

NOTA/NOTE

First record of Moustached Puffbird *Malacoptila mystacalis* (Bucconidae) in EcuadorJosé María Loaiza¹ *, Juan Carlos Crespo², Alex Boas³, Pablo Molina⁴¹ Fundación ECOMINGA Red de Bosques Protectores Amenazados. 12 de Noviembre 270 y Luis A. Martínez. Baños de Agua Santa.² Bellavista Cloud Forest. Jorge Washington E7-25 y Av. 6 de Diciembre. Quito.³ Ministerio de Turismo. Av. Gran Colombia N11-165 y Gral. Pedro Briceño, Edificio La Licuadora. Quito.⁴ San Antonio de Ibarra, Ramón Teanga y calle s/n.

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Primer registro del Buco Bigotudo *Malacoptila mystacalis* (Bucconidae) en Ecuador**Resumen**

Presentamos el primer reporte de Buco Bigotudo *Malacoptila mystacalis* en Ecuador a partir del registro de cuatro individuos en El Chical, noroccidente de la provincia de Carchi y la obtención de evidencia fotográfica, vídeo y grabación de vocalizaciones. Este registro representa una ampliación hacia el sur de su rango de distribución en el norte de Sudamérica. Describimos los hábitats donde encontramos dos parejas en la reserva Drácula, señalamos las marcas distintivas de campo y analizamos sus vocalizaciones, características que la diferencian del Buco Bigotiblanco *M. panamensis*, con la cual puede traslaparse en las tierras bajas y estribaciones. Este registro no es del todo inesperado dada la colección de especímenes en Ricaurte y Guayacana, departamento de Nariño, Colombia, apenas 39,5 km al norte de El Chical.

Palabras clave: Distribución, Ecuador, *Malacoptila mystacalis*, hábitat, vocalización.**Abstract**

We present the first Ecuadorian record of Moustached Puffbird *Malacoptila mystacalis* based on observations, supported by photographs, videos and audio recordings, of four individuals at El Chical, northwest Carchi province. This record represents a southwards range extension in northern South America. We describe the habitats where two pairs were found in the Dracula Reserve, discuss distinctive field marks and analyze vocalizations, characteristics to separate from White-whiskered Puffbird *M. panamensis*, with which it might overlap in the lowlands and foothills. This record is not entirely unexpected given the collection of specimens in Ricaurte and Guayacana, Nariño Department, Colombia, only 39.5 km north of El Chical.

Keywords: Distribution, Ecuador, *Malacoptila mystacalis*, habitat, vocalization.

Puffbirds are medium sized, large-head forest birds with strong bills hooked at tip and puffy appearance of their feathers. They have mostly cryptic plumages in brown, black and grey shades (Ridgely & Greenfield, 2001). Most species are not sexually dimorphic, but in some species minor color differences between male and female are perceptible, mainly in the genus *Malacoptila* (Athanas & Greenfield, 2016). Puffbirds are solitary, quiet and lethargic, normally seen in small and low exposed perches in under to mid-storey. Their diets comprise insects and other arthropods, and often eat fruit (Robinson, 2003). Puffbirds nest in galleries or burrows dug by themselves in banks, while some species nest inside termite mounds. The family is endemic to the Neotropics, and has a primarily tropical distribution, although there are exceptions like the montane White-faced Nunbird *Hapaloptila castanea* (Fjeldså & Krabbe, 1990), and Moustached Puffbird *M. mystacalis*, which ranges up to 2200 m a.s.l. in Colombia (McMullan *et al.*, 2010).

Malacoptila mystacalis is uncommon in Colombia and fairly common in Venezuela, ranging from the Pacific Andean foothills of Colombia north and east to northern Colombia and coastal Venezuela, between 350–2200 m a.s.l. (McMullan *et al.*, 2010; Rasmussen & Collar, 2017). In the western Andes of Colombia, the species

ranges from the headwaters of the San Juan River south to Nariño Department, close to the Ecuadorian boundary (Hilty & Brown, 2001). *Malacoptila mystacalis* is monotypic (Clements *et al.*, 2016), but Rasmussen & Collar (2017) suggest that the populations of southwest Colombia might merit subspecific status (*M. m. pacifica*); whether it is a valid subspecies needs further study.

