are sure that both taxa are present in Corsica, we do not think it is necessary to mention *C. lessonae* from Corsica until the taxonomy and the nomenclature are revised.

***Chrysotoxum intermedium* A**

References. – SPEIGHT *et al.* (2018).

Material examined. – 4 males, 3 females.

Remarks. – See Remarks under *C. intermedium*.

***Chrysotoxum intermedium* B**

References. – LEBARD *et al.* (2019).

Material examined. – 14 males, 15 females.

Remarks. – See Remarks under *C. intermedium*.

***Chrysotoxum octomaculatum* Curtis, 1837**

Material examined. – 2 males, 2 females.

Distribution. – England, Central and Southern Europe, southern parts of Russia, Armenia, and Kazakhstan.

IUCN status. – Near Threatened.

Remarks. – New species for Corsica.

Claussenia hispanica (Strobl, 1909)

References. – SPEIGHT *et al.* (1998) as *Heringia hispanica*; BIRTELE (2011) as *Heringia (Neocnemodon) hispanica*; SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 7 females.

Distribution. – Mediterranean Europe.

IUCN status. – Endangered under criterion B2ab(iii).

Dasysyrphus albostrigatus (Fallén, 1817)

References. – KUNTZE (1913) as *Syrphus albostrigatus*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 6 males, 2 females.

Distribution. – British Isles, Europe, Northern Africa, Turkey, Caucasus Region, Russia, and Japan.

IUCN status. – Least Concern.

Dasysyrphus pinastri (De Geer, 1776)

Material examined. – 1 male, 2 females.

Distribution. – British Isles, Europe, Turkey, and Russia (eastwards to Yakutia).

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Didea fasciata Macquart, 1834

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 2 males, 2 females.

Distribution. – British Isles, Europe, Russia (including Russian Far East), China, and Japan; India and Taiwan in the Indomalayan Region.

IUCN status. – Least Concern.

Doros destillatorius Mik, 1885

References. – CORNUEL-WILLERMOZ (2021).

Material examined. – 1 female.

Distribution. – Mediterranean Europe, Bulgaria, Romania, Turkey and Crimea.

IUCN status. – Endangered under criterion B2ab(iii).

Remarks. – Second report of this species from Corsica.

Epistrophe eligans (Harris, 1780)

References. – BECKER *et al.* (1910) as *Syrphus bifasciatus* Fabricius, 1794; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 4 males, 6 females.

Distribution. – British Isles, Europe, European parts of Russia, Turkey, and Caucasus Region.

IUCN status. – Least Concern.

Remarks. – All studied specimens belong to *Epistrophe eligans* var. *trifasciata* (Strobl, 1898), except for a male that belongs to the nominative subspecies.

Epistrophe nitidicollis (Meigen, 1822)

References. – BECKER *et al.* (1910) as *Syrphus nitidicollis*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 4 females.

Distribution. – British Isles, Europe, Russia, Caucasus Region, and Japan; from Alaska south to California and South Carolina in the Nearctic Region.

IUCN status. – Least Concern.

Episyrphus balteatus (De Geer, 1776)

References. – BECKER *et al.* (1910) as *Syrphus balteatus*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 29 males, 26 females, 2 unknown.

Distribution. – British Isles, Europe, Canary Islands, Azores, Northern Africa, Russia, Caucasus Region, and Japan.

IUCN status. – Least Concern.

Remarks. – The two specimens with unknown sex are field observations.

Eristalinus (Eristalinus) megacephalus (Rossi, 1794)

References. – DIRICKX (1994); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 3 females.

Distribution. – Mediterranean Europe, Northern Africa, Turkey, and Afrotropical Region.

IUCN status. – Least Concern.

Eristalinus (Eristalinus) sepulchralis (Linnaeus, 1758)

References. – KUNTZE (1913); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 14 males, 13 females.

Distribution. – British Isles, Europe, Northern Africa, Turkey, Russia, China, Japan, and India.

IUCN status. – Least Concern.

Eristalinus (Eristalodes) taeniops (Wiedemann, 1818)

References. – BECKER *et al.* (1910) as *Eristalis taeniops*; KUNTZE (1913) as *Eristalodes taeniops*; DIRICKX (1994); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 1 male, 1 unknown.

Distribution. – Mediterranean Europe, Middle East, Turkey, Northern Africa, Caucasus Region, Canary Islands, Afrotropical Region and parts of the Indomalayan Region.

IUCN status. – Least Concern.

Remarks. – The specimen with unknown sex is a field observation.

Eristalinus (Lathyrophthalmus) aeneus (Scopoli, 1763)

References. – BECKER *et al.* (1910) as *Eristalis aeneus*; VAN DER GOOT (1961) as *Lathyrophthalmus aeneus*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 10 males, 8 females.

Distribution. – Cosmopolitan.

IUCN status. – Least Concern.

Eristalis (Eoseristalis) arbustorum (Linnaeus, 1758)

References. – KUNTZE (1913); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 12 males, 13 females.

Distribution. – Throughout the Palearctic Region, including Northern Africa; from Wisconsin to Labrador and south to Kansas and South Carolina in the Nearctic Region; and in northern India.

IUCN status. – Least Concern.

Eristalis (Eoseristalis) pertinax (Scopoli, 1763)

References. – KUNTZE (1913); DIRICKX (1994); SPEIGHT *et al.* (2020).

Material examined. – 5 males.

Distribution. – British Isles, Europe, European parts of Russia, and Turkey.

IUCN status. – Least Concern.

Eristalis (Eoseristalis) similis Fallén, 1817

References. – KUNTZE (1913) and DIRICKX (1994) as *Eristalis pratorum* Meigen, 1822; SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 9 males, 12 females.

Distribution. – England, Europe, Mediterranean Basin, Turkey, and Russia.

IUCN status. – Least Concern.

Eristalis (Eristalis) tenax (Linnaeus, 1758)

References. – SCHINER (1857); BECKER *et al.* (1910) as *Eristalis hortorum* Meigen, 1822, and *E. tenax*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 25 males, 7 females.

Distribution. – Cosmopolitan.

IUCN status. – Least Concern.

