



Aristolochia gurinderii (Aristolochiaceae): a new species from Great Nicobar Island, India

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Abstract

Aristolochia gurinderii described here as a new species, was collected from North-South Road, Campbell Bay, Great Nicobar Island (Andaman and Nicobar Islands), India. Stem woody with corky fissured bark; lamina deltoid or hastate; cauliflorous inflorescences in scorpioid cyme up to 55 cm long, small size of flowers; seeds winged with distinctive ridge at the center are the distinguishable characters from its allied species *A. jackii* Steudel. With a detailed description, illustration, photo plates are provided.

Key words: *Aristolochia gurinderii*, Aristolochiaceae, new species, Great Nicobar, Andaman and Nicobar Islands, India

Introduction

As a part of survey and collection of medicinal plants all over India, under the Center of Excellence programme supported by the Ministry of Environment and Forests, the authors undertook a botanical tour to The Great Nicobar Island which had yielded in quite a few interesting taxa out of 269 collections. Among these, one species of *Aristolochia*, on critical study and a thorough literature screening turned out to be an un-described species and the same is presented here with botanical description and illustrations.

Aristolochia Linnaeus (1753:960), a member of the family Aristolochiaceae as currently circumscribed, consists of two subfamilies (Aristolochioideae and Asaroideae) each with two genera (Wu 1989, Huber 1993, Wanke *et al.* 2006). This genus treated in its broad sense by many authors (Duchartre 1854, 1864, Huber 1993, Hooker 1886) consists of about 650 species, most of which are largely distributed in tropical and subtropical regions, and represented by about 17 species in India (Santapau & Henry 1973, Sivarajan & Pradeep 1989, Karthikeyan *et al.* 2009 and Baruah *et al.* 2012), but the proper documentation of the genus is yet to be accomplished.

In the past 15 years, eight new species were described from Thailand (González & Poncy 1999, Hansen & Phuphatanaphong 1999, Phuphatanaphong 1987, 2006). This indicates that the species in the Old World, especially in Southeast Asia is still underestimated.

As a part of survey and collection of medicinal plants all over India, under the Center of Excellence programme supported by the Ministry of Environment and Forests, India, the authors undertook a botanical tour to The Great Nicobar Island to find a putative new species of *Aristolochia* out of 269 collections. On critical study and a thorough literature screening it is described here as a new species.

Material and methods

Five samples from this species were collected along the North - South Road, Great Nicobar Island, India. The specimens are deposited in the Herbarium of Foundation for Revitalization of Local Health Traditions, Bangalore (FRLH). A morphological analysis based on leaf, inflorescence, flower, fruit and seed was performed (Table 1). A

Distribution: India. Endemic to Great Nicobar Island.

Habitat and ecology: This climber is located in the Andaman Tropical Semi-evergreen forests and found growing along the perennial streamlet and seen associated with *Celtis* sp., *Terminalia bialata*, *Poikilospermum suaveolens*, *Korthalsia* sp., *Ficus* spp., *Garcinia* sp., *Rauvolfia* sp., *Premna* sp., *Litsea* sp., *Dinochloa scandens*, *Calamus* spp. etc.

Etymology: Gurinderjit Singh Goraya, IFS, is an Additional Principal Chief Conservator of Forests in the Himachal Pradesh Forest Department, currently working on deputation as Deputy Inspector General of Forests (Research) at Indian Council of Forestry Research and Education (ICFRE), Dehra Dun. A specialist in the medicinal plants especially in the Himalayan region and he steered a pioneering medicinal plant conservation programme while working with the Foundation for Revitalization of Local Health Traditions (FRLHT). His boundless interest, passion and commitment towards the branch of field taxonomy, forestry aspects and conservation of medicinal plants made the authors to honour him with this new species.

Conservation assessment: This species is clearly scarce. About three individuals confined to an area of 1 km² were observed during the field survey. Though no current information on abundance or direct threats is available it should be kept under Critically Endangered (CR) category. Further studies and explorations in adjacent areas are required to ascertain its actual status. The highly restricted range together with the high human population growth in the region will act as a serious threat to the existence of this species in future.

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