



## The *Nepenthes micramphora* (Nepenthaceae) group, with two new species from Mindanao, Philippines

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### Abstract

The *N. micramphora* group is erected to accommodate the species *N. micramphora*, *N. abgracilis* sp. nov. and *N. cid* sp. nov. from submontane habitats in Mindanao, Philippines. An overview of the genus in the Philippines is presented in the context of recent discoveries. The greater taxonomic importance of pitcher characters over those of the flowers in the genus is reviewed and hypotheses are provided to account for this phenomenon.

**Key words:** conservation, Critically Endangered, IUCN, Surigao Province, taxonomy, ultramafic

### Introduction

This paper is part of the research towards a World Monograph of *Nepenthes* Linnaeus (1753: 955), building on a Skeletal Revision of *Nepenthes* (Jebb & Cheek 1997) and the Flora Malesiana account (Cheek & Jebb 2001).

*Nepenthes* is the only genus of Nepenthaceae Dumort. and includes taxa mainly distributed in Malesia (ca. 125 species), while ca. 12 species occur in Madagascar, Seychelles, Sri Lanka, NE India, Indochina, Solomon Islands, New Caledonia and Australia. Cheek & Jebb (2001) recorded 87 species of *Nepenthes*, but since 2001, 54 new specific names have been published in the genus (see IPNI 2013 continuously updated) and others have been resurrected from synonymy. The number of species currently accepted is 140 and is set to rise further.

Cheek & Jebb (2001) recorded 12 species in the Philippines. New field surveys and herbaria examinations allowed discovery of 16 new species that have been published in the last twelve years (see IPNI 2013 continuously updated, e.g. Heinrich *et al.* 2009, Cheek 2011, Cheek & Jebb 2013a, 2013b, 2013c, 2013d). Some taxa [e.g. *Nepenthes alzapan* Jebb & Cheek (2013b: 59)] are considered possibly extinct since the destruction of forest habitat in the Philippines over the last 100 years has been so extensive. Although the Philippines is thought to have remained two-thirds forested as recently as 1925 according to Sohmer & Davis (2007), 75 years after that date Myers *et al.* (2000) estimated that remaining primary vegetation in the Philippines amounted to only 3%. Lowland primary forest has now all but gone from the Philippines (Sohmer & Davis 2007). They define lowland forest as occurring below 500 m a.s.l. Sohmer & Davis (2007) estimate species extinction levels due to habitat destruction as 9–28% in one representative, mainly forest genus, *Psychotria* Linnaeus (1759: 929) (Rubiaceae). Since habitat destruction continues in the Philippines, it is a race against time to discover, publish, assess and draw attention to the conservation needs of species before they become extinct, if they have not already been lost.

## Key to the species of the *N. micramphora* group

1. Epiphyte of tall trees; stems, leaves and pitcher hairy; leaves with distinct petiole 2.5–4 cm long ..... *N. cid*
- Terrestrial shrub or climber; stems, leaves and pitchers (except under peristome) glabrous; leaves without a distinct petiole (sessile) ..... 2
2. Upper pitchers subcylindric, widest at base, about 16 cm long ..... *N. abgracilis*
- Upper pitchers infundibuliform, narrowest at base, widest in upper half, 4(–6.7) cm long ..... *N. micramphora*

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