



## *Pilea brasiliensis*: a new species of *Pilea* (Urticaceae) from Central Brazil

A.L. GAGLIOTI<sup>1</sup>, S. ROMANIUC<sup>1</sup> & A.K. MONRO<sup>2</sup>

<sup>1</sup>Instituto de Botânica, CP 3005, 01031-970, São Paulo, SP, Brazil, E-mail: agaglioti@gmail.com, sromaniuc@gmail.com

<sup>2</sup>Departement of Botany, The Natural History Museum, London, SW75 BD, United Kingdom, E-mail: alm@nhm.ac.uk

### Abstract

During the course of floristic studies on Urticaceae in Distrito Federal, Brazil, we encountered a species of *Pilea* that was not described until now. *Pilea brasiliensis* is here described and illustrated, its affinities are discussed and its position in Weddell & Killip's subdivisions of the genus is indicated. A Conservation Assessment determines *P. brasiliensis* to be Critically Endangered (CE) with the possibility that it may be Extinct in the Wild (EW).

**Key words:** Critically Endangered, *Elatostemateae*, *Fallaces*, Species Conservation Assessment, systematics, taxonomy

### Introduction

*Pilea* currently includes between 600–715 taxa (Adams 1970, Burger 1977, Monro 2004, 2006) and is probably the largest genus in Urticaceae. It is distributed throughout the tropics, subtropics and warm temperate regions (with the exception of Australia and New Zealand). *Pilea* is easily distinguished from other Neotropical Urticaceae by the combination of opposite leaves and ligulate intrapetiolar stipules in each leaf axil. Most of the species are small herbs, many of which are facultatively epiphytic or epipetric.

The genus was first described by Lindley (1821), and subsequently Weddell (1869) recognized 159 species, which he classified into three groups: *Integrifoliae*, *Heterophyllae* and *Dentatae*, based on leaf isomorphy and margin morphology. Killip (1936) subdivided *Pilea* into 12 groups based largely on Weddell's (1856, 1869) studies. Currently the genus is being studied by A.K. Monro (1999, 2000, 2001, 2004, 2006, 2009). In 2006, Monro proposed a phylogenetic framework for the strategic revision of *Pilea* (Urticaceae) based on *cpDNA*, *nrDNA*, and morphology. As part of Monro's studies, a survey of neotropical *Pilea* was carried out. During the course of Urticaceae floristic studies in Distrito Federal, Brazil, a new species of *Pilea* was recognised among herbarium specimens. The specimens were only identified to the genus level. The affinities of this species are discussed and its subgeneric placement following classifications of Weddell (1869) and Killip (1936) is indicated.

### Material and method

Approximately 1200 specimens of *Pilea* were studied, including type material, from the following herbaria: BOTU, ESA, GUA, HEPH, HRCB, IAC, IBGE, INPA, P, PMSP, RB, SP, SPF, SPSF, UB, UEC and UPCB. The localities where specimens of our new species were found (four in total) were surveyed to assess the conservation status of the new taxon.