

## FOUR SPECIES OF OSCINELLINAE (DIPTERA: CHLOROPIDAE) ADDED TO THE FAUNA OF MAINLAND PORTUGAL

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**Abstract:** Four species of Oscinellinae (Diptera: Chloropidae) are recorded from mainland Portugal for the first time: *Gaurax fascipes* Becker, 1910, *Lasiochaeta pubescens* (Thalhammer, 1898), *Oscinella nitidissima* (Meigen, 1838) and *Tricimba cincta* (Meigen, 1830).

**Key words:** Diptera, Chloropidae, faunistics, first records, Portugal.

**Cuatro especies de Oscinellinae (Diptera: Chloropidae) más para la fauna de Portugal continental**

**Resumen:** Se citan de Portugal continental por primera vez cuatro especies de Oscinellinae (Diptera: Chloropidae): *Gaurax fascipes* Becker, 1910, *Lasiochaeta pubescens* (Thalhammer, 1898), *Oscinella nitidissima* (Meigen, 1838) y *Tricimba cincta* (Meigen, 1830).

**Palabras clave:** Diptera, Chloropidae, faunística, primeras citas, Portugal.

Eighteen species of Chloropidae were listed for Portugal in the Catalogue of Diptera of Spain, Portugal and Andorra (Carles-Tolrá, 2002). Only one species, *Eurina lurida* Meigen, 1830, was recorded from Portugal (mainland), 12 from Azores and 11 from Madeira. For comparison, 94 species of Chloropidae are recorded in Spain, 81 of them occur in Spain (mainland) (Carles-Tolrá, 2002; Nartshuk, 2004). Now, four species are added to the Chloropidae fauna of mainland Portugal. Except *Gaurax fascipes* Becker, 1910, the other species are known from Spain (mainland). The material is deposited in the Zoological Museum of the Moscow University in Moscow.

***Gaurax fascipes* Becker, 1910.**

Tras-os-Montes e Alto Douro, Vimioso, Rio Anguira, between & N of Vale de Algosos & Uve, 8.07. 2010 (O. Kosterin), 1 male.

Euro-caucasian species. Adults occur in forests. Larvae develop in bracket fungi (*Piptoporus betulinus* Fr.), rotting wood and coniferous cones (Smith, 1956, 1967; Skrzypczyńska, 1978, 1982), in *Agrobacterium tumefaciens* galls (Von Tschirnhaus, 1992) and bird's nests (Collin, 1939).

***Lasiochaeta pubescens* (Thalhammer, 1898).**

Tras-os-Montes e Alto Douro, Vimioso, Rio Anguira, between & N of Vale de Algosos & Uve, 8.07. 2010 (O. Kosterin), 1 male.

Widespread in southern parts of the Palaearctic Region, known from Azores, Madeira, and North Africa to Afghanistan, the most northern locality in Europe - Great Britain (Clemons, 2009; Ismay, 2009).

The species shows apparently continuous variation in colour. Examined specimen has postpronotum, scutellum and anterior parts of pleura yellow, scutum black dusted.

***Oscinella nitidissima* (Meigen, 1838).**

Tras-os-Montes e Alto Douro, Vimioso, Rio Anguira, between & N of Vale de Algosos & Uve, 8.07. 2010 (O. Kosterin), 1 male.

Holarctic species, widely distributed in the Palaearctic Region, known from the Canary Islands, Azores, Madeira to Mongolia. Larvae phytophagous, develop in shoots of different species grasses (Poaceae), preferable in *Agrostis* (Nartshuk, 1956; Vickerman, 1978a). In Canada was recorded unusual damage of oats caused by larvae of this species (Comeau & Pelletier, 1977). Vickerman (1978b) in Germany established that larvae of the species did not survive on either oats, wheat or barley.

***Tricimba cincta* (Meigen, 1830).**

Minho, Vila do Coñde, Vairão, 2-6.07.2010 (O. Kosterin), 1 male.

Holarctic species, widely distributed in the Palaearctic Region, from the Canary Islands to Far East. Hibernates as adults. Adults were found in the canopies of *Pinus silvestris* in Norway (Thunes et al., 2004), on meadows and agricultural fields. Hackman (1963) found adults in burrows of voles of *Microtus* and *Clethrionomys* in Finland. The species was recorded many times indoors autumn together with *Thaumatomyia notata* (Meigen, 1930). Adults were recorded also in bird's nest (Krivokhatsky & Nartshuk, 2001).

Larvae develop in stem of cereals infested other insects as recorded by many authors, rotting spathes of skunk cabbage (*Symplocarpus foetidus* L. (Nutt)), mushrooms Boletaceae, Agaricaceae, Russulaceae, rotting bark of *Alnus*, berries of *Sambucus racemosa*, dead molluscs, meat baits (Brown, 1956; Myhályi, 1965; Dely-Draskovits, 1972; Krivosheina, 1974; Schatzman, 1977; Grimaldi & Jennike, 1983; Von Tschirnhaus, 1992; Yakovlev, 1994).

