

## Two new species of *Phyllophaga* Harris (Coleoptera: Scarabaeidae: Melolonthinae) from Costa Rica

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### Abstract

Two new species of *Phyllophaga* (*Phyllophaga*) are described: *Phyllophaga larai* García-López & Morón sp. nov. and *Phyllophaga copalensis* García-López & Morón sp. nov. The specimens were collected in premontane rain forests located at 1000 m in altitude in the Talamanca and Guanacaste mountain ranges, Costa Rica. A distribution map, key to the two new species as well as their two nearest relatives, and illustrations of diagnostic structures are provided.

**Key words:** taxonomy, rain forest, Talamanca, Guanacaste, Central America, May beetles

### Resumen

Se describen dos especies nuevas de *Phyllophaga* (*Phyllophaga*): *Phyllophaga larai* sp. nov. y *Phyllophaga copalensis* sp. nov. Los especímenes fueron colectados en bosques lluviosos premontanos de las cordilleras de Talamanca y de Guanacaste en Costa Rica situados a 1000 m de altitud. Se proporcionan las distribuciones y una clave de las especies nuevas y sus especies más cercanas y se ilustran las estructuras diagnósticas.

**Palabras clave:** taxonomía, bosque lluvioso, Talamanca, Guanacaste, América Central, abejones de mayo

### Introduction

*Phyllophaga* Harris is a genus of New World scarab beetles that is extraordinarily diverse with 840 known species (Evans and Smith 2007). *Phyllophaga* are found in almost all the biomes from sea level to altitudes above 3000 m. Morón (1986) proposed an introductory treatment of the genus in Mexico that included a supraspecific classification with a key to seven subgenera, 37 groups of species, five species complexes and descriptions of several Mexican species. In Costa Rica, more than 70 species are listed. They belong to two subgenera and ten of the species groups described by Morón (1986).

Reviewing the scarab beetle collections at Instituto Nacional de Biodiversidad de Costa Rica (INBio) Solís & Morón (1998) found 16 new Costa Rican species of *Phyllophaga* (*Phyllophaga*). Most of these were unrelated to any species groups described by Morón (1986) and represented undescribed species groups, probably originating from southeastern Central America or the northern areas of South America (Morón & Solís 2001). During recent collection trips in the mountain ranges of Costa Rica, two undescribed species of *Phyllophaga* (*Phyllophaga*) were found. These species do not seem to be members of any described group but are closely related to *P. guapiloides* Morón & Solís and *P. guapiles* Saylor. Morón and Solís (2001) described