



Three decades to connect the sexes: *Calatola microcarpa* (Icacinaceae), a new species from the Southwestern Amazon

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Abstract

A new species of *Calatola* (Icacinaceae), *C. microcarpa*, from the departments of Loreto and Madre de Dios, Peru, and the state of Acre, Brazil, is described and illustrated. The new taxon is well documented with staminate and pistillate flowers, and fruits. Its small leaves and fruit are similar to those found in *Calatola laevigata* and *C. uxpanapensis*. It is also compared with *Calatola costaricensis*, with which it sometimes grows sympatrically in Brazil and Peru. The conservation status of the new taxa is assessed against IUCN criteria.

Key words: Brazil, IUCN, Peru

Introduction

The genus *Calatola* Standley (1923: 688), including *C. mollis* Standley (1923: 689) and *C. laevigata* Standley (1923: 689), was referred to Icacinaceae. Standley used the generic name to evoke the vernacular name of the plant as it is known in Mexico, “nuez de calatola” or “calatolazno.” Since then, five additional species were added to the genus: *C. costaricensis* Standley (1926: 416), *C. venezuelana* Pittier (1938: 360), *C. colombiana* Sleumer (1940: 247), *C. pastazana* Sleumer (1940: 248), and *C. sanguinensis* Cuatrecasas (1949: 220). Two classical treatments of the genus (Sleumer 1940; Howard 1942) were complemented by a comprehensive, fully documented monograph by Vera-Caletti (1999), followed by the description of another new species, *C. uxpanapensis* Vera-Caletti & Wendt (2001: 40).

Calatola is a poorly understood genus because of its dioecious condition and its small flowers. A unique feature of genus is the presence in all parts of the plant of a flavonoid compound that oxidizes to a blue-violet color upon exposure to air (Vera-Caletti 1999).

The dioecious condition and tetramerous flowers are elsewhere found only in Paleotropical genera of the family. The staminate inflorescence is a conspicuous, long pendulous spike with many small flowers (1–2 mm long), but the pistillate inflorescence is a shorter, compound dichasium with few flowers. Herbarium collections of *Calatola* are well represented by specimens bearing staminate flowers or fruits, but because they are inconspicuous and few-flowered, pistillate inflorescences are only known from a limited number of collections. As a result, some species descriptions remain incomplete, with the exception of those of Standley (1923, 1926), and Vera-Caletti & Wendt (2001).

The most recent phylogenetic analysis of the family Icacinaceae suggests that the sister group of *Calatola* is the Asiatic genus *Platea* Blume (1826: 646) and these two genera are part of the *Emmotum* Desv. ex Hamilton (1825: 29) group in Icacinaceae s.str. (Kärehed 2001). It is not surprising that the closest affinity of a member of this family is geographically far disjunct, as this is a phenomenon characteristic of other