Eumerus amoenus Loew, 1848

References. – VAN DER GOOT (1961); DOCZKAL (1996).

Material examined. – 8 males, 4 females.

Distribution. – Central and Southern Europe, Mediterranean Basin, Canary Islands, Azores, Caucasus Region, and central parts of Asia (Kazakhstan, Turkestan, Tajikistan, and Mongolia).

IUCN status. – Least Concern.

Eumerus argyropus Loew, 1848

Material examined. – 1 male.

Distribution. – Mediterranean Europe, Switzerland, Bulgaria, Romania, Ukraine, Caucasus Region, and Turkey.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Eumerus barbarus (Coquebert, 1804)

References. – BECKER *et al.* (1910) as *Eumerus iris* Loew, 1848 and *E. barbarus*; DIRICKX (1994); SPEIGHT (2014, 2018, 2020b); SPEIGHT & LEBARD (2020); SPEIGHT *et al.* (2020).

Material examined. – 6 males, 2 females.

Distribution. – Mediterranean Basin.

IUCN status. – Least Concern.

Eumerus basalis Loew, 1848

References. – BECKER *et al.* (1910); VAN DER GOOT (1961); DIRICKX (1994); SPEIGHT & SARTHOU (2006); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male.

Distribution. – Mediterranean Europe, Bulgaria, Romania, Ukraine, Turkey, and Iran.

IUCN status. – Least Concern.

Eumerus consimilis Šimić & Vujić, 1996

Material examined. – 1 male.

Distribution. – Unknown, but confirmed from Portugal, Croatia, France, and Sardinia.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Eumerus emarginatus Loew, 1848

References. – CORNUEL-WILLERMOZ *et al.* (2023).

Material examined. – 1 male.

Distribution. – Italy and Greece, including Peloponnesus and Aegean islands.

IUCN status. – Not Evaluated.

Remarks. – CORNUEL-WILLERMOZ *et al.* (2023) reported the species for the first time from Corsica including the male collected in the surveys of the *Our Planet Reviewed in Corsica 2019-2021*.

Eumerus flavitarsis Zetterstedt, 1843

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT (2014, 2018, 2020b).

Material examined. – 13 males, 11 females.

Distribution. – Europe, Russia, and Japan.

IUCN status. – Least Concern.

Eumerus niehuisi Doczkal, 1996

References. – DOCZKAL (1996); SPEIGHT *et al.* (1998, 2018, 2020); SPEIGHT (2014, 2018, 2020b).

Material examined. – 6 males, 2 females.

Distribution. – Corsica.

IUCN status. – Endangered under criterion B1ab(iii)+2ab(iii).

Remarks. – Endemic species from Corsica. RICARTE *et al.* (2012) reported two *Eumerus* males identified as *E. niehuisi* from the island of Lesvos (Greece) and they referred to the male genitalia and the antennal shape to ground their determination. GRKOVIĆ *et al.* (2015) provided new records of *Eumerus* specimens identified as *E. niehuisi* from the Greek islands of Chios, Lesvos, and Samos, and they established their determination by comparing the Greek material with the type material of *E. niehuisi*. Later, CHRONI *et al.* (2018) stated that the

material identified as *E. niehuisi* in Grković *et al.* (2015) belong to *Eumerus crassus* Grković, Vujić & Radenković in Grković *et al.* (2015). In their *Atlas of the Hoverflies of Greece*, VUJIĆ *et al.* (2020a) did not list *E. niehuisi* for Greece, neither MILIČIĆ & GRKOVIĆ (2021) in their assessment for the European Red List of Hoverflies. Thus, we interpret that *E. niehuisi* is considered absent from Greece by VUJIĆ *et al.* (2020a).

CHRONI *et al.* (2018) also mentioned Corsica and Sardinia for the distributional range of *E. niehuisi* referring to DOCZKAL (1996) as the source for such statement, but DOCZKAL (1996) did not study (neither mentioned) any individual from Sardinia. Thus, *E. niehuisi* does not occur on Sardinia based on the current evidence.

Eumerus obliquus (Fabricius, 1805)

References. – SPEIGHT *et al.* (1998); BIRTELE (2011); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 3 males.

Distribution. – Western Mediterranean Basin (including islands), Canary Islands, Afro-tropical Region (including the Mascarene Islands and Madagascar), Yemen, Socotra, and Australia.

IUCN status. – Least Concern.

Eumerus ornatus Meigen, 1822

Material examined. – 2 males.

Distribution. – England, Central and Southern Europe, Romania, Ukraine, and Caucasus Region.

IUCN status. – Least Concern.

Remarks. – New species for Corsica. We believe that the specimens reported by BECKER *et al.* (1910) and DIRICKX (1994) as *Eumerus lucidus* Loew, 1848 from Corsica may refer to this taxon, but we did not study this old material.

Eumerus pulchellus Loew, 1848

References. – BECKER *et al.* (1910); VAN DER GOOT (1961); DIRICKX (1994); DOCZKAL (1996); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 64 males, 9 females, 1 intersex.

Distribution. – Southern Europe and Mediterranean Basin.

IUCN status. – Least Concern.

Eumerus sp.

Material examined. – 14 females.

Remarks. – All these female specimens belong to several different species, but we cannot properly identify them at this moment.

Eumerus sulcitibius Rondani, 1868

References. – DIRICKX (1994); SPEIGHT *et al.* (1998, 2018, 2020); BIRTELE (2011); SPEIGHT (2014, 2018, 2020b).

Material examined. – 5 males, 2 females.

Distribution. – Southern Europe, Turkey, eastwards to Azerbaijan.

IUCN status. – Least Concern.

Eumerus vandenberghiei Doczkal, 1996

References. – DOCZKAL (1996); SPEIGHT *et al.* (1998, 2018, 2020); BIRTELE (2011); SPEIGHT (2014, 2018, 2020b); GRKOVIĆ *et al.* (2017).

Material examined. – 1 male.

Distribution. – Corsica and Sardinia.

IUCN status. – Endangered under criterion B1ab(iii)+2ab(iii).

Eupeodes (Eupeodes) corollae (Fabricius, 1794)

References. – SCHINER (1857) as *Syrphus corollae*; KUNTZE (1913) as *Syrphus corollae*; DIRICKX (1994) as *Metasyrphus corollae*; SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 16 males, 46 females.

Distribution. – Palaearctic and Afrotropical Regions, also Taiwan.

IUCN status. – Least Concern.

Eupeodes (Eupeodes) latifasciatus (Macquart, 1829)

Material examined. – 6 males, 2 females.

Distribution. – British Isles, Europe, Northern Africa, Turkey, and Russia (including Russian Far East); India; and from Alaska south to California and Texas in the Nearctic Region.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Eupeodes (Eupeodes) lucasi (Marcos-García & Láska, 1983)

References. – MARCOS-GARCÍA *et al.* (2000); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 17 males, 5 females.

Distribution. – Central and Southern Europe.

IUCN status. – Least Concern.

Eupeodes (Eupeodes) luniger (Meigen, 1822)

References. – BECKER *et al.* (1910) as *Syrphus luniger*; DIRICKX (1994) as *Metasyrphus luniger*.

Material examined. – 5 males, 4 females.

Distribution. – British Isles, Europe, Madeira, Northern Africa, Turkey, Russia (including Russian Far East), and Japan; also in Northern India.

IUCN status. – Least Concern.

Remarks. – This is the second published record of this species from Corsica; being the first 110 years old. In recent literature, *E. luniger* is not listed from Corsica (SPEIGHT, 2018; SPEIGHT *et al.*, 2018, 2020).

Eupeodes (Eupeodes) nuba (Wiedemann, 1830)

References. – SPEIGHT *et al.* (2020).

Material examined. – 1 male, 4 females.

Distribution. – Canary Isles, Mediterranean Basin, Switzerland, Romania, Caucasus Region, south-western parts of Asia (Uzbekistan, Kirghizstan, Tajikistan), Afghanistan and Mongolia; and from Ethiopia south to South Africa in the Afrotropical Region.

IUCN status. – Least Concern.

Eupeodes (Eupeodes) vandergooti (Dušek & Láška, 1973)

References. – DUŠEK & LÁŠKA (1973) as *Metasyrphus vandergooti*; DIRICKX (1994) as *Metasyrphus vandergooti*; SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male, 7 females.

Distribution. – Corsica.

IUCN status. – Endangered under criterion B1ab(iii,iv)+2ab(iii,iv).

Remarks. – Endemic from Corsica. SPEIGHT (2020b) listed this species from Italy, but MAZÁNEK *et al.* (2021) considered uncertain the presence of *E. vandergooti* from mainland France, mainland Italy and Sardinia.

Fagisyrphus cinctus (Fallén, 1817)

References. – BECKER *et al.* (1910) as *Syrphus cinctus*; DIRICKX (1994) as *Melangyna cincta*; SPEIGHT *et al.* (2020) as *Meligramma cincta*.

Material examined. – 2 females.

Distribution. – Europe, Crimea, European parts of Russia, Caucasus Region, and Turkey.

IUCN status. – Least Concern.

Ferdinandea cuprea (Scopoli, 1763)

Material examined. – 1 male.

Distribution. – British Isles, Europe, Northern Africa, Turkey, Russia, and Japan.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Helophilus (Helophilus) pendulus (Linnaeus, 1758)

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 11 males, 5 females.

Distribution. – British Isles, Europe, and Russia (including the Pacific coast).

IUCN status. – Least Concern.

Helophilus (Helophilus) trivittatus (Fabricius, 1805)

References. – KUNTZE (1913) as *Heliophilus bivittatus* Fabricius [misspelling]; SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male, 1 female.

Distribution. – British Isles, Europe, eastwards through Russian Federation to the Pacific, including Iran and Afghanistan.

IUCN status. – Least Concern.

Heringia heringi (Zetterstedt, 1843)

References. – BECKER *et al.* (1910) as *Pipizella heringi*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 4 males, 1 female.

Distribution. – British Isles, Europe, Turkey, European parts of Russia, and Mongolia.

IUCN status. – Least Concern.

Lapposyrphus lapponicus (Zetterstedt, 1838)

Material examined. – 2 males, 1 female.

Distribution. – British Isles, Europe, Turkey, Russia (to the Pacific coast), Japan, Iceland, and Greenland. Its presence in North America needs re-assessment.

IUCN status. – Least Concern.

Remarks. – New species and new genus for Corsica.

Lejogaster tarsata (Meigen, 1822)

References. – BECKER *et al.* (1910) as *Liogaster splendida* (Meigen, 1822); DIRICKX (1994); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 4 males, 15 females.

Distribution. – British Isles, Europe, Russia (eastwards until the Pacific coast), Middle East, and Asia (Afghanistan, Uzbekistan, Tajikistan, Kirghizia, Turkmenia, Kazakhstan, Mongolia).

IUCN status. – Least Concern.

Lejops vittatus (Meigen, 1822) (fig. 2-4)

Material examined. – 3 males, 9 females.



Fig. 2-4. – *Lejops vittatus* (Meigen, 1822), new species and new genus records from Corsica. – 2, Sampling locality of *L. vittatus*, marais de Péri. – 3, Male resting. – 4, Female. © T. Lebard.

Distribution. – England, Europe, Russian Federation (eastwards to the Pacific coast, including middle Asia).

IUCN status. – Vulnerable under criterion A3c.

Remarks. – New species and new genus for Corsica.

Mallota cimbiciformis (Fallén, 1817)

References. – BECKER *et al.* (1910) as *Mallota cymbiciformis* Fallén [misspelling]; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male, 1 female.

Distribution. – British Isles, Europe, Northern Africa, Russia (to central Siberia), and Iran.

IUCN status. – Least Concern.

Melangyna compositarum (Verrall, 1873)

Material examined. – 1 female.

Distribution. – British Isles, Europe, Russia (to the Russian Far East), and Japan; and from Alaska south through the Rocky Mountains to New Mexico in the Nearctic Region.

IUCN status. – Least Concern.

Remarks. – New species and new genus for Corsica.

Melanostoma mellinum (Linnaeus, 1758)

References. – BECKER *et al.* (1910); VAN DER GOOT (1961); DIRICKX (1994); LEBARD *et al.* (2019); SPEIGHT *et al.* (2020).

