

NOTA CIENTÍFICA

**First record of the ant genus *Oxyepoecus*
(Formicidae: Myrmicinae: Solenopsidini) in Chile,
with remarks on its geographical range**

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**Primer registro del género de hormigas mirmicinas
Oxyepoecus (Formicidae: Myrmicinae: Solenopsidini) para
Chile con consideraciones sobre la amplitud de su
distribución**

■ **RESUMEN.** El género de hormigas *Oxyepoecus* (Formicidae: Myrmicinae: Solenopsidini) Santschi, 1926, está compuesto por 16 especies reconocidas como válidas. Tres de estas especies, *O. inquilinus*, *O. bruchi* y *O. daguerrei*, son consideradas actualmente como vulnerables (VuD2) e incluidas en la lista roja de especies amenazadas. El propósito de este trabajo es registrar, por primera vez, una de estas especies para Chile: *O. inquilinus*. Esta nueva localidad constituye el límite de distribución austral de este género rara vez recolectado.

PALABRAS CLAVE. Especies amenazadas. Formicidae. América del Sur. Chile.

■ **ABSTRACT.** The ant genus *Oxyepoecus* (Formicidae: Myrmicinae: Solenopsidini) Santschi, 1926 has 16 species recognized as valid. Three of these species: *O. inquilinus* (Kusnezov, 1952), *O. bruchi* Santschi, 1926 and *O. daguerrei* (Santschi, 1933) are considered as vulnerable (VuD2) and included in the Red List of threatened species. The aim of this paper is to record one of these species: *O. inquilinus* in Chile for the first time, adding a new locality to be considered as the southernmost limit of distribution for this relatively rarely collected ant genus.

KEY WORDS. Endangered species. Formicidae. South America. Chile.

The ant genus *Oxyepoecus* (Formicidae: Myrmicinae: Solenopsidini) was created by Santschi (1926). *Oxyepoecus* is exclusively neotropical and workers are seldom collected. The genus was reviewed by Kempf (1974) and recently the *Vezenyii* group was proposed and reviewed by Albuquerque & Brandão (2004). The last authors propose a

new generic diagnosis dividing *Oxyepoecus* in two complex: *Vezenyii* with 11 species and *Oxyepoecus* grouping the remainder five species.

Oxyepoecus can be distinguished from other Solenopsidini ant genera by the following suite of characters: 11 segmented antennae with a 3-segmented apical club;

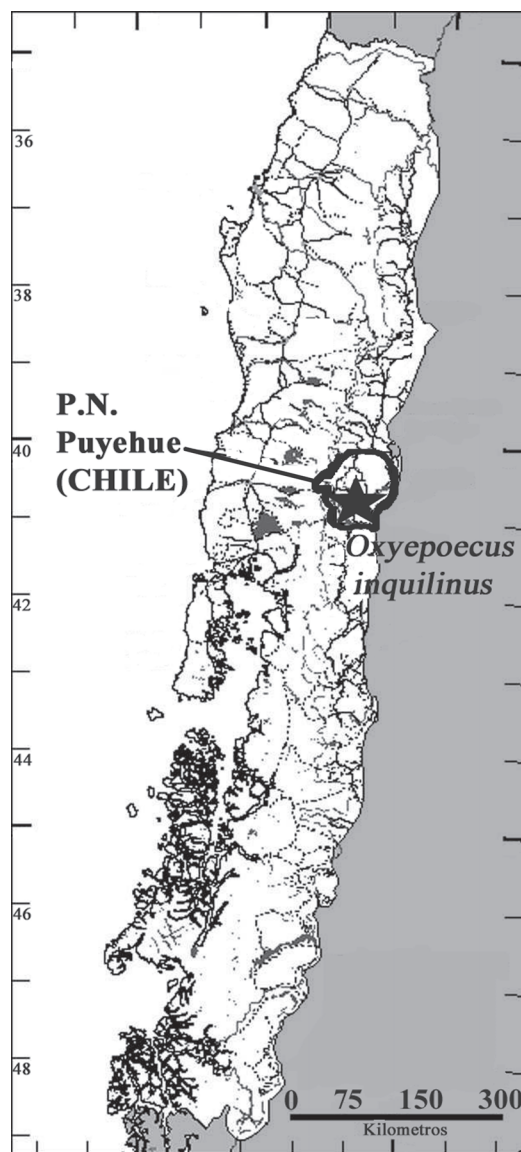


Fig. 1. Record of *O. inquilinus* in the Valdivian Temperate Forest, Chile.

clypeus with four teeth; propodeum with a pair of teeth and integument always extensively sculptured.

As Albuquerque & Brandão (2004) say: «all known individuals of *Oxyepoecus* were obtained either by chance discoveries or specialized collecting techniques applied sporadically at very few and scattered localities».

The use of new techniques and protocols, as is the case of leaf litter Winkler extractor, soil samples and/or Berlesse funnel to sample

soil and leaf litter, has permitted to obtain, in a more efficient way, relatively small ants that inhabit specifically these niches, up to a decade ago very little studied.