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## References

- BROWN, W.L., Jr. 1956. Drosophilid and Chloropid flies bred from skunk cabbage. *Psyche*, **63**: 13.
- CARLES-TOLRÁ HJORTH-ANDERSEN, M. 2002. (Coordinator). Catálogo de los Díptera de España, Portugal y Andorra (Insecta). *Monografías de la Sociedad Entomológica Aragonesa*, **8**: 1-323.
- CLEMONS, L. 2009. Notes on *Melanochaeta pubescens* (Thalhammer, 1898) (Diptera, Chloropidae) in Kent. *Dipterist Digest*, **16**: 15-20.
- COLLIN, J.E. 1939. On various new or little-known British Diptera, including several species bred from the nests of birds and mammals. *Entomologist's monthly Magazine*, **75**: 134-154.
- COMEAU, A. & J. PELLETIER 1977. Un problème nouveau: les dommages causés à l'avoine par *Oscinella nitidissima* (Diptera, Chloropidae). *Annales de la Société entomologique de Québec*, **22**(1): 59-61.
- DELY-DRASKOVITS, Á. 1972. Systematische und ökologische Untersuchungen an den in Ungarn als Schädlinge der Hutzpilze auftretenden Fliegen. I. Limoniidae, Syrphidae, Platypezidae, Chloropidae. *Acta zoologica Academiae scientiarum hungaricae*, **18**: 7-21.
- GRIMALDI, D. & J. JAENNIKE 1983. The Diptera breeding on skunk cabbage *Symplocarpus foetidus* (Araceae). *Journal of the New York entomological Society*, **91**(1): 83-89.
- HACKMAN, W. 1963. Studies on the Dipterous fauna in burrows of voles (*Microtus*, *Clethrionomys*) in Finland - *Acta Zoologica Fennica*, **102**: 1-64.
- ISMAY, J.W. 2009. *Melanochaeta pubescens* (Thalhammer, 1898) (Diptera, Chloropidae) new to Buckinghamshire and Oxfordshire. *Dipterist Digest*, **16**: 20.
- KRIVOKHATSKII, V.A. & E.P. NARTSHUK 2001. Flies (Diptera) inhabiting birds' nests in the "Forest on the River Vorskla" Natur Reserve (Belgorod province, Russia). *Entomologicheskoe Obozrenie*, **80**(2): 383-397 (In Russian). English translation *Entomological Review of Washington*, **81**(2): 177-187).
- KRIVOSHEINA, N.P. 1974. Xylophilous insects developing in *Alnus hirsuta* in South of Far East of the USSR. In: Mamaev, B.M. (Ed.). *Nasekomye rasrushiteli drevesiny v lesnykh biocenozakh Yuznogo Primoria*, Moskwa: 56-64. (In Russian).
- MIHÁLYI, F. 1965. Rearing flies from faeces and meat infected under natural condition. *Acta zoologica hungarica*, **11**: 153-164.
- NARTSHUK, E.P. 1956. *Oscinella*-Arten (Diptera, Chloropidae) des europäischen Teils der UdSSR und ihre Nährpflanzen. *Entomologicheskoe Obozrenie*, **35**: 856-822. (In Russian with German summary).
- NARTSHUK, E.P. 2004. On the knowledge of Chloropidae (Diptera, Muscomorpha) from Spain with including the description of two new species. *Studia dipterologica*, **10**(2) (2003): 653-664.
- SCHATZMAN, E. 1977. Früchte als natürliche Entwicklungssubstrate von Drosophiliden. *Mitteilungen der Schweizerische entomologische Gesellschaft*, **50**: 135-148.
- SKRZYPCZŃSKA, M. 1978. A review of the insects found in cones of the European larch, *Larix decidua* Mill. and Polish larch, *L. polonica* Rac. in Poland. *Polskie Pismo entomologiczne*, **48**: 543-563.
- SKRZYPCZŃSKA, M. 1982. The entomofauna of the cones of spruce, *Picea abies* (L.) Karst. in Poland. *Zeitschrift für angewandte Entomologie*, **92**: 21-32.
- SMITH, K.G.V. 1956. On the Diptera associated with the stinkhorn (*Phallus impudicus* Pers.) with notes on other insects and invertebrates found on the fungus. *Proceedings of the Royal entomological Society of London*, **31A**(4-6): 49-55.
- SMITH, K.G.V. 1967. A further note on *Gaurax fascipes* Becker (Dipt., Chloropidae). *Entomologist's monthly Magazine*, **102**(1966): 149.
- THUNES, K.H., J. SKARTVEIT, I. GJERDE *et al.* 2004. The arthropod community of Scots pine (*Pinus silvestris*) canopies in Norway. *Entomologica Fennica*, **15**(2): 65-90.
- VICKERMAN, G.P. 1978a. Host plant preferences of *Oscinella* spp. (Diptera: Chloropidae) in the laboratory. *Annals of applied Biology*, **89**(3): 379-386.
- VICKERMAN, G.P. 1978b. Survival and duration of development of *Oscinella* spp. (Diptera: Chloropidae) on different Gramineae in the laboratory. *Annals of applied Biology*, **68**: 387-393.
- VON TSCHIRNHAUS, M. 1992. Minier- und Halmfliegen (Agromyzidae, Chloropidae) und 52 weitere Familien (Diptera) aus Malaise-Fallen in Kiesgruben und einen Vorstadtgarten in Köln. *Decheniana - Beihefte* (Bonn), **31**: 445-497.
- YAKOVLEV, E.B. 1994. Palaearctic Diptera associated with fungi and myxomycetes. *Petrozavodsk*: 1-127. (In Russian).