

A checklist of the ants (Hymenoptera: Formicidae) of Peru

KLÁRA BEZDĚČKOVÁ¹, PAVEL BEZDĚČKA¹ & IVO MACHAR²

¹Museum of Highlands Jihlava, Masarykovo nám. 55, CZ-586 01 Jihlava, Czech Republic.

E-mail: bezdeckova@muzeum.ji.cz, bezdecka@muzeum.ji.cz

²Palacky University, Faculty of Science, Department of Development Studies, Tr. 17. listopadu 12, CZ-771 46 Olomouc, Czech Republic. E-mail: ivo.machar@upol.cz

Abstract

The article presents a comprehensive list of the ants (Hymenoptera: Formicidae) of Peru. Distribution data for 592 valid names of species-group taxa in 76 genera and 12 subfamilies were collected through a bibliographical review. The most diverse subfamilies in terms of species richness are Myrmicinae (273 species/subspecies), Formicinae (86 species/subspecies) and Ponerinae (71 species/subspecies). The most diverse genera are *Pheidole* (86 species/subspecies), *Camponotus* (73 species/subspecies), and *Pseudomyrmex* (47 species/subspecies). With respect to geographic divisions, richness is highest in Madre de Dios (245 species/subspecies), followed by Huanuco (109 species/subspecies) and Cusco (104 species/subspecies). Regions in greatest need of additional survey work are Aycucho, Huancavelica, Moquegua and Tacna, from which virtually no information on the ant fauna is available.

Key words: list, ant fauna, Republic of Peru, Neotropical region

Introduction

Peru is one of the countries with the highest biodiversity on the planet (Reynel *et al.* 2013). It is situated in the Neotropical region on the west coast of South America and covers 1,285,216 km². Peru is topographically complex, resulting in a variety of habitats. A dominant feature of Peru is the Andean Cordillera, running north-south and parallel with the coast. The Cordillera divides the country into the three regions with different natural conditions. They are traditionally called the *costa*—a largely arid region adjacent to the Pacific coast (*ca.* 12% of Peruvian territory), the *sierra*—the central mountain region including the highest parts of the Andes (*ca.* 28% of Peruvian territory), and the *selva*—the lowland humid forest area east of the Andes (*ca.* 60% of Peruvian territory) (MINAM 2010).

An effort to understand the complicated ecological reality of Peru leads to various schemes of ecological classification. According to individual sources it is possible to identify 11–21 ecoregions, 18 ecological regions, 25–34 vegetation formations, 84 life zones or 98 terrestrial ecological systems in the Peruvian territory (e.g. Reynel *et al.* 2013). A widely used classification, formulated by Brack Egg (1986) and continually updated (e.g. by Brack Egg & Mendiola 2010) and developed (by Reynel *et al.* 2013), defines 11 ecoregions (nine terrestrial and two water) in Peru. It clearly illustrates the geographical and ecological diversity of Peru by dividing its mainland into the following ecoregions: the desert of the Pacific, the equatorial dry forest, the Pacific tropical forest, the highland steppes, the high Andean plain (Puna), the high plateau (Paramo), cloud forest, tropical rain forest, and savannah.

Peruvian biodiversity is impressive. The number of vascular plant species known from Peru is close 20,000 (30% of the native flora is endemic), of butterflies about 3,700 (the highest of any country), of birds approximately 1,835 (second highest), of amphibians about 538 (fourth highest), and of reptiles about 421 (fifth highest) (Reynel *et al.* 2013). Nevertheless, information on the richness and distribution of many taxa, particularly invertebrates, is still limited.

Here we compile the current knowledge of the richness and distribution of ants (Hymenoptera: Formicidae) in Peru. Ants are among the most ubiquitous, widespread, and abundant groups of animals on earth (Alonso 2010).