



Two new species of *Nasa* (Loasaceae) from Andean South America

T. HENNING¹ & M. WEIGEND¹

¹ Institut für Biologie, Morphologie und Systematik der Phanerogamen, Altensteinstraße 6, 14195 Berlin, Germany.

E-mail: tilo.henning@fu-berlin.de

Abstract

Two new species of the South American Genus *Nasa*, namely *Nasa sanchezii* and *N. urubambensis* are described as new to science. Both species are found in the Peruvian Andes. *Nasa sanchezii* occurs in the north, in the Amotape-Huancabamba zone, a diversity hotspot in general and the main center of diversity for the genus *Nasa* in particular. *Nasa urubambensis* is found in the southern Peruvian Andes (Department Cusco) an important secondary center of diversity of the genus. Both species are here formally described and notes on the distribution, habitat and affinities are given. A distribution map for both taxa and line drawings for each species are provided.

Keywords: Amotape-Huancabamba Zone, Andean flora, Cusco, Peru

Introduction

The medium sized (<300 spp), mainly South American family Loasaceae, has been in the focus of several taxonomic treatments within the last decades. The high Andes of South America in general and those of Peru in particular have been revealed as their center of diversity. Especially the Amotape-Huancabamba-Zone is home to many taxa belonging to the family. The largest genus *Nasa* has recently been subject to several taxonomic studies (Henning *et al.* 2009, Henning & Weigend 2009, 2009a, Henning & Weigend 2011, Weigend *et al.* 2003, Dostert & Weigend 1999, Weigend & Rodriguez 2003, Rodriguez 2009). However, new species are frequently distinguished either from new collections or previously mis-identified herbarium specimens. In this article two new species are described: *N. sanchezii* Henning & Weigend and *N. urubambensis* Henning & Weigend. Both species would have traditionally been placed in the series *Saccatae* Urban & Gilg (1900), an unnatural group mainly defined on the basis of plesiomorphic characters such as an annual habit and spreading, white petals. Molecular data revealed the paraphyly of this group (Weigend & Gottschling 2006), but also helped, in combination with morphological data, to identify some infrageneric monophyla. Three groups formerly assigned to ser. *Saccatae* have been retrieved, namely the *Nasa triphylla* (Juss.) Weigend -group (Dostert & Weigend 1999), the *Nasa stuebeliana* (Urb. & Gilg) Weigend -group (Weigend & Rodriguez 2003) and the *Nasa poissoniana* (Urb. & Gilg) Weigend -group (Henning & Weigend 2009). Although recently revised, new collections keep expanding the limits of these groups, (e.g. *Nasa triphylla*-group: two new subspecies of *Nasa humboldtiana*; Henning & Weigend 2009a). However, only one of these groups (*Nasa triphylla*-group) is actually clearly characterized by morphological characters, whereas the other two groups remain poorly described. Several taxa traditionally assigned to ser. *Saccatae* cannot be confidently placed into any of these three groups and future molecular studies will be required to further resolve the phylogeny of this genus.

One of the two new species described here, *N. urubambensis*, is known only from two collections in southern Peru (Dept. Cusco, Fig. 1) and can be clearly assigned to the mainly southern Peruvian *Nasa*