Until today, the southern limit of *Oxyepoecus* distribution was the parallel 31°S, in Argentina (Cordoba, Alta Gracia) (fig.2). *O. inquilinus* (Kusnezov, 1952) was formerly recorded from Central and Southern Brasil and Tucumán, in northern Argentina. The northern limit of its distribution was recently mentioned by Fernandez (2002) to Llanos Orientales, Meta Department, Orinoco Basin, Colombia. Here, I provide the first record of *Oxyepoecus* in Chile, being the new southernmost record that is known for this genus.

One worker of *Oxyepoecus inquilinus* was collected in 06 February 2005 by M. Ramírez and F. Labarque (Museo de Ciencias Naturales B. Rivadavia, Buenos Aires, Argentina; MACN) from litter submitted to a Berlese funnel, taken in Chile, Reg. X: Osorno, P.N. Puyehue, Aguas calientes, sendero «El Pionero» (40° 44' 13.9''S-72° 18' 23.3''W). 70 m.bsl. This National Park is a reserve of Valdivian forest (see fig. 1). This Ecoregion is one of the most particular environments of Chile, with a high degree of endemism and one of the most diverse biomes of the planet. *Conservation International* identified this temperate region as part of 25 places with most high value to conserve biodiversity in the world level. It is possible that this species has a extremely localized population and this may be the reason for this species to be included in the Red List (SIG, 1996) as VuD2 (Vulnerable, population is characterized by an acute restriction in its area of occupancy, typically less than 100 km², or in the number of locations, typically less than five). Other two species of *Oxyepoecus*: *O. bruchi* Santschi, 1926 and *O. daguerrei* (Santschi, 1933) are considered as endangered species too.

The specimen will be deposited at MACN. I thank Dr. M. Ramirez for providing the specimens of *Oxyepoecus inquilinus*, along with innumerable additional specimens of ants collected throughout Chile. Other examined material: *Oxyepoecus inquilinus*, 1 worker, type material (IFML, Kusnezov coll).

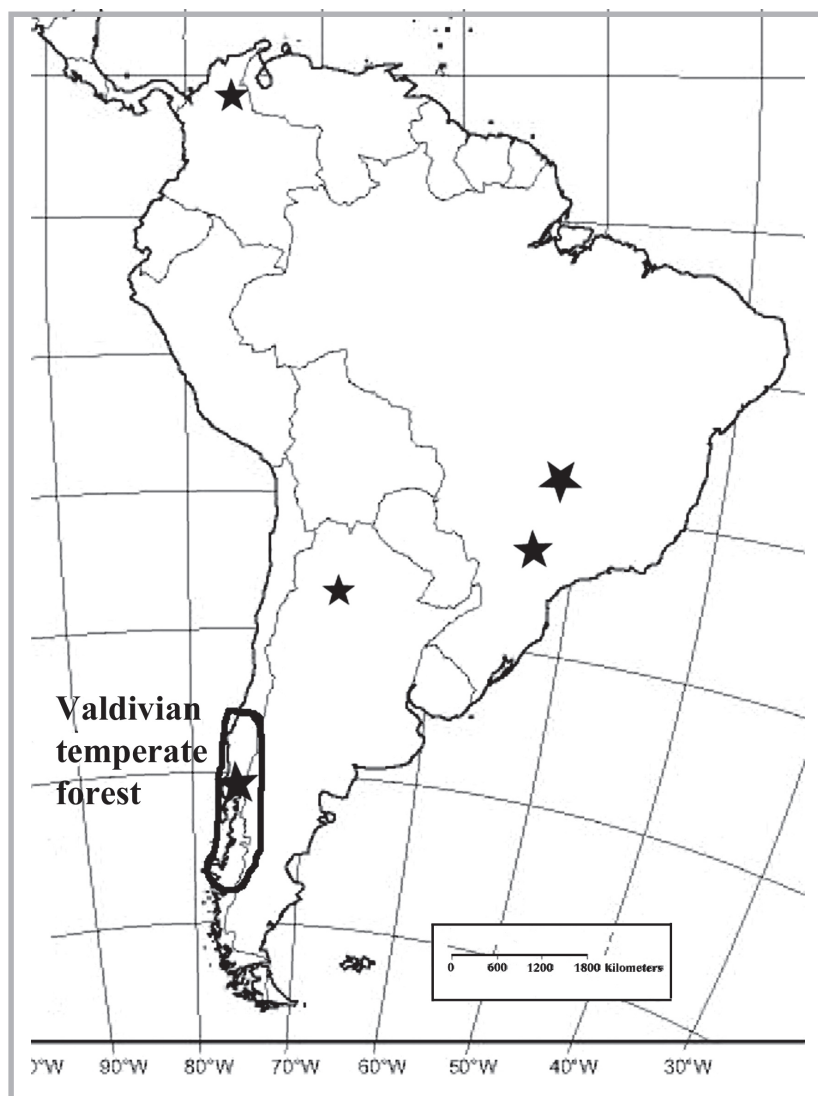


Fig. 2. Distribution of *Oxyepoecus inquilinus* showing all known records of *O. inquilinus*

ACKNOWLEDGMENTS

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