

## Additions to the checklist of the ants (Hymenoptera: Formicidae) of Peru

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### Abstract

A recent species checklist of the ants of Peru recorded 592 nominal species and 79 genera on the basis of a literature review. Here we complement the previously published checklist with the addition of 83 nominal species and six genera, including three genera recorded only from morphospecies. This increases the list of ants reported from Peru to at least 679 species and subspecies and 85 genera. We also modify the list of species known as endemic from Peru, discuss the historical importance of the Peruvian ant fauna in myrmecology, and highlight potential research for future studies.

**Key words:** Formicidae, Peru, checklist

### Introduction

The compilation and curation of species checklists for different regions of the world provides important tools for biologists to complete inventories, realize new discoveries, assist taxonomic identifications, but also to mark milestones in the understanding of regional faunas and floras. However the completion of checklists using literature records represents a real challenge as records have been spread across centuries in thousands of publications in various fields of biology (taxonomy, biogeography, ecology, etc.), in museum collections, and more recently in online databases.

In a recent publication Bezděcková and collaborators (2015) produced a checklist of ant species for a species-rich country, Peru. A list of 592 nominal species and subspecies was compiled based on literature records only, representing an increase of 260 species since the last publication that included Peruvian ants more than 10 years earlier (Fernandez & Sendoya 2004). The 592 nominal species were in 76 genera, and three additional genera were known from morphospecies records, bringing the total to 79 genera.

We compared these published results with a newly developed global ant database (GABI), and noted some discrepancies between our database of Peruvian ant diversity and the new published checklist. Based on this comparison, it appears that Bezděcková et al. (2015) missed some publications of species records for Peru. Here we complete the list of ants of Peru published by Bezděcková and collaborators, identify records that are potential misidentifications, and correct a few misspellings.

### Methods

The records presented here were collected from an extensive global literature search, museum records and records from personal collections compiled into a centralized database GABI (Global Ant Biodiversity Informatics Project). GABI includes nearly 1.7 million records globally from the synthesis of over 8520 publications and has been recently used for the compilation of species checklist from various parts of the world including the Solomons islands (Sarnat *et al.* 2013) and Yunnan in China (Liu *et al.* 2015). Visualizations of the GABI data are available through the web-mapping tool antmaps.org.