

## ABSTRACT

Colombia has lost about 70% of its contiguous montane forests during the last 200 years. Although only about 10% of the territory is protected within National Parks, it is still one of the most biodiverse rich countries in the world. Some of the most species rich and well studied groups include birds, frogs and some families of plants. In contrast, even though the Scarabaeoidea and the majority of insects are incredibly species rich, they are still poorly known. Most of the existing knowledge comes from limited sampling of just a few areas and majority of the specimens remain unidentified in Museums. Based on both our data and that gathered from the museums in Colombia, we now have a better perspective of the diversity of the Cetoniinae and Rutelinae scarabs: At this time, the Cetoniinae is composed of 31 species (8 new records) and the Rutelinae 237 species (16 new records). As the vast majority of territory in Colombia remains unexplored, there is a promising future for research in these and other groups of insects.



## INTRODUCTION

Geographically, Colombia is considered a transition zone between the Mesoamerican and South American biota, with unique and shared species within each area. Most biologists have believed that tropical diversity was a simple function of the presence and extent of the biota of lowland rainforests. Although these lowland rainforest areas exhibit prominent diversity, the presence of such forests in Colombia explains only part of the species richness. The other reason is the range of elevation found in this country via the Central Andean Mountains, as a continuation of the Cordillera Real of Ecuador that splits into three different cordilleras; the Occidental, Central and Oriental.

In addition to the highland areas, other diversity hot spots for both plants and animals are the northern part of Chocó which borders Panama, the low Calima, southern Colombia, the Colombian Amazonia, southern Orinoquia bordering Brazil and the Caribbean region in areas Serranía del Perijá, Serranía de los Motilones, Serranía de San Lucas and Sierra Nevada de Santa Marta. These regions are largely unexplored for Cetoniinae and Rutelinae scarabs and it is likely that many taxa remain to be discovered. And despite exploration of the Andean zone, new taxa appear almost every time a new site is visited.

## MATERIALS AND METHODS

The beetles were obtained using fruit traps, light traps and from hand collecting in several zones of Colombia, predominantly the Chocó, Cordillera Central and the northeast Cordillera Oriental. Some of the species were collected as larvae or pupae and reared until the adults emerged. Specimens have also been examined in the following collections: Museo de Entomología Facultad de Agronomía, Bogotá; Colección Entomológica Instituto de Ciencias Naturales, Bogotá; Colección de Entomología Universidad Industrial de Santander, Bucaramanga; Colección Entomológica Francisco Luis Gallego, Medellín; and Colección Entomológica Universidad Tecnológica del Chocó.

## RESULTS AND DISCUSSION

### THE CETONIINAE SCENARIO

The diversity of the group in Colombia is composed of 31 species. The main diversity is within the Gymnetini with 24 species. Eight species recorded for the first time, most of them from the western Cordillera Occidental (Table 1). One species can be considered endemic to Colombia: *Howdenypa gloriosa* (Ratcliffe). Very little is known about the Cremastocheilini and very few specimens have been collected. Although three species have been described for Colombia, only *Cyclidius elongatus* (Olivier) and *Genuchinus muzo* Krikken have been confirmed in our studies.



### THE RUTELINAE SCENARIO

Two hundred and thirty seven species of Rutelinae distributed in 49 genera and five tribes are present in Colombia. Most of the taxa belong to the Rutelini (40 genera and 147 species). The majority of the species recorded for the first time were found in the Andean region. The subtribe Areodina is recorded for the first time with *Areoda leachi* McLeay, 1819. Species in *Areoda* were previously known only from the Atlantic region of Brazil. The genera *Vayana* (*Vayana melzeri* Ohaus), *Telaugis* (*Telaugis aenesceus* Burmeister), and *Lobogeniatus* are also recorded for the first time. Sixteen species constitute the number of new records (Table 2).

Species	Locality
<i>Areoda leachi</i> McLeay, 1819	Cundinamarca
<i>Vayana melzeri</i> Ohaus	Amazonas
<i>Telaugis aenesceus</i> Burmeister	Cundinamarca and Meta
<i>Lobogeniatus</i> sp.	Cundinamarca, Boyacá and Meta
<i>Strigoderma marginata</i> (Olivier)	Antioquia
<i>Anticheira capuchina</i> (Fabricius)	Vaupés
<i>Lasiocala lucens</i> Ohaus	Cundinamarca
<i>Macraspis hirtiventris</i> (Bates)	Chocó
<i>Pelidnota chiriquina</i> Bates	Chocó
<i>Pelidnota punctulata</i> Bates	Valle del Cauca
<i>Ptenomela mexicana</i> Soula	Antioquia
<i>Thyriochlorota pilosula</i> (Waterhouse)	Antioquia
<i>Spodochlamys cupreola</i> Bates	Chocó, Antioquia and Cundinamarca
<i>Pelidnota parallela</i> Hardy	Chocó
<i>Pelidnota punctata</i> Bates	Chocó

Table 2. New records of Rutelinae



Species	Locality
<i>Allorhina carmelita</i> (Burmeister)	Santander
<i>Euphoria lurida</i> (Fabricius)	Wide distr.
<i>Gymnetis vanderpolli</i>	Chocó
<i>Gymnetis wollastoni</i> (Schaum)	Chocó
<i>Gymnetis pardalis</i> (G. & P.)	Chocó
<i>Hoplopyga ocellata</i> (Olivier)	Chocó
<i>Guatemalica hueti</i> (Chevrolat)	Chocó
<i>Euphoria steinheili</i> Janson	Chocó

Table 1. New records of Cetoniinae



## ACKNOWLEDGMENTS

Most of the identifications were confirmed by Brett Ratcliffe, Mary Liz Jameson and Miguel Angel Moron. Keith Philips provided support to make this presentation possible.