

***Orthotylus (Parapachylops) caprai* Wagner, 1955, new record for Iberian Peninsula (Heteroptera, Miridae)**

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Summary. – The authors report the first record of *Orthotylus (Parapachylops) caprai* Wagner, 1955, in the Iberian Peninsula, from five specimens collected in a domestic garden and one specimen collected in a municipal park, both in the city of Barcelona (Catalonia, Spain). The host plant at both collecting sites was the ornamental tree *Cupressus sempervirens* L. Habitus and male paramers are illustrated.

Résumé. – *Orthotylus (Parapachylops) caprai* Wagner, 1955, nouveau pour la péninsule Ibérique (Heteroptera, Miridae). Les auteurs reportent le premier signalement d'*Orthotylus (Parapachylops) caprai* Wagner, 1955, dans la péninsule Ibérique, à partir de cinq spécimens recueillis dans un jardin privé et un spécimen récolté dans un parc municipal, tous les deux dans la ville de Barcelone (Catalogne, Espagne). La plante-hôte sur les deux lieux de collecte était l'arbre ornemental *Cupressus sempervirens* L. L'habitus et les paramères du mâle sont illustrés.

Keywords. – True bugs, faunistics, new record, Iberian Heteroptera, Cupressaceae.

As part of an on-going investigation on Heteroptera biodiversity patterns in the Barcelona metropolitan region (Catalonia, Spain), 104 true bug species have been collected and identified. Among these, one species of Miridae, *Orthotylus (Parapachylops) caprai* Wagner, 1955, has been found. In the present note we report this species living on *Cupressus sempervirens* L., in two localities within the city of Barcelona, a private domestic garden and a public municipal park, as the first records for the Iberian Peninsula.

The species was described on specimens collected in the Island of Sardinia (WAGNER, 1955). It remained a Sardinian endemism for ca. 40 years, until it was found in the Island of Sicily (CARAPEZZA, 1997). Since, it has been also recorded in Great Britain (NAU, 2007a, b; HODGE, 2008), Croatia, Germany and Switzerland (SIMON, 2007). In 2010, it was reported to Carapezza in mainland Italy (A. Carapezza, pers. com.). *O. caprai* is considered an alien species in Europe north of the Alps (RABITSCH, 2010), and thus a candidate example of a biological invading species.

O. caprai, as is typical for species belonging to subgenus *Parapachylops* Ehanno & Matocq, 1990, has been previously found living on *Cupressus* L. (CARAPEZZA, 1997); however, it has also been reported on *Juniperus* L. (CARAPEZZA, 1984), *Chamaecyparis* Spach (SIMON, 2007 ; HODGE, 2008), *Pinus sylvestris* L. (SIMON, 2007), *Sequoiadendron giganteum* (Lindley) Buchholz (NAU, 2007a, b; RYAN, 2008), and, possibly, *Thuja* L. (A. Carapezza, pers. com.). All captures have occurred from June to August.

MATERIALS AND METHODS

Sampling occurred in 2010, from May to July. Cypress trees (*Cupressus sempervirens* L.) were explored for bugs by shaking branches for 15 s while holding below a 40 cm diameter entomological net. An aspirator was used to transfer specimens to plastic containers filled with 70% ethanol. Collected bugs were brought back to the laboratory, where they were

identified to species level as *O. caprai*. Voucher specimens are deposited for future reference in the Department of Animal Biology of the University of Barcelona. Male identification followed WAGNER (1974), and female followed CARAPEZZA (1984).

RESULTS

Six *O. caprai* were collected in two different localities during the course of the 2010 sampling period (UTM projection is based in the datum Europe 1950, Spain and Portugal):

1 ♂, Barcelona city, Pedralbes area, Can Alejo, UTM 31T, 429701 N 4580161 E, Catalonia, Spain, 30.VI.2010, *Cupressus sempervirens* L. ; 3 ♂ and 2 ♀, Barcelona city, Montjuïc-Poble Sec area, Jardins de Laribal, UTM 31T, 426263 N 4583557 E, Catalonia, Spain, 1.VII.2010, *Cupressus sempervirens* L.

"Can Alejo" corresponds to a private domestic garden, while "Jardins de Laribal" is an historic municipal park.

An illustration of *O. caprai* habitus is provided in fig. 1, and male parameres are illustrated in fig. 2-3.

