



***Eriocnemis isabellae*
sp. nov.**

Familia:

Trochilidae

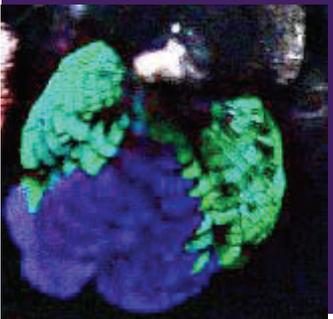
Common Name:

Gorgeted Puffleg.

Zamarrito del Pinche.

Endangered Category
(Proposed) :

CR B2a B2b (i, ii, iv)



Eriocnemis isabellae sp. nov.

Distribution

The Gorgeted Puffleg (*Eriocnemis isabellae*, sp. nov.), inhabits the Serranía del Pinche, an unexplored isolated mountain massif in the Department of Cauca, southwest Colombia. This species represents a distinct new member of the genus *Eriocnemis* and inhabits the cloud and temperate forest zone of the Serranía. (Cortes-Diago *et al.* In press). The new taxon is ecologically associated with elfin forest, occupying a very small range at steep slopes along mountain ridges.



Serranía del Pinche ridges where the type locality was found.

Habitat

The habitat of *Eriocnemis isabellae* sp. nov. is characterized by a series of mountain ridges of gravitational flow origin, represented by erosionally branched mountains with a longitudinal profile with angular tops and rocky outcrops, composed of metamorphic rocks and volcanic mass flows with pronounced to very steep slopes. Governed by a very cold and humid climate, transitional Subandean and Andean forests are found here. The ecosystem inhabited by the new taxon is part of the transition between the upper sub Andean (2400–2700 m) and the lower Andean biomes (2750–2850 m) and includes mainly zones between 2600 and 2900 m, with average temperatures oscillating from 10° to 18°C and an annual precipitation of approximately 3000 mm. The habitat can be best described as very humid cloud forest or stunted elfin forest with frequent natural clearings that suggest a dynamic ecosystem due to strong winds during the months of July and August and unstable steep slopes. The elfin forest averages 6–8 m in height and includes species that, under optimal conditions, would grow up to 20–25 m. The forest is distinguishable from Andean forests found below by the dominance of oak forests (*Quercus humboldtii*).

Ecology

E. isabellae sp. nov. shares its habitat with other hummingbird species, outnumbered by *Heliangelus exortis*. The sympatric occurrence of *E. mirabilis* is particularly noteworthy since this site represents just the second one known for this taxon at all, meaning a range extension of c. 30 km west of the type locality "El Planchón," PNN Munchique. *E. isabellae* sp. nov. was observed foraging on *Bejaria resinosa*, *Cavendishia* cf. *bracteata*, *Cinchona pubescens*, and *Faramea flavicans*.



Gorgeted Puffleg (*E. isabellae* sp. nov.)
Serrania del Pinche by A. Cortes



Bejaria resinosa is one of the main plant species visited by *E. isabellae* at the la Serrania del Pinche.

Threats

Unfortunately, the Serranía del Pinche is not immune to the threats that affect most of the natural areas in Colombia. The main threat is the shift of the agriculture border towards the primary forests, especially of illegal crops, which causes the loss of vegetation cover, contamination of watersheds and soil degradation through the use of eradication methods. The lack of governmental presence and programs allows armed groups to promote the planting of coca fields with the consequential social impacts. Additionally, there are plans to complete a road from El Estrecho in the Patía Valley to Guapi on the Pacific coast, with serious implications for both the Serranía and PNN Munchique.



The planting of Coca is one of the main threats to the Serranía del Pinche

Status

Eriocnemis isabellae sp. nov. presently faces the risk of extinction and is therefore recommended for IUCN red list status as "critical, B2a and B2b (i, ii, iv)" because, based on preliminary estimation of the extension of the preferred habitat from observations and study of satellite imagery to identify similar ecosystems in the Serranía, its presumed range is less than 10 km². Therefore, further studies to determine the distribution and population size of this trochilid are of high priority and would greatly assist the development of a specific management plan for the species.

Conservation

There is an ongoing conservation plan which involves various local authorities and participants: community leaders, majors, regional governors and inhabitants of El Naranjal and Santa Clara, the Corporación Regional del Cauca (CRC), the South Andean Administrative Unit of the Ministerio del Medio Ambiente, The Hummingbird Conservancy (THC) foundation, and Ecohabitats foundation. Research and conservation initiatives in the Serranía del Pinche should also focus on several other globally threatened or range-restricted birds that were observed in the course of this study, e.g., *Eriocnemis mirabilis*, *Oroaetus isidori*, *Penelope ortonii*, *P. perspicax*, *Thamnomanes (Dysithamnus) occidentalis*, *Oreothraupis arremonops*, *Chlorochrysa nitidissima*, *Cephalopterus penduliger*, *Leptosittaca branickii*, *Grallaria gigantea*, *Henicorhina negreti*, *Diglossa gloriosissima*, *Odontophorus hyperythrus*, and *Chloropipo flavicapilla*.