

NOTA / NOTE

New data on the biology and distribution of *Leptoglossus occidentalis* Heidemann, 1910 (Hemiptera: Heteroptera: Coreidae: Coreinae: Anisoscelini).

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Abstract: Information on the hibernation of *Leptoglossus occidentalis* Heidemann, 1910 (Hemiptera: Heteroptera: Coreidae) is provided. The presence of the species in Morocco is confirmed.

Key words: Hemiptera, Heteroptera, Coreidae, Coreinae, Anisoscelini, *Leptoglossus occidentalis*, invasive species, hibernation, Europe, Morocco.

Resumen: Nuevos datos sobre la biología y distribución de *Leptoglossus occidentalis* Heidemann, 1910 (Hemiptera: Heteroptera: Coreidae: Coreinae: Anisoscelini). Se proporciona información sobre la hibernación de *Leptoglossus occidentalis* Heidemann, 1910 (Hemiptera: Heteroptera: Coreidae). Se confirma la presencia de la especie en Marruecos.

Palabras clave: Hemiptera, Heteroptera, Coreidae, Coreinae, Anisoscelini, *Leptoglossus occidentalis*, especie invasora, hibernación, Europa, Marruecos.

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The Western Conifer Seed Bug *Leptoglossus occidentalis* Heidemann, 1910 (Hemiptera: Heteroptera: Coreidae) is native to western North America. After its first observation in Italy in 1999, *L. occidentalis* has been reported as an invasive species from most European countries in the last twenty years (Taylor *et al.*, 2001; van der Heyden, 2018a, 2018b; Lesieur *et al.*, 2019).

The species is known to hibernate in a variety of sites, such as loose bark, holes of dead trunks, birds' nests as well as human dwellings (Fent & Kment, 2011; Kulijer *et al.*, 2017; Kulijer & Ibrahimi, 2017; van der Heyden, 2018b; Lesieur *et al.*, 2019). Fent & Kment (2011) mentioned that in North America overwintering adults of *L. occidentalis* leave their shelters in mid-May to early June.

Recently, several specimens of *L. occidentalis* were observed in Barcelona (Spain) leaving their overwintering shelters in early to mid-February. It seems that they left sites as tunnels, gaps of concrete bridges and empty beehives to warm themselves in the sun. When disrupted, they crawled back into their shelters (José Manuel Sesma, personal comment).

Checking the Internet, especially the website iNaturalist.org (2019), recent observations of specimens of *L. occidentalis* from other European countries confirm that they left their overwintering sites in early to mid-February and even in January.

Further research should be done to investigate the hibernation of *L. occidentalis*, especially in regions with temperate climate.

The first record of *L. occidentalis* in Morocco, based on three nymphs found near Tangier, was reported by Gapon (2015).

A recent finding of *L. occidentalis* confirms the presence of the species in that country: On 11.02.2019, Samantha Zaza photographed an adult specimen in Rabat (Fig. 1). The photograph was first published in the online database iNaturalist (Zaza, 2019).

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Fig. 1.- *Leptoglossus occidentalis* Heidemann, 1910, Rabat, Morocco, 11.02.2019. (Photograph: Samantha Zaza).