We found the first Ecuadorian record of *M. mystacalis* during a fieldtrip to Drácula Reserve, in Cerro Oscuro, at the Río Blanco drainage, northwest province of Carchi (0.92329; -78.20375; 1200 m a.s.l.), on 11 August 2017. The reserve is owned by Ecominga Foundation, and is settled 3.5 km south of El Chical (Fig. 1). We walked upstream 4.5 km following the Río Blanco course and surveyed montane forest along its slopes, where we found potential suitable habitat for the species. We performed 60-s playback trials to elicit responses, and made visual inspections with binoculars. The first observation was made at 7h49, when one individual flew around the observers and perched in an exposed branch in mid-storey. Another individual was heard calling from a stationary perch for a few seconds but was not seen. This observation was in a secondary, riparian montane forest with sparse undergrowth, about 4 m from the Río Blanco. The bird perched motionless for 1.5 h, allowing us to obtain detailed observations of plumage characters, and to secure photographs and video footage (Fig. 2). During this time, it did not interact with its presumed pair or with any other species, and only uttered a high-pitch vocalization that was difficult to record. Finally, it moved around making short flights upslope to steep montane forest. Careful use of playback proved reliable for detecting *M. mystacalis*.

Figure 1: First record of Moustached Puffbird *Malacoptila mystacalis* in northwest Carchi province (green dot); yellow dots indicate the nearest localities in Colombia: Ricaurte (right), Guayacana (left).



A second record of the species was obtained in the same reserve at 12h35 in a trail along an upper montane forest remnant, where an individual was seen flying and apparently following a Squirrel Cuckoo *Piaya cayana*. Forest was mature and distant from the river, at 1400 m a.s.l., with minimal evidence of human impact and dense vegetation. We recorded its vocalization as well. This individual was performing short aerial sallies after insects from a single perch. A second individual was heard in the vicinity but was not seen. Our two records accounts for a total of two pairs that were separated by 250 m in straight line.

Our observations and photographic evidence prove that the individuals observed were two adult males (Restall *et al.*, 2006; Rasmussen & Collar, 2017), because they showed light buff spots on the scapulars, mantle, lesser, median and greater coverts, and their breasts were rich rufous-chestnut. There is some resemblance to the nearly sympatric *M. panamensis* that occurs at lower elevations in lowlands to foothills (Hilty & Brown, 2001), up to 900 m a.s.l. in Ecuador (Freile & Restall, 2018), but also reported up to 1300 m a.s.l. by McMullan & Navarrete (2017). However, color of lower mandible is gray in *M. mystacalis*, not yellowish as in *M. panamensis* (Ridgely & Greenfield, 2001). Our photos show drabber brown upperparts and the rufous-chestnut on the breast of *M. mystacalis* extending from the throat almost to the belly (Fig. 2), in comparison with *M. panamensis*, which has much less rufous on the underparts. Audio recordings are available online (Loaiza, 2017). Our audio recordings were compared with other audio recordings of *M. mystacalis* (Athanas, 2005), and with audio recordings of the songs of *M. panamensis* (Athanas, 2002) (Fig. 3). Sonograms and oscillograms showing these differences are depicted in Fig. 4.

Figure 2: Adult male Moustached Puffbird *Malacoptila mystacalis* photographed on 11 August 2017 at Drácula Reserve, northwest Carchi province (Alex Boas).