Material examined. – 42 males, 53 females.

Distribution. – Northern Africa, Palearctic Region, and from Alaska to Quebec and south to Washington in the Nearctic Region.

IUCN status. – Least Concern.

Melanostoma scalare (Fabricius, 1794)

References. – BECKER *et al.* (1910); DIRICKX (1994); LEBARD *et al.* (2019); SPEIGHT *et al.* (2020).

Material examined. – 94 males, 70 females.

Distribution. – British Isles, Europe, Northern Africa, Russia, Japan, and China. records from the Afrotropical, Australasian and Indomalayan regions need re-assessment.

IUCN status. – Least Concern.

Meliscaeva auricollis (Meigen, 1822)

References. – BECKER *et al.* (1910) as *Syrphus auricollis* and *Syrphus maculicornis* var. *nigritibius* Rondani, 1857; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 22 males, 12 females, 1 unknown.

Distribution. – British Isles, Europe, Canary Islands, Northern Africa, Middle East, Caucasus Region, and European parts of Russia.

IUCN status. – Least Concern.

Remarks. – The specimen with unknown sex is a field observation.

Meliscaeva cinctella (Zetterstedt, 1843)

References. – BECKER *et al.* (1910) as *Syrphus cinctellus*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 16 males, 7 females.

Distribution. – British Isles, Europe, Northern Africa, Turkey, Caucasus Region, Russia (including the Russian Far East), Japan, and China; Alaska south to California and Colorado in the Nearctic Region.

IUCN status. – Least Concern.

Merodon aff. aureus

References. – SPEIGHT & LANGLOIS (2020) as *Merodon* species C; JANKOVIĆ & RADENKOVIĆ (2021) as *Merodon aerarius* Rondani, 1857.

Material examined. – 22 males, 17 females.

Distribution. – Austria, France (including Corsica), Italy (including Sardinia), Balkan Peninsula, and Romania.

IUCN status. – Least Concern.

Remarks. – VUJIĆ *et al.* (2021: Supplementary file S4) listed *Merodon aerarius* as a valid species of the *cinereus* subgroup within the *aureus* group. This taxon was named ‘species C’ in SPEIGHT & LANGLOIS (2020), and JANKOVIĆ & RADENKOVIĆ (2021) referred to it as *Merodon aerarius*. Our specimens belong to the same taxon as the one reported by SPEIGHT & LANGLOIS (2020) and JANKOVIĆ & RADENKOVIĆ (2021) from Corsica, whose name should be *Merodon aerarius* (Ante VUJIĆ, pers. comm.). We hesitate to name it *M. aerarius* in the present work until a ground-based taxonomic decision is taken (VUJIĆ *et al.*, in prep.).

Merodon avidus (Rossi, 1790)

References. – SCHINER (1857) as *Merodon spinipes* (Fabricius, 1794) and *M. avidus*; BECKER *et al.* (1910) as *Merodon spinipes*; KUNTZE (1913); VAN DER GOOT (1961) as *Lampetia spinipes*; HURKMANS (1993); DIRICKX (1994); POPOVIĆ *et al.* (2015); SPEIGHT & LEBARD (2020); SPEIGHT *et al.* (2020).

Material examined. – 46 males, 10 females.

Distribution. – Mediterranean Europe and Romania.

IUCN status. – Least Concern.

Merodon clavipes (Fabricius, 1781)

References. – SCHINER (1857); BECKER *et al.* (1910); DIRICKX (1994); MARCOS-GARCÍA *et al.* (2007); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 2 females.

Distribution. – Central and Southern Europe, Romania, Ukraine, Turkey, and Northern Africa.

IUCN status. – Least Concern.

Merodon equestris (Fabricius, 1794)

References. – BECKER *et al.* (1910) as *Merodon equestris* Fbr. var. *nigrithorax* Bezzi, 1900; DIRICKX (1994).

Material examined. – 4 males.

Distribution. – British Isles, Europe, Northern Africa, Russia (including Russian Far East), and Japan; also in New Zealand (introduced), and from British Columbia south to California in the Nearctic Region.

IUCN status. – Least Concern.

Remarks. – This is the second published record of this species from Corsica; being the first 110 years old. In recent literature, *M. equestris* is not listed from Corsica (SPEIGHT, 2018; SPEIGHT *et al.*, 2018, 2020).

***Merodon femoratus* Sack, 1913**

References. – HURKMANS (1993); DIRICKX (1994); SPEIGHT (2018); SPEIGHT *et al.* (2018, 2020); SPEIGHT & LANGLOIS (2020).

Material examined. – 2 males.

Distribution. – Mediterranean Basin.

IUCN status. – Least Concern.

***Merodon funestus* (Fabricius, 1794)**

Material examined. – 1 male, 2 females.

Distribution. – Mediterranean Basin (except Northern Africa).

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

***Merodon geniculatus* Strobl, 1909**

References. – DIRICKX (1994); SPEIGHT *et al.* (1998, 2018, 2020); MARCOS-GARCÍA *et al.* (2007); SPEIGHT (2014, 2018, 2020b); RICARTE *et al.* (2017); SPEIGHT & LANGLOIS (2020).

Material examined. – 4 males.

Distribution. – Mediterranean Basin.

IUCN status. – Near Threatened under criterion B2ab(iii).

***Merodon minutus* Strobl, 1893**

References. – DIRICKX (1994); SPEIGHT (2018); SPEIGHT *et al.* (2018, 2020); SPEIGHT & LANGLOIS (2020); AČANSKI *et al.* (2022).

Material examined. – 10 males, 12 females.

Distribution. – It needs a re-assessment due to recent nomenclatural changes (AČANSKI *et al.*, 2022), but it is known from Corsica, Balkan Peninsula, Sardinia, Sicily, and Greece (East Aegean Is., mainland, and Crete).

IUCN status. – Least Concern.

***Merodon natans* (Fabricius, 1794)**

Material examined. – 1 female.

