

## First report of *Ricania speculum* (Walker, 1851) in Europe (Hemiptera: Fulgoromorpha: Ricaniidae)

GIUSEPPE MAZZA<sup>1,5</sup>, FABRIZIO PENNACCHIO<sup>1</sup>, ELISABETTA GARGANI<sup>1</sup>, ITALO FRANCESCHINI<sup>2</sup>,  
PIO FEDERICO ROVERSI<sup>1</sup> & FABIO CIANFERONI<sup>3,4</sup>

<sup>1</sup>Consiglio per la Ricerca e la Sperimentazione in Agricoltura, Research Centre for Agrobiology and Pedology, via di Linciola 12/a,  
Cascine del Riccio, I-50125, Firenze, Italy.

<sup>2</sup>Retired Inspector of Corpo Forestale dello Stato (State Forestry Corps), Via San Lorenzo 11, I-16030, Casarza Ligure, Genova, Italy

<sup>3</sup>Natural History Museum of the University of Florence, Zoological Section "La Specola", via Romana 17, I-50125, Firenze, Italy.

E-mail: fabio.cianferoni@unifi.it

<sup>4</sup>Institute of Agroenvironmental and Forest Biology, CNR - National Research Council of Italy, via Salaria 29.300, I-00015,  
Monterotondo Scalo (Roma), Italy.

<sup>5</sup>Corresponding author. E-mail: giuseppe.mazza@entecra.it

### Abstract

*Ricania speculum* (Walker, 1851) (Hemiptera: Fulgoromorpha: Ricaniidae) is reported for the first time in Europe. Both nymphs and adults were observed from 2009 in several municipalities of Liguria (Italy). Since the species is extremely polyphagous and is a real pest for several crops in tropical and subtropical areas, the presence of this alien insect is noteworthy, representing a new possible threat for native species and human activities.

**Key words:** *Ricania speculum*, Fulgoromorpha, Hemiptera, Italy, Europe

The family Ricaniidae is mainly distributed in tropical regions, and it is represented only by the genus *Ricania* in the Palaearctic region (Demir 2009). Only three species are known to be in Europe: *Ricania hedenborgi* Stål, 1865, an element spread in the Palaearctic and Afrotropical regions, present in Greece (Demir 2009), *R. japonica* Melichar, 1898, an East-Palaearctic species introduced in Bulgaria and Ukraine (Gjonov 2011), and *R. limbata* Lallemand, 1935, an Australian element introduced in France (cf. Bourgoin 2013).

Even if most species belonging to this family are harmless, few are relevant agricultural pests, such as *Ricania speculum* (Walker, 1851), *Pochazia sublimata* Schumacher, 1915 and *Scolycopa australis* (Walker, 1851) (see Bu & Liang 2011). The biology of the three species of Ricaniidae present to date in Europe has not been comprehensively studied; only *R. japonica* seems to be a pest for several plants due to its polyphagy (Gjonov 2011).

According to Bourgoin (2013), today *Ricania speculum* (Fig. 1) is distributed in Korea, Japan, China, Vietnam, Philippines and Indonesia. This species, commonly known as black planthopper, is here reported for the first time in Europe. Moreover, the family Ricaniidae is new for the Italian fauna.

In 2013, October 16<sup>th</sup>, 21 specimens (16 females and 5 males) were collected by I. Franceschini in Casarza Ligure (GE), 44°16'41"N 9°27'04"E (WGS84) (Liguria, Italy) and are now preserved in pure ethanol at the Research Centre for Agrobiology and Pedology of Florence. Under the name of *Ricania speculum* there is probably a complex of about ten species (Stroiński A., *in littoralis*), but these specimens (Figs 1–3) belong properly to *R. speculum* as illustrated in Yang (1989).

Since 2009 the species has been observed in Italy (Liguria) and now it can be considered as established. This alien species is already present in several coastal municipalities of Liguria: Genova, and Carasco, Casarza Ligure, Chiavari, Cogorno, Lavagna, Sestri Levante (Franceschini I., pers. obs.). The pathway of introduction is still unknown, however, it could have been accidentally introduced with ornamental plants or crops.

Italy is one of the most invaded European country by alien insects (see Inghilesi *et al.* 2013) and this record updates the list of the established Auchenorrhyncha to ten species.

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