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## Description and phylogenetic relationships of a new species of treefrog of the *Dendropsophus leucophyllatus* group (Anura: Hylidae) from the Amazon basin of Colombia and with an exceptional color pattern

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### Abstract

We describe *Dendropsophus manonegra* **sp. nov.** from the upper Amazon basin in the eastern foothills of the Andes in Colombia (1° 47' 42.2" N, 75° 38' 48.7" W; 1040 m a.s.l.). Phylogenetic analysis of DNA sequences of 2582 aligned base pairs of the 12S and 16S rRNA genes recovered the new species as a member of the *D. leucophyllatus* species group and sister to *D. bifurcus*. Morphological traits, such as the presence of pectoral glands in males and females, support this hypothesis. The new species is readily distinguished from all other members of the species group by having bluish-black coloration on fingers, toes, webbing, axillary membranes, groin and hidden surfaces of arms and legs. Some aspects on the composition and systematics of the *D. leucophyllatus* group are discussed.

**Key words:** Amphibia, Amazonia, morphology, species description, taxonomy

### Resumen

Describimos *Dendropsophus manonegra* **sp. nov.** de la cuenca alta del Amazonas en las estribaciones orientales de los Andes en Colombia (1° 47' 42.2" N, 75° 38' 48.7" W; 1040 m s.n.m.). Un análisis filogenético de secuencias de DNA de 2582 pares de bases de los genes 12S rRNA y 16S rRNA recuperan la nueva especie como miembro del grupo *D. leucophyllatus* y especie hermana de *D. bifurcus*. Atributos morfológicos como la presencia de glándulas pectorales en machos y hembras apoyan esta hipótesis. La nueva especie es fácilmente distinguible de todos los miembros del grupo por tener coloración negra azulada en dedos, membranas interdigitales, ingle y en las superficies ocultas de brazos y piernas. Adicionalmente, discutimos algunos aspectos acerca de la composición y sistemática del grupo *D. leucophyllatus*.

**Palabras clave:** Amphibia, Amazonia, morfología, descripción de especie, taxonomía

### Introduction

With 97 described species, *Dendropsophus* is currently the second most specious genus in Hylinae (Amphibiaweb 2013, Frost 2013). The genus was resurrected by Faivovich *et al.* (2005) from its synonymy with *Hyla*, where it had been placed by Kellogg (1932), to accommodate species known or suspected to have a karyotype of 2N = 30. Although the genus maintained most of the traditional species groups, the monophyly and relationships among members within these groups are, in many cases, either unknown or weakly supported (Fouquet *et al.* 2011; Pyron & Wiens 2011; Motta *et al.* 2012). One of these groups is the charismatic *Dendropsophus leucophyllatus* species group (or leaf-gluing frogs) currently composed of nine species (according to Faivovich *et al.* 2005; Frost 2013):