Distribution. – Mediterranean Europe, Bulgaria, Israel, and Caucasus Region.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

***Merodon rubidiventris* Costa, 1884**

References. – HURKMANS (1993), SPEIGHT *et al.* (1998, 2018, 2020), SPEIGHT (2014, 2018, 2020b) and LEBARD *et al.* (2019) as *Merodon mariae* Hurkmans, 1993; SPEIGHT & LANGLOIS (2020); VUJIĆ *et al.* (2020b).

Material examined. – 2 males, 3 females.

Distribution. – Corsica and Sardinia.

IUCN status. – Vulnerable under criterion B2ab(iii).

Merodon trochantericus Costa, 1884

References. – VILLENEUVE (1909) as *Merodon podagricus* Villeneuve, 1909; BECKER *et al.* (1910) as *Merodon podagricus*; DIRICKX (1994); MARCOS-GARCÍA *et al.* (2007); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 3 males.

Distribution. – France, Spain, Italy, Corsica, Sardinia, and Corfu (Greece).

IUCN status. – Least Concern.

Mesembrius peregrinus (Loew, 1846)

Material examined. – 6 males, 3 females.

Distribution. – Central and Southern Europe, Israel, Ukraine, Caucasus Region, Russia, Japan, and China.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Milesia crabroniformis (Fabricius, 1775)

References. – KUNTZE (1913); DIRICKX (1994); SARTHOU *et al.* (2004); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 2 males, 2 females.

Distribution. – Mediterranean Europe, Portugal, Madeira, Switzerland, Bulgaria, Hungary, and Turkey.

IUCN status. – Least Concern.

Milesia semiluctifera (Villers, 1789)

References. – VAN DER GOOT (1961); DIRICKX (1994); SPEIGHT & LEBARD (2020); SPEIGHT *et al.* (2020).

Material examined. – 3 males.

Distribution. – Mediterranean Basin, Switzerland, Romania, Ukraine, Caucasus Region, eastwards to Turkmenistan.

IUCN status. – Least Concern.

Myathropa florea (Linnaeus, 1758)

References. – SCHINER (1857) as *Helophilus floreus*; BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 12 males, 7 females.

Distribution. – Palearctic Region.

IUCN status. – Least Concern.

Myiolepta dubia (Fabricius, 1805) (fig. 7-8)

References. – KUNTZE (1913) as *Myiolepta luteola* (Gmelin, 1790); DIRICKX (1994) as *Myiolepta luteola*; SPEIGHT *et al.* (2018, 2020).

Material examined. – 8 males, 1 female.

Distribution. – British Isles, Europe, and European parts of Russia.

IUCN status. – Least Concern.

***Myolepta nigratarsis* Coe, 1957 (fig. 5-6)**

Material examined. – 1 male.

Distribution. – Southern France, Italy, Austria, Hungary, Romania, Greece, Crete, Balkan Peninsula, southern parts of European Russia, Turkey, Azerbaijan, and Armenia.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

***Myolepta* sp.**

Material examined. – 2 females.

Remarks. – We are not sure about the species identification of these two females. They were collected together with *Myolepta dubia* males, but we key them out to *Myolepta potens*

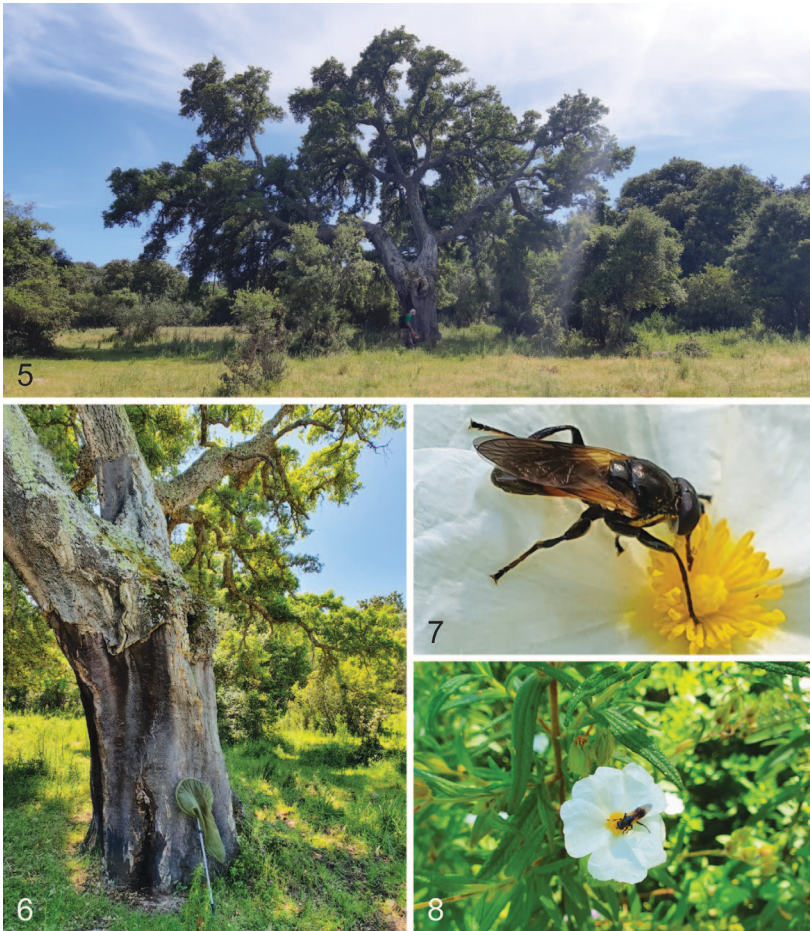


Fig. 5-8. – *Myolepta* spp. – 5-6, Sampling locality of *Myolepta nigratarsis* Coe and *Mallota cimbiciformis* (Fallén), 1 km west of Valavo. – 7-8, Male of *Myolepta dubia* (Fabricius). © T. Lebard.

in the identification key by REEMER *et al.* (2004). We need a further comparison with more material of *M. dubia* and, maybe, a molecular study.

Neosciasia (Neosciasia) podagrica (Fabricius, 1775)

References. – BECKER *et al.* (1910) as *Ascia podagrica*; KUNTZE (1913) as *Ascia floralis* Meigen, 1822; DIRICKX (1994) as *Neosciasia floralis* and *N. podagrica*; SPEIGHT *et al.* (2020).

Material examined. – 2 females.

Distribution. – British Isles, Europe, Mediterranean Basin, Madeira, and Russia (eastwards to Cis-Baikal).

IUCN status. – Least Concern.

Neosciasia (Neosciasia) tenur (Harris, 1780)

Material examined. – 3 males, 1 female.

Distribution. – Western Palaearctic (including Iceland), eastwards until most of Siberia.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Neosciasia (Neosciella) interrupta (Meigen, 1822)

Material examined. – 19 males, 8 females.

Distribution. – Northern and Central Europe, England, European parts of Russia (until Siberia), and the Caucasus Region.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Neocnemodon brevidens (Egger, 1865)

Material examined. – 4 males, 4 females.

Distribution. – England, Central Europe (northwards until Latvia), Romania, Ukraine, Russia (across Siberia to the Pacific coast), and China.

IUCN status. – Least Concern.

Remarks. – New species and new genus for Corsica.

Neocnemodon latitarsis (Egger, 1865)

Material examined. – 22 males, 16 females.

Distribution. – Britain, Europe, and the Caucasus Region.

IUCN status. – Least Concern.

Remarks. – New species and new genus for Corsica.

***Neocnemodon* sp.**

Material examined. – 1 female.

Remarks. – The specimen is damaged and not well-preserved. It keys out to *Neocnemodon larusi* Vujčić, 1999 using the identification key of BARTSCH (2009).

Neocnemodon vitripennis (Meigen, 1822)

Material examined. – 3 females.

Distribution. – British Isles, Northern and Central Europe, Russia (until the Pacific coast), China, and Japan.

IUCN status. – Least Concern.

Remarks. – New species and new genus for Corsica.

Paragus (Pandasyophthalmus) ascoensis Goeldlin de Tiefenau & Lucas, 1981

References. – GOELDLIN DE TIEFENAU & LUCAS (1981); DIRICKX (1994); BIRTELE (2011); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 29 males.

Distribution. – Corsica and Sardinia.

IUCN status. – Vulnerable under criterion B2ab(iii).

Paragus (Pandasyophthalmus) haemorrhous Meigen, 1822

References. – GOELDLIN DE TIEFENAU & LUCAS (1981); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 58 males, 2 females.

Distribution. – British Isles, Europe, Mediterranean Basin, Russia, Caucasus Region, Japan, and China; the Afrotropical Region; and from Yukon south to Costa Rica in the Americas.

IUCN status. – Least Concern.

Paragus (Paragus) albifrons (Fallén, 1817)

References. – BECKER *et al.* (1910); GOELDLIN DE TIEFENAU & LUCAS (1981); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 2 males.

Distribution. – British Isles, Europe, Mediterranean Basin, Caucasus Region, Russia (until the Pacific coast), Mongolia, and China.

IUCN status. – Endangered under criterion B2ab(iii,iv).

Paragus (Paragus) bicolor (Fabricius, 1794)

References. – KUNTZE (1913); GOELDLIN DE TIEFENAU & LUCAS (1981); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 24 males, 7 females.

Distribution. – Europe, Mediterranean Basin, Iran, Afghanistan, Russia, Mongolia, and China.

IUCN status. – Least Concern.

Paragus (Paragus) bradescui Stănescu, 1981

References. – GOELDLIN DE TIEFENAU & LUCAS (1981) and DIRICKX (1994) as *Paragus antoinettae* Goeldlin de Tiefenau & Lucas, 1981; SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male.

Distribution. – France, Portugal, Spain, Italy, Corsica, Sardinia, Sicily, Balkan Peninsula, Romania, Greece, Ukraine, Russia, Kyrgyzstan, Turkmenistan, and Tajikistan.

IUCN status. – Endangered under criterion B2ab(iii).

Paragus (Paragus) pecchiolii Rondani, 1857

References. – SPEIGHT *et al.* (2018, 2020).

Material examined. – 22 males, 3 females.

Distribution. – Europe, Mediterranean Basin, Turkey, Caucasus Region, and European parts of Russia.

IUCN status. – Least Concern.

***Paragus (Paragus) quadrifasciatus* Meigen, 1822**

References. – SCHINER (1857); GOELDLIN DE TIEFENAU & LUCAS (1981); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 5 males.

Distribution. – Southern Europe, France, Romania, Northern Africa, Turkey, Caucasus Region, Iran, Russia, middle Asia, and China.

IUCN status. – Least Concern.

***Paragus (Paragus) sexarcuatus* Bigot, 1862**

References. – BIGOT (1862); BECKER *et al.* (1910); GOELDLIN DE TIEFENAU & LUCAS (1981); DIRICKX (1994); BIRTELE (2011); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 1 male.

Distribution. – Corsica, Sardinia, and Sicily.

IUCN status. – Vulnerable under criteria B1ab(iii)+2ab(iii).

***Paragus (Paragus) strigatus* Meigen, 1822**

References. – KUNTZE (1913); GOELDLIN DE TIEFENAU & LUCAS (1981); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 37 males, 7 females.

Distribution. – Portugal, Mediterranean Basin, Bulgaria, Romania, Ukraine, Western Russia to Kirghizia, Tajikistan, and Mongolia.

IUCN status. – Least Concern.

Paragus sp.

Material examined. – 16 females.

Remarks. – The unnamed females may belong to several *Paragus* species, all of them to the subgenus *Pandasyophthalmus*, except for one female that belongs to the *bicolor* group of the subgenus *Paragus*.

***Parhelophilus frutetorum* (Fabricius, 1775)**

Material examined. – 2 males.

Distribution. – Europe, Caucasus Region, Russia, and China.

IUCN status. – Least Concern.

Remarks. – New species and new genus for Corsica.

***Parhelophilus versicolor* (Fabricius, 1794)**

Material examined. – 2 males, 6 females.

Distribution. – British Isles, Europe, Mediterranean Basin, Russia, and China.

IUCN status. – Least Concern.

Remarks. – New species (and new genus) for Corsica.

Pelecocera (Chamaesyrrhus) lusitanica (Mik, 1898)

Material examined. – 1 male, 1 female.

Distribution. – Europe and European parts of Russia.

IUCN status. – Near Threatened under criterion A3c.

