

HABENARIA RHODOCHEILA HANCE- A NEW RECORD TO INDIA FROM MIZORAM

Saithantluangi Zote, H Lalramnghinglova, Chaya Deori¹, and S J Phukan¹

¹ Department of Forest Ecology, Biodiversity & Environmental Sciences, Mizoram University, Tuanhil-796 009, Mizoram, India
¹ Botanical Survey of India, Eastern Regional Centre, Shillong-793 003, Meghalaya, India

Abstract

Habenaria rhodocheila Hance, a new record to India is described and illustrated from Mizoram.

Introduction

THE GENUS *Habenaria* Wild. (Orchidaceae) commonly called as a group of bog orchids comprises 600-