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## New records of the Western Conifer Seed Bug *Leptoglossus occidentalis* Heidemann (Heteroptera: Coreidae) in Chile

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# New records of the Western Conifer Seed Bug *Leptoglossus occidentalis* Heidemann (Heteroptera: Coreidae) in Chile

Nuevos registros de la chinche de las coníferas occidental *Leptoglossus occidentalis* Heidemann (Heteroptera: Coreidae) en Chile

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**Abstract:** New records of the invasive Western Conifer Seed Bug *Leptoglossus occidentalis* from Chile are given from Araucanía, Los Ríos and Los Lagos Regions. The new records extend the distribution of the species nearly 650 km southwards.

**Keywords:** Alien species, Anisoscelini, Coreinae, Faunistics.

**Resumen:** Se presentan nuevos registros de la chinche de las coníferas occidental *Leptoglossus occidentalis* en Chile, de las regiones de la Araucanía, Los Ríos y Los Lagos. Los nuevos registros extienden su distribución conocida en el país cerca de 650 km hacia el sur.

**Palabras clave:** Anisoscelini, Coreinae, Especie exótica, Faunística.

*Leptoglossus occidentalis* Heidemann, 1910 (Fig. 1) is an invasive leaf-footed bug from Western United States which has invaded several European, Asian and most recently South and Central American countries (Brailovsky, 2014; Lesieur et al. 2018; van der Heyden, 2019).

This species is considered an important pest on pine nuts (Awan & Pettenella, 2017), but it is also considered a household pest, as it aggregates for overwintering causing damage to plumbing materials and biting people adventitiously (Bates, 2005; Hornok & Kontschán, 2017). In South America, it was first reported in Chile during 2017 from La Serena and Valparaíso (Faúndez et al., 2018b). After its detection, *L. occidentalis* experienced a rapid expansion from Atacama to Bío Bío Regions, and it is considered as well established since 2018 (Faúndez & Rocca, 2017; Faúndez et al., 2017, 2018a). The purpose of this contribution is to report new records of this species in the country.

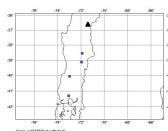


Fig. 1. Distribution of *Leptoglossus occidentalis* in Southern Chile.

Black triangle = known locality; Blue squares = new records.

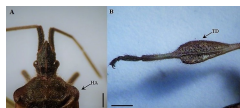


Fig. 2. *Leptoglossus occidentalis*, female from Cherquenco.

A. Head and pronotum; B. Metathoracic leg.

HA = humeral angles of pronotum; TD = tibial dilation. Bars = 1 mm.

Araucanía Region, Cherquenco, 2-III-2019, 2 ♀ 1 ♂ (E. Faúndez Coll.); Araucanía Region, Pucón, 27-III-2019, 1 ♀, M. Mellado leg. & coll; Los Ríos Region, Rincón de la Piedra, 27-III-2019, 2 ♀ (avistadas); Los Lagos Region 30-III-2019 1 ♂ N. Contreras leg. (Instituto de la Patagonia Coll.).

#### Material examined

Araucanía Region, Cherquenco, 2-III-2019, 2 ♀ 1 ♂ (E. Faúndez Coll.); Araucanía Region, Pucón, 27-III-2019, 1 ♀, M. Mellado leg. & coll; Los Ríos Region, Rincón de la Piedra, 27-III-2019, 2 ♀ (avistadas); Los Lagos Region 30-III-2019 1 ♂ N. Contreras leg. (Instituto de la Patagonia Coll.).

The new localities extend the known distribution of the bug nearly 680 km southwards, with Puerto Varas becoming the southernmost locality (Fig. 1). These records are within the expected invasion area predicted by the model of Zhu et al. (2014). Therefore, it might be expected that additional records appear among these new localities in the near future, and even southwards. In these southern localities we may expect more collecting in houses for overwintering, as the winters are harder in the south. Thus, especial attention may be needed in order to avoid structural damages as it was reported by Bates (2005). In the new area, it may be confused with *Leptoglossus chilensis*, from which it can be easily differentiated by having rounded humeral angles of pronotum and lanceolate metatibial dilation (Fig. 2); whereas in *L. chilensis* there are teeth in both humeral angles and metatibial dilations. These differences are keyed and illustrated in Faúndez et al. (2018b). Finally, it is necessary to remark that the area has several native conifers which may be attacked by this invasive insect. For this reason, it is suggested that taxonomic training should be provided to staff from natural protected areas and forestry services, as well as control alternatives, in order to avoid the negative impact that *L. occidentalis* may cause to the native flora.

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