Remarks. – New species for Corsica. MENGUAL *et al.* (2015b) synonymized *P. lusitanica* under *Pelecocera (Chamaesyrrhus) lugubris* Perris, 1839 without studying the type material, but VAN ECK & MENGUAL (2021) suggested to use *P. lusitanica* until a comprehensive molecular study can be carried out using specimens from Northern, Central and Southern Europe, including the Iberian Peninsula. LAIR *et al.* (2022) demonstrated that the name for the specimens identified as *P. lusitanica* from mainland France (all records are from the Atlantic coast) is *P. lugubris*. Thus, the question about the synonymy proposed by MENGUAL *et al.* (2015b) remains open and we decided to use *P. lusitanica* for the studied Corsican specimens as they do not originate from mainland France.

The male specimen used in the molecular study by VAN ECK & MENGUAL (2021) is the same male specimen reported here (unique identifier: LPRC2021-2417; COI sequence GenBank accession number: OK330482).

Pelecocera (Chamaesyrrhus) pruinosomaculata Strobl, 1906

References. – VAN ECK & MENGUAL (2021); LAIR *et al.* (2022).

Material examined. – 1 female.

Distribution. – Uncertain due to confusion with related species, but known from Portugal, Spain, southern France, Corsica, southern Italy, Cyprus, and Greece.

IUCN status. – Near Threatened under criterion A3c.

Platycheirus (Platycheirus) fulviventris (Macquart, 1829)

References. – BECKER *et al.* (1910) as *Platycheirus fulviventris*; DIRICKX (1994); SPEIGHT *et al.* (2020).

Material examined. – 22 males, 10 females.

Distribution. – Europe, Morocco, Turkey, and Russia (to the Pacific coast).

IUCN status. – Least Concern.

Platycheirus (Platycheirus) muelleri Marcuzzi, 1941

References. – SPEIGHT *et al.* (1998, 2018, 2020); SPEIGHT (2014, 2018, 2020b).

Material examined. – 71 males, 64 females, 2 intersex.

Distribution. – Southern France, Corsica, Sardinia, northern Italy, and mainland Greece.

IUCN status. – Endangered under criterion B2ab(ii).

Platycheirus (Platycheirus) scutatus (Meigen, 1822)

Material examined. – 13 males, 20 females.

Distribution. – Europe, Turkey, Russia, Afghanistan, and China.

IUCN status. – Least Concern.

Remarks. – New species for Corsica.

Platycheirus (Platycheirus) sp.

Material examined. – 3 females.

Remarks. – The preservation condition of these three females is not optimal and their identification was not possible.

***Pyrophaena rosarum* (Fabricius, 1787)**

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 4 males, 4 females.

Distribution. – Holarctic, but not in northern Africa.

IUCN status. – Least Concern.

***Riponnensia daccordii* (Claussen, 1991)**

References. – CLAUSSEN (1991) and DIRICKX (1994) as *Orthonevra daccordii*; SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 3 males.

Distribution. – Corsica.

IUCN status. – Critically Endangered under criteria B1ab(i,ii,iii)+2ab(i,ii,iii).

Remarks. – Endemic for Corsica. VAN STEENIS *et al.* (2021) indicated that the five females identified as *Orthonevra* sp. in BECKER *et al.* (1910) might refer to this taxon, but this is not confirmed. The same authors assessed this taxon as Critically Endangered and Possibly Extinct (PE), but our records from July 2022 indicate that there is still a population, which comes from a location (near Quenza) different from the type locality that VAN STEENIS *et al.* (2021) used in their assessment (between Tolla and Bastelica); the only known location for this species before our survey.

***Riponnensia splendens* (Meigen, 1822)**

References. – BECKER *et al.* (1910) as *Chrysogaster splendens*; DIRICKX (1994) as *Orthonevra splendens*; SPEIGHT *et al.* (2018, 2020).

Material examined. – 11 males, 7 females.

Distribution. – British Isles, Central and Southern Europe, Mediterranean Basin, Crimea, and the Caucasus Region.

IUCN status. – Least Concern.

***Scaeva (Scaeva) albomaculata* (Macquart, 1842)**

References. – SCHINER (1857) as *Syrphus gemellarii* (Rondani, 1845); BECKER *et al.* (1910) as *Catabomba albomaculata*; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 2 males.

Distribution. – Mediterranean Basin, Canary Islands, Caucasus Region, southern Russia eastward to China and Mongolia.

IUCN status. – Least Concern.

Scaeva (Semiscaeva) dignota (Rondani, 1857)

References. – DIRICKX (1994); SPEIGHT *et al.* (2020).

Material examined. – 26 males, 3 females.

Distribution. – England, Central and Southern Europe, Mediterranean Basin, and Canary Islands.

IUCN status. – Least Concern.

Scaeva (Semiscaeva) mecogramma (Bigot, 1860)

References. – DIRICKX (1994); BIRTELE (2011); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male.

Distribution. – France, Portugal, Spain, Corsica, mainland Italy, Sardinia, Sicily, and Greece.

IUCN status. – Least Concern.

Sericomyia silentis (Harris, 1778)

References. – KUNTZE (1913) as *Sericomyia borealis* (Fallén, 1816); DIRICKX (1994).

Material examined. – 1 female.

Distribution. – British Islands, Europe, Caucasus Region, and European parts of Russia.

IUCN status. – Least Concern.

Remarks. – This is the second published record of this species from Corsica; being the first 110 years old. In recent literature, *S. silentis* is not listed from Corsica (SPEIGHT, 2018; SPEIGHT *et al.*, 2018; SPEIGHT *et al.*, 2020).

Sphaerophoria (Sphaerophoria) rueppellii (Wiedemann, 1830)

References. – BECKER *et al.* (1910) as *Sphaerophoria flavicauda* var. *nitidicollis* Zetterstedt, 1849; DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 17 males, 1 female.

Distribution. – Palearctic and eastern parts of the Afrotropical Region.

IUCN status. – Least Concern.

Sphaerophoria (Sphaerophoria) scripta (Linnaeus, 1758)

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 101 males, 50 females.

Distribution. – Palearctic Region.

IUCN status. – Least Concern.

