



## A new species of *Mimosa* (Mimosoideae, Leguminosae) from the inter-Andean dry valleys

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### Abstract

*Mimosa arturoana* (Mimosoideae, Leguminosae) is described and illustrated for the first time. This species is similar to the recently published *M. lamolina* and to the allopatric, Mexican *M. deamii*, but differs by several morphological characters, such as stems armament, secondary venation of leaflets and pubescence of vegetative organs and pods. This species should be included in the *Mimosa* sect. *Mimosa* ser. *Mimosa* subser. *Lactifluae* by its characteristic habit, armament of stems, and ecology. This finding increments the diversity of Leguminosae in the dry forests of Inter-Andean valleys of Peru, a potentially center of endemism of this family.

### Resumen

*Mimosa arturoana* (Mimosoideae, Leguminosae) es descrita e ilustrada por primera vez. Esta especie es similar a la recientemente publicada *M. lamolina* y a la especie alopatrica mexicana *M. deamii*, pero difiere por varios caracteres morfológicos, como la presencia de acúleos en de los tallos, el indumento, la venación secundaria y pubescencia de los folíolos y frutos. Esta especie debería incluirse en la sección *Mimosa* serie *Mimosa* subserie *Lactifluae* por su hábito de crecimiento, armamento de los tallos y ecología características. Este hallazgo incrementa la diversidad de Leguminosae en los bosques secos de los valles inter-andinos de Perú, un potencial centro de endemismo de la familia.

### Introduction

The pantropical and subpantropical genus *Mimosa* Linnaeus (1753: 533) comprises ca. 540 species (Simon *et al.* 2011). Bentham (1841, 1842, 1875, 1876) performed extensive studies in this megadiverse genus, and the Neotropical species were exhaustively revised by Barneby (1991), who recognized 479 species classified in five sections: *Mimadenia* Barneby (1991: 25), *Batocaulon* DeCandolle (1825: 429), *Habbasia* DeCandolle (1825: 428), *Calothamnus* Barneby (1991: 313), and *Mimosa*. However, recent phylogenetic analyses discussed this infrageneric division (Simon *et al.* 2011; Bessega & Fortunato 2011).

*Mimosa* has two important centers of diversification, 1) Mexico, Central America, La Hispaniola, and Orinoco Basin; and 2) Amazonas Basin and adjacent areas of Brazilian Planalto, Argentina, Uruguay, and Paraguay (Barneby 1991).

The inter-Andean valleys of South America, in Peru and Ecuador, are especially rich in endemic Leguminosae, for example, the Río Marañón valley (Barneby 1998; Linares-Palomino 2006; Linares-Palomino *et al.* 2007; Lewis *et al.* 2010). Several authors proposed endemic *mimosas* in this area, such as sect. *Batocaulon* ser. *Andinae* Barneby (1991: 84): *M. montana* Kunth var. *sandemanii* Barneby (Barneby 1991: