



Habenaria osmastonii (Orchidaceae), a new terrestrial orchid from the Andaman Islands, India

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Abstract

Habenaria osmastonii, a new species of terrestrial orchid is described from Rutland Island of the Andaman Islands, India. This species differs from *H. richardiana* by having radical leaves, fewer and smaller flowers, shallowly denticulate, falcate lip side lobes and a lip midlobe slightly longer than the side lobes. A detailed description, illustrations and photographs are provided.

Key words: Andaman, *Habenaria*, new species, Orchidaceae, Osmaston, Rutland Island

Introduction

The genus *Habenaria* Willdenow (1805: 5) is one of the largest genera of orchids, comprising about 600–800 species (Seidenfaden & Wood 1992, Cribb 2001, Govaerts 2013). It belongs to subfamily Orchidoideae and is distributed throughout the tropical and subtropical regions of the Old and New Worlds (Cribb 2001). The main centers of diversity of the genus are Brazil, southern and central Africa, and East Asia (Kurzweil & Weber 1992). Represented by 71 taxa, it is the largest terrestrial genus among the Indian orchids. The genus is distributed throughout India with 36 endemic taxa (Misra 2007, Choudhury *et al.* 2011).

The Andaman & Nicobar Islands, endowed with luxuriant tropical rainforests, are one of the major orchid habitats in the country. They comprise 572 islands, islets and rocks covering an area of 8,249 sq. km. A total of 152 taxa of orchids have been recorded so far from these islands (Pandey & Diwakar 2008). The number is increasing rapidly due to plant exploration which results in many new discoveries being added to the orchid flora of the Andaman & Nicobar Islands. So far, the genus *Habenaria* is represented in the Andaman Islands by a single endemic species, viz. *H. andamanica* Hooker (1890: 134)(Choudhury *et al.* 2011). *Habenaria acuminata* Thwaites in Trimen (1885: 91) is not included in the present paper as there is no valid record of its presence in Andaman & Nicobar Islands or specimen available in PBL (BSI Portblair Herbarium) or CAL (BSI Kolkata Herbarium).

During a floristic exploration of the Mahatma Gandhi Marine National Park in South Andaman several orchid species were collected. Among them, an interesting *Habenaria* species was collected from the dense tropical stunted evergreen forest on the slopes of Mount Ford in Rutland Island. Following critical study of the literature and comparison with herbarium specimens deposited at PBL and CAL, the species was found to be different from all other *Habenaria* species known in the region so far, and is obviously a representative of a new species. While studying the specimens of *Habenaria* at CAL, a herbarium specimen of the same species was found filed among unidentified material. Interestingly, the CAL specimen was collected almost a century ago from Rutland Island by Bertram Beresford Osmaston, i.e. on the same island where we collected our plant. B.B. Osmaston CIE (1867–1961) was an officer in the Imperial Forestry Service in India. He served in the United Provinces, Bengal, Andaman Islands, Myanmar (Burma) and retired as a Chief Conservator of the Central Provinces. He was a keen naturalist and was made Companion of the Indian Empire (CIE) for his meritorious contribution to Indian Forestry. The present paper describes the new *Habenaria* species which is named in honour of B.B. Osmaston. A detailed description, illustrations, photographs and notes on habitat, ecology and conservation status are here provided for this new taxon.

TABLE 1. Diagnostic morphological characters and distribution range of *Habenaria osmastonii* and *H. richardiana*.

Characters	<i>Habenaria osmastonii</i>	<i>Habenaria richardiana</i>
Plant height	10–20 cm	10–30 cm
Leaves	Radical, crowded at the base of the stem, flat on the ground, broadly lanceolate	Subradical, cauline leaves smaller or reduced to sheaths, crowded but not flat on the ground, elliptic-lanceolate
Inflorescence	3–5-flowered	8–10-flowered
Flower size	ca. 1 cm across	ca. 2.5 cm across
Sepals	Subsimilar, 2-nerved, acute at apex	Dorsal sepal conspicuously smaller than lateral sepals, 3–5-nerved, acuminate at apex
Petals	Slightly falcate, ovate-lanceolate	Gibbous at the base, lanceolate
Lip	Largely obovate, ca. 15 × 9 mm	Fan-shaped, ca. 8 × 3 mm
Side lobes	Subrhombic, slightly incurved, shallowly irregularly denticulate	Narrow, not incurved, deeply dentate, acuminate at apex
Midlobe	Longer than the side lobes, obtuse at apex	shorter to the lateral lobes, acute at apex
Distribution	South Andaman (Rutland Island)	Southern Western Ghats (Nilgiri, South Kerala)

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