DISCUSSION

Most alien Heteroptera colonize habitats under strong human influence (RABITSCH, 2010), for example agroecosystems, but also more urban ones, like parks and gardens. The association between *O. caprai* and ornamental trees gives support to the idea that ornamental plant trade is among the major pathways for the dispersal of Heteroptera throughout the world;

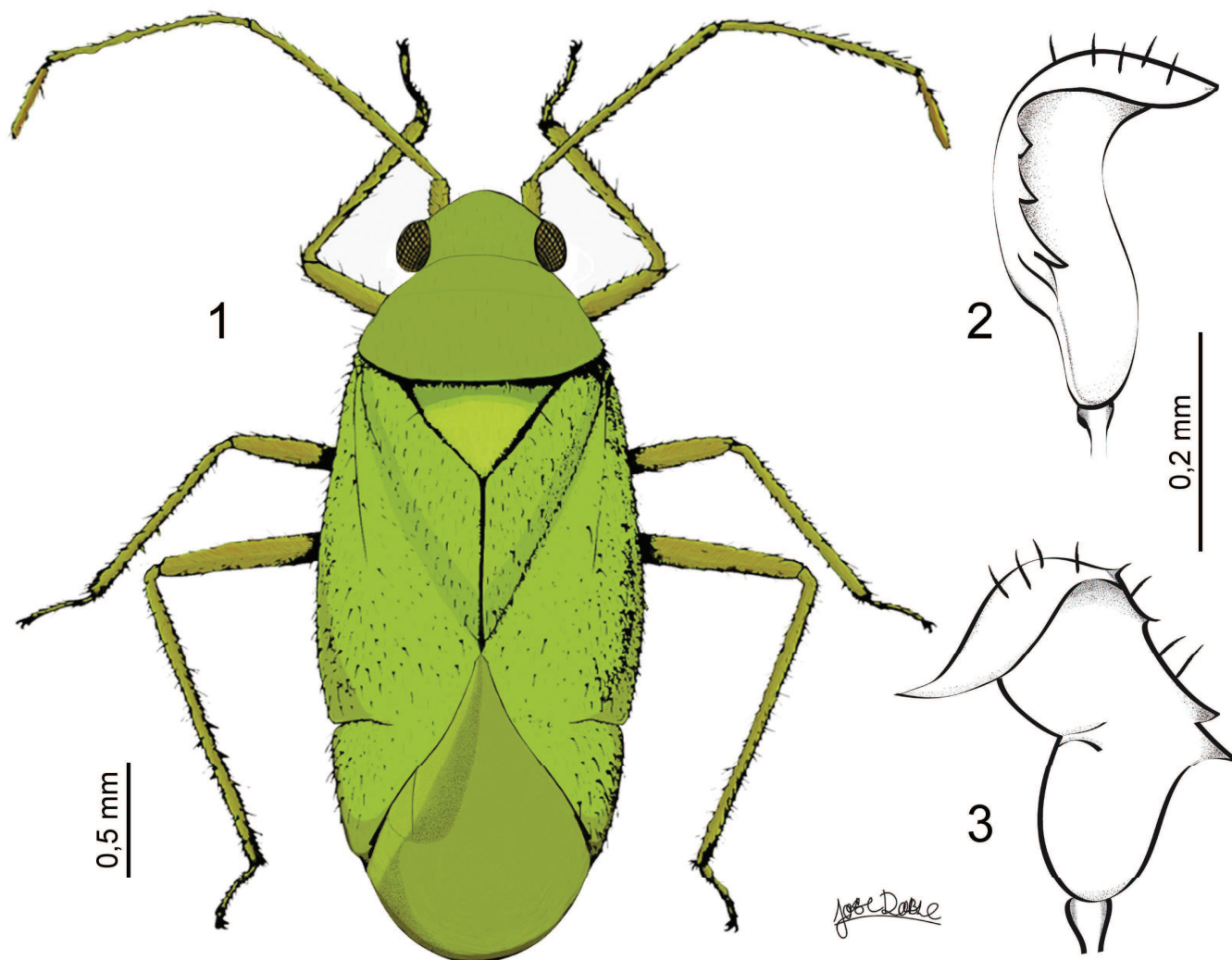


Fig. 1-3. – *Ortothylus (Parapachylops) caprai* Wagner, 1955. – 1, Habitus. – 2, Male right paramere. – 3, Male left paramere.

consequently, the use of many Cupressaceae as ornamentals in urban ecosystems (*i. e.*, domestic gardens, municipal parks) has, most probably, a core role in the new records of this Orthotylinae all over Europe.

Finding that *O. caprai* is present in the Iberian Peninsula gives support to the idea that it might be a human induced biological invading species; however, we also agree with A. Carapezza (com. pers.) that these new frequent findings of *O. caprai* may reflect undercollection.

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