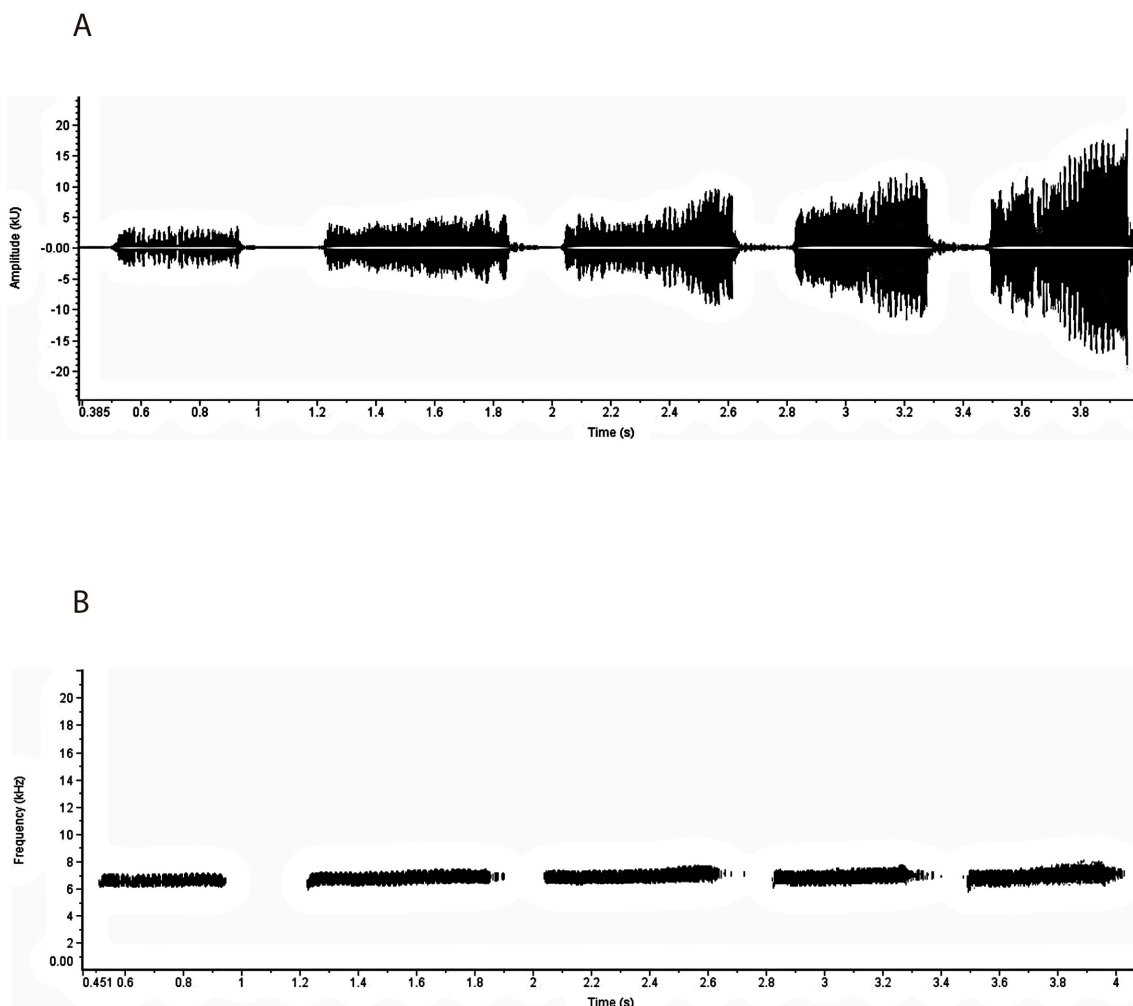


Our records represent the southernmost localities for *M. mystacalis*, 39.5 km south of the nearest locality, La Planada Reserve, Nariño Department, Colombia (Fig. 1). Meyer de Schauensee & Phelps (1978) pointed out that the distribution includes eastern Peru and western Brazil, but this statement is likely mistaken since no other authors mention the presence of this species in Peru and Brazil.

Observations were made in two different habitats: a secondary forest with moderate human disturbance and mature, well-conserved forest. Parker *et al.* (1996) consider this species as having medium sensitivity to habitat disturbance, because it occurs in different ecosystems and habitat types throughout its range (Restall *et al.*, 2006; Rasmussen & Collar, 2017). We suspect that the species is locally fairly common in appropriate habitats given the presence of two pairs within a linear distance of 250 m.

Our record reveals that the border area between northwestern Ecuador and southwestern Colombia has favorable conditions for this and possibly for other species. Further observations of the avifauna in the border of Ecuador and Colombia might help to clarify the status of several species listed as possibly occurring in Ecuador (Freile & Restall, 2018). Additional records of *M. mystacalis* were reported a few days later in the town of Quinshul (0.9365, -78,1862), close to El Chical (Ahlman, 2017), suggesting that there is a resident, albeit marginal, population in Ecuador. The inclusion of this species in the Ecuador bird list contributes to our knowledge about the ornithological diversity of Ecuador (Freile *et al.*, 2017), and highlights the importance to pursue more detailed observations in our study area, which is currently under threat by mining concessions and future exploitation.

Figure 3: Oscillogram (A) and sonogram (B) of five syllables of the song of Moustached Puffbird *Malacoptila mystacalis* recorded by JML at Drácula Reserve, northwest Carchi, Ecuador. Song consists of short, fast, high-pitched, ascending notes. Sonogram and oscillograms prepared by Pablo Molina using Raven Pro (Cornell Lab of Ornithology, Ithaca, NY).



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Figure 4: Sonogram (A) and oscillogram (B) of five syllables of the song of White-whiskered Puffbird *Malacoptila panamensis* (Athanas, 2002), recorded in San Miguel de Los Bancos, Pichincha Province, northwest Ecuador. The song consists of longer, steady and lower pitched notes. Sonogram and oscillograms prepared by Pablo Molina using Raven Pro (Cornell Lab of Ornithology, Ithaca, NY).

