

Short scientific noteSubmitted: June 15th, 2019 - Accepted: October 2nd, 2019 - Published: November 15th, 2019

***Anthrenus (Anthrenops) coloratus* Reitter, 1881: a new pest in Italian entomological collections (Coleoptera: Dermestidae)**

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Abstract

The first infestation of a museum entomological collection in Italy by *Anthrenus (Anthrenops) coloratus* Reitter, 1881 is recorded; it was detected in Rome (Lazio Region) in 2014. General distribution and biological data on this pest are summarized.

Key words: museum pests, alien species, urban fauna.

Introduction

Anthrenus (Anthrenops) coloratus Reitter, 1881 is a pest of zoological collections, it is subcosmopolitan (Holoarctic, Neotropical, Afrotropical and Oriental Regions) in distribution, but was only recently (1991) collected in Italy (cf. Nardi & Háva 2013; Háva 2015; Audisio et al. 2015, as *A. (Florilinus) coloratus*; Kovalenko 2018).

The object of this note is to record the first infestation by this species of an Italian entomological collection, and also to alert museum curators.

Acronyms of specimen depositories:

CGN	G. Nardi collection, Cisterna di Latina, Italy
CJH	J. Háva collection, Praha-západ, Czech Republic
CNBFVR	Centro Nazionale per lo Studio e la Conservazione della Biodiversità Forestale “Bosco Fontana” Carabinieri, Marmirolo, Italy
CPC	P. Cornacchia collection, Porto Mantovano, Italy
MZUR	Zoological Museum, Sapienza Rome University, Rome, Italy

Results***Anthrenus (Anthrenops) coloratus* Reitter, 1881**

Anthrenus (Anthrenops) coloratus Reitter, 1881: 91
Anthrenus rufescens Pic, 1923a: 3 (Háva 2007a: 49)

Material examined. Italy: Lazio region: Roma, La Sapienza University, Entomological Section, Piazzale Valerio Massimo [41.54.23N, 12.31.19E], 18.VI.2014, G. Nardi leg., 19 specimens (CGN; CJH; CNBFVR; CPC; MZUR).

Geographical distribution. *Anthrenus (Anthrenops) coloratus* was described from “Attica” in Greece (Reitter 1881) and is probably indigenous to the Eastern Mediterranean region (Denux & Zagatti 2010), but it is now subcosmopolitan in distribution (Audisio et al. 2015, as *A. (Florilinus) coloratus*; Háva 2015; Kovalenko 2018); in Western Europe, it was firstly recorded from Great Britain in 1944 (Peacock 1993). This species is currently known from: Palaearctic Region (see below), Afrotropical Region (Eritrea, Ethiopia, Guinea, Namibia, South Sudan, Sudan), USA, Mexico, Ecuador, and India (cf. Háva 2007b, 2015; Kovalenko 2018). In the Palaearctic region it is recorded (cf. Háva 2003, 2007b; Audisio et al. 2015; Háva 2015; Kovalenko 2018) from: Europe (Austria, Bulgaria, France, Germany, Great Britain, Greece, Italy, Portugal, Romania, Serbia and Montenegro, South European Territory of Russia, Spain, Turkey), North Africa (Algeria, Canary Islands, Egypt, Morocco, Tunisia) and Asia (Afghanistan, Iran, Iraq, Israel, Japan, Kazakhstan, Kyrgyzstan, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Tajikistan, Turkmenistan, United Arab Emirates, and Yemen).

Ecology. Adults of *Anthrenus (Anthrenops) coloratus*, like those of congeneric species, are found on flowers, and



Fig. 1 – *Anthrenus (Anthrenops) coloratus* from Roma. Body length 2.2 mm (photo G. Scaglioni).

larvae fed on the remains of insects in nests of spiders and wasps (cf. Háva 2011; Kovalenko 2018). In synanthropic environments, its larvae are serious museum pests, capable of damaging stuffed animals, entomological collections, a number of other museum objects of animal origin, as well as stored woollen fabrics (cf. Hagstrum et al. 2013; Kovalenko 2018). In urban dwellings in central Spain, *A. (Anthrenops) coloratus* was the most frequent and abundant coleopterous species (Gamarra et al. 2009, as *A. (Florilinus) coloratus* Reitter, 1880 [sic!]).

Notes. *Anthrenus (Anthrenops) coloratus* is the only species of the subgenus *Anthrenops* Reitter, 1881 that occurs in Italy, and one of only a few living in Europe (Háva 2015), so the taxonomic identification of adults and larvae is relatively easy (cf. Zhantiev 1976, as *A. (Florilinus) coloratus*; Peacock 1993; Outerelo & Gamarra 1996; Kadej 2011; Kadej et al. 2013).

In Italy this species was previously known only from Sardinia (without further details) (Háva et al. 2013) and Gargano Promontory in Apulia region (Nardi & Háva 2013), where it was collected in the wild (Háva, unpublished data). The above-mentioned new record is the first from central Italy. It is based on several adults infesting dry beetles housed in the entomological collection of Sapienza University (Rome). The entomological boxes of this collection were treated by freezing at -40 °C (Florian 1990) (E. Piattella, pers. comm., 2019).

Discussion. Insect collections (see Hagstrum et al. 2013) can favour the spread of museum pests, and, unfortunately, this phenomenon has occurred in Italy, as shown by recent

records of alien dermestids (cf. Nardi & Háva 2013; Nardi & Vomero 2017).

The above new record reaffirms the need to carefully inspect museum collections for signs of infestation, to avoid the further spreading of dermestid pests in Italy.

Acknowledgements – Thanks are due to Paolo Audisio (Sapienza Rome University, Rome, Italy), Paolo Cornacchia (Porto Mantovano, Italy), Franco Mason (Verona, Italy), Emanuele Piattella (Sapienza Università di Roma, Rome, Italy), Gianluca Scaglioni (Porto Mantovano, Italy), and Laura Spada (Centro Nazionale per lo Studio e la Conservazione della Biodiversità Forestale “Bosco Fontana” Carabinieri, Marmirolo, Italy), for their help; Maxwell Barclay (London, Great Britain) for the linguistic revision of the manuscript.

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