

Short scientific noteSubmitted: February 25th, 2020 - Accepted: March 15th, 2020 - Published: April 15th, 2020***Xanthochroina* Ganglbauer, 1881, a new genus of Oedemeridae for the Italian fauna (Coleoptera)**Marco A. BOLOGNA^{1,*}, Davide BADANO², Riccardo POLONI³¹ Dipartimento di Scienze, Università Roma Tre - Viale G. Marconi 446, 00146 Roma, Italy - marcoalberto.bologna@uniroma3.it² Dipartimento di Scienze della Terra dell'Ambiente e della Vita, Università degli Studi di Genova - Corso Europa 26, 16132 Genova, Italy; Department of Biology and Biotechnology "Charles Darwin", Sapienza University of Rome - Piazzale A. Moro 5, 00185 Roma, Italy - davide.badano@gmail.com³ Department of Biology, University of Padova - Via Ugo Bassi 58B, 35131 Padova, Italy - riccardo.poloni@gmail.com

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Abstract

In this paper is reported for the first time with certainty the presence in Italy of the genus *Xanthochroina*, exhibiting a Holarctic discontinuous distribution. The Mediterranean species *X. auberti* is recorded from western Liguria and information on the range of the species is updated.

Key words: false blister beetles, Liguria, Mediterranean distribution.

Xanthochroina Ganglbauer, 1881 is a Palearctic genus of false blister beetles characterized by a remarkably disjunct distribution, only including two species (Vazquez 2002): *X. auberti* (Abeille de Perrin, 1876), with a Mediterranean fragmented range, and *X. tarsalis* (Kôno, 1938), reported for the Ryukyu Islands (Japan) and Taiwan (Švihla 2008). The latter species was originally described as *Anancosessinia* Kôno, 1938, and later synonymized with *Xanthochroina* by Mizota (2001). Moreover, the Nearctic species *Oxacis bicolor* (Leconte, 1851), known from western North America, was also assigned to *Xanthochroina* by Arnett (1951) and later accepted by Kriska (2002), although convincing evidence of this relationship is still lacking. If the genus placement of *O. bicolor* is confirmed, the fragmented and relic range of the genus *Xanthochroina* would represent another rare case of ancient Holarctic disjunct distribution similar to that of the amphibian family Plethodontidae (Bologna & Balletto 2007).

Xanthochroina auberti (Fig. 1) is associated with Mediterranean open woodlands, especially those characterized by *Pinus halepensis* Miller, 1786. The larvae of this species are saproxylic, developing on dead wood of *Pinus halepensis*, while the adults are nocturnal and are attracted to light (phenology July-October) (Vázquez 2002). According to Fadda (2016), this species is occasionally found on flowers and is attracted by aerial wine traps. On the other hand, the hypothetic predaceous habits of adults (see Ponel 1993) are doubtful.

The range of this species appears highly fragmented in

the Mediterranean (Švihla 2008): few populations were recorded from isolated localities of Central Morocco (Middle Atlas: Arahou 2008), western Spain (Vasquez & Lencina 1991; Lencina et al. 2008; Vazquez 2002; Diéguez Fernández 2010) and Balears (Mallorca: Fleischer 1919 as *Asclerostoma reitteri*, synonym; Magistretti 1942; Compte 1963; Vazquez 1997, 2002), Southern France and Monaco (e.g. Caillol 1919; Ponel 1993; Allemand 2003; Ponel et al. 2011; Fadda 2016), Croatia (Ganglbauer 1881; Švihla 2008), Hungary (Švihla 2008; Merkl et al. 2010), Greece mainland (Ganglbauer 1881; Brustel & Kakiopoulos 2009), Southern Anatolia (Vazquez 2002; Kubisz et al. 2007; Švihla 2008), Cyprus (Švihla 2011), NW Iran (Gahari et al. 2017), Lebanon (Ganglbauer 1881; Magistretti 1942), and Israel (Rittner & Nir 2014).

Xanthochroina auberti was included in the keys to Italian beetles (see Porta 1934) due to its presence in South Eastern France, including the departments of Var and of Alpes Maritimes, biogeographically strictly related to western Liguria. The presence in these departments was confirmed by recent records from Nice, Monaco and other localities close to the Italian border (Lemaire 2011). Magistretti (1967) in his comprehensive paper on the Italian Oedemeridae did not include this species, as well as Angelini et al. (1995), while Švihla (2008, 2011) and Gahari et al. (2017) reported *X. auberti* from Italy but not providing any locality, probably based on unpublished data or on the erroneous interpretation of Porta (1934).

We hypothesized the presence of this species in west-

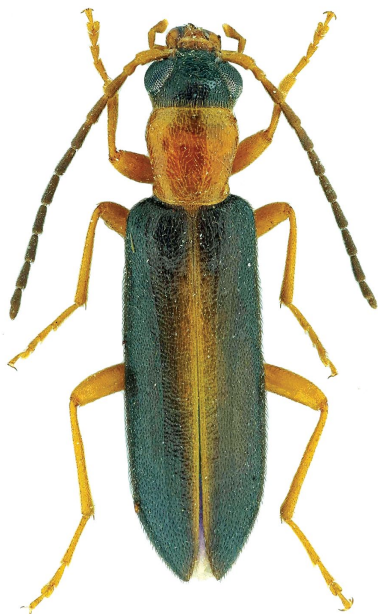


Fig. 1 – *Xanthochroina auberti* (Abeille de Perrin, 1876), from Greece (Photo: Marco Uliana).

ern Liguria based on the ecological continuity of Mediterranean ecosystems between this region and south eastern France, as also supported by the presence of several Iberian-Provençal species of both plants and animals (e.g. Bologna & Balletto 2007). The presence of the species was actually confirmed by the following record, which represents the first certain locality for the Italian fauna:

Italy: Liguria Region, Imperia province, Bordighera, Monte Nero, 43° 47' 35.36" N – 7° 41' 10.71" E, 20.VI-II.2019, UV light trap, D. Badano coll., 4 exx. These specimens, preserved in alcohol 95%, are housed in the M. A. Bologna collection at the University Roma Tre.

The locality of Monte Nero (Fig. 2) is a Mediterranean scrubland and it is included in the Natura 2000 network (SAC IT1315806 Monte Nero – Monte Bignone), although the area is heavily damaged and often plagued by wildfires. The specimens were collected at light in close proximity of young trees of *Pinus halepensis*, part of a mixed broadleaves-evergreen stand including short trees and bushes (*Pinus*, *Quercus*, *Cupressus*, *Pistacia*) bordering a low scrubland with prevalence of *Cistus*.

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Fig. 2 – Liguria, Bordighera, Monte Nero, the first sampling site in Italy of *Xanthochroina auberti* (Photo: D. Badano).

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