

Two exotic jumping plant-lice (Hemiptera: Psylloidea) new to mainland Portugal

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Abstract: The occurrence of *Cacopsylla pulchella* and *Platycorypha nigrivirga* is reported for the first time from mainland Portugal. The psyllids were observed causing injuries on leaves of *Cercis siliquastrum* and *Tipuana tipu* respectively in urban areas of Faro, southern Portugal.

Key words: Hemiptera, Psyllidae, *Cacopsylla pulchella*, *Platycorypha nigrivirga*, *Cercis siliquastrum*, *Tipuana tipu*, pest, Portugal.

Dos psílidos exóticos nuevos para Portugal continental

Resumen: Se cita por primera vez para Portugal continental a los psílidos *Cacopsylla pulchella* y *Platycorypha nigrivirga* causando daños en hojas de *Cercis siliquastrum* y de *Tipuana tipu* respectivamente, en calles y jardines de la ciudad de Faro, en el sur de Portugal.

Palabras clave: Hemiptera, Psyllidae, *Cacopsylla pulchella*, *Platycorypha nigrivirga*, *Cercis siliquastrum*, *Tipuana tipu*, plaga, Portugal.

The Psyllidae is the largest family of jumping plant lice with a cosmopolitan distribution and some 1,800 described species included in more than 150 genera. They are all sap-sucking insects and most of them are narrowly host-plant specific, with many species utilizing woody legumes. Jumping plant lice alien to Europe include 11 species belonging to this family (Mifsud *et al.*, 2010). Most of them are hosted by exotic legumes that have been traditionally cultivated in Europe with an ornamental or forestal use.

During a visit to Faro (Algarve, 29SNA99, 20 m.s.n.m) on 27 June 2010, many adults of *Cacopsylla pulchella* and *Platycorypha nigrivirga* were found living on the underside of leaves of several Judas tree and Rosewood tree respectively that we checked along sidewalks and in public gardens. The samples are preserved in 70% ethanol in the author's collection.

Cacopsylla pulchella (Löw, 1877) is a species strictly associated with the Judas tree (*Cercis siliquastrum* L.), native from South-eastern Europe and Western Asia and largely cultivated in Western Europe as an ornamental tree.

This psyllid is probably native to the Eastern Mediterranean basin but since the 1960's the species was found in various localities in Central and Northern Europe. The first confirmed record of *Cacopsylla pulchella* in Europe dates to 1964, in France (Hodkinson & White, 1979) and afterwards has been found naturalized in several European countries including Switzerland (Burckhardt, 1999), Hungary (Ripka, 2003), Slovenia (Seljak, 2006) and also the UK, Germany, Greece, Italy, Sicily and Ukraine (Burckhardt, 2010).

In spite that Maryańska-Nadachowska & Hodkinson (1993) registered this species in Majorca (Balearic Islands, Spain) and Gaspar *et al.* (2008) reported it for the Azores Islands (Portugal) there were no records for the Iberian Peninsula in the entomological

literature. Nevertheless this species is well known in the Spanish agriculture literature and it was recorded in the early 2000's in different cities. Pons *et al.* (2003) recorded this species as *Psylla pulchella* Löw, being an important pest for *Cercis* in the city of Lleida during 2001-2003. In the management plan for the urban trees of Barcelona city (Institut Municipal de Parc i Jardins de Barcelona, 2004) it is considered as one of the main pests in the city. Laviña *et al.* (2004) looking for species known to be liable to transmit phytoplasmas found *Cacopsylla pulchella* in the Baix Llobregat area and Torrent (2003) mentioned this plague in the city of Seville. We detected its presence in Jerez de la Frontera (Cádiz province) gardens for the first time in 2005 and it is widespread in the area since then. In addition some photographs posted on the "Biodiversidad Virtual" portal (<http://www.biodiversidadvirtual.org/>) allow visual identification of this species at different locations in Spain: Madrid (pictures by A. Umaran posted on 26 Jan. 2007 and 22 May 2011), Tarragona (by X. Cano posted on 19 Jun 2010), Valencia (by L. Vivas posted on 13 May 2011) and Barcelona (by F. Turmo posted on 29 May 2011).

In continental Portugal, Lopes Moreira (2009) mentioned *Psila oleae* affecting *Cercis siliquastrum* in Jardim do Campo Grande (Lisbon) but the figure 14 clearly shows that this is *Cacopsylla pulchella*.

Platycorypha nigrivirga Burckhardt, 1987, is a species strictly associated with Rosewood tree (*Tipuana tipu* (Benth.) Kuntze), native from Bolivia, Northern Argentina, Brazil and Uruguay and cultivated in temperate areas of Europe as an ornamental tree. Apart from Southamerica, the psyllid has recently been recorded in Spain, in the Balearic islands (Burckhardt, 2007) and Andalusia (Sánchez, 2008).

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