Sphegina (Sphegina) clunipes (Fallén, 1816)

References. – BECKER *et al.* (1910); DIRICKX (1994); LEBARD *et al.* (2019); SPEIGHT *et al.* (2020).

Material examined. – 15 males, 10 females.

Distribution. – Western Palearctic.

IUCN status. – Least Concern.

Sphegina (Sphegina) elegans Schummel, 1841

References. – DIRICKX (1994).

Material examined. – 8 males, 11 females.

Distribution. – British Isles, Europe, Caucasus Region, and European parts of Russia.

IUCN status. – Least Concern.

Sphiximorpha subsessilis (Illiger, 1807) (fig. 9-10)

References. – SCHINER (1857) as *Ceria subsessilis*; DIRICKX (1994); SPEIGHT *et al.* (2020).

Material examined. – 4 males.

Distribution. – Europe, Caucasus Region, and European parts of Russia

IUCN status. – Least Concern.

Syritta flaviventris Macquart, 1842

References. – VAN DER GOOT (1961) as *Syritta fasciata* (Wiedemann, 1830); VAN DER GOOT (1964) as *Syritta spinigera* Loew, 1848; DIRICKX (1994); SPEIGHT (2014, 2018, 2020b); SPEIGHT *et al.* (2018, 2020).

Material examined. – 1 male, 1 female.

Distribution. – Mediterranean Basin, Middle East, the Afrotropical Region, Central and South America, and Eastern Island.

IUCN status. – Least Concern.

Syritta pipiens (Linnaeus, 1758)

References. – SCHINER (1857); BECKER *et al.* (1910); KUNTZE (1913); VAN DER GOOT (1961); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 31 males, 19 females.



Fig. 9-10. – *Sphiximorpha subsessilis* (Illiger, 1807), collected 2 km south of Fromontica. © T. Lebard.

Distribution. – Holarctic Region.

IUCN status. – Least Concern.

Syrphus ribesii (Linnaeus, 1758)

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 55 males, 14 females.

Distribution. – Holarctic Region.

IUCN status. – Least Concern.

Syrphus torvus Osten Sacken, 1875

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2020).

Material examined. – 1 female.

Distribution. – Holarctic Region; and Taiwan, northern India, Nepal, and Thailand in the Indomalayan Region.

IUCN status. – Least Concern.

Syrphus vitripennis Meigen, 1822

References. – KUNTZE (1913); DIRICKX (1994); SPEIGHT *et al.* (2020)

Material examined. – 14 males, 13 females.

Distribution. – Holarctic Region.

IUCN status. – Least Concern.

Volucella zonaria (Poda, 1761)

References. – BECKER *et al.* (1910); VAN DER GOOT (1961) as *Volucella zonaria beckeri* Van der Goot, 1961; DIRICKX (1994); BIRTELE (2011); SPEIGHT (2014, 2018); LEBARD *et al.* (2019).

Material examined. – 12 males, 14 females.

Distribution. – British Isles, Central and Southern Europe, Russia, Iran, Mongolia, and China.

IUCN status. – Least Concern.

Xanthandrus comtus (Harris, 1780)

References. – KUNTZE (1913); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 7 males, 3 females.

Distribution. – Palearctic Region.

IUCN status. – Least Concern.

Xanthogramma stackelbergi Violovitsh, 1975

References. – SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 4 males, 15 females.

Distribution. – Uncertain due to the confusion with other *Xanthogramma* species, but known from most Europe, England, Caucasus Region, and European parts of Russia.

IUCN status. – Least Concern.

Xylota segnis (Linnaeus, 1758)

References. – BECKER *et al.* (1910); SPEIGHT *et al.* (2018, 2020); LEBARD *et al.* (2019).

Material examined. – 82 males, 17 females.

Distribution. – Palearctic Region (except for the extreme north) and eastern parts of North America.

IUCN status. – Least Concern.

Xylota sylvarum (Linnaeus, 1758)

References. – BECKER *et al.* (1910); DIRICKX (1994); SPEIGHT *et al.* (2018, 2020).

Material examined. – 5 males, 8 females.

Distribution. – Palearctic Region.

IUCN status. – Least Concern.

DISCUSSION

In the present study, we report 30 species from Corsica for the first time (including *Eumerus emarginatus*), as well as the genera *Anasimyia*, *Brachyopa*, *Lapposyrphus* Dušek & Láska, 1967, *Lejops* Rondani, 1857, *Melangyna* Verrall, 1901, *Neocnemodon*, and *Parhelophilus* Girschner, 1897. Among the studied hover flies, there are seven species that are endemic of Corsica (*Eumerus niehuisi*, *Eupeodes vandergooti*, *Riponnensia daccordii*) or have a distribution limited to the islands in the middle of the Mediterranean Sea, namely Corsica, Sardinia and Sicily (*Eumerus vandenberghiei*, *Merodon rubidiventris*, *Paragus ascoensis*, *P. sexarcuatus*).

Among the 131 sampled taxa, there are one Critically Endangered species, 10 Endangered species, six Vulnerable species, and five Near Threatened species. This means that near 13% of the hover fly species collected during the project *Our Planet Reviewed in Corsica 2019-2021* are threatened at the European level. We would also like to point out some remarkable records, such as the second record from Corsica of the Endangered *Doros destillatorius*, recently reported by CORNUEL-WILLERMOZ (2021), or the second record from Corsica of *Sericomyia silentis* since 1913 (KUNTZE, 1913). Furthermore, we report a new location for the Critically Endangered *Riponnensia daccordii* and corroborate that it is not extinct.

As mentioned by TOUROULT *et al.* (2023), the survey *Our Planet Reviewed in Corsica 2019-2021* did not sample evenly in Corsica. Thus, we can expect additional new species records for Corsica with more surveys on the island. We hope our results contribute to a better knowledge of the Syrphidae fauna of Corsica and help to make management decisions regarding these important pollinators.

ORCID

Ximo Mengual :  <https://orcid.org/0000-0002-6185-9404>

Thomas Lebard :  <https://orcid.org/0000-0001-7538-9477>

Alexandre Cornuel-Willermoz :  <https://orcid.org/0009-0008-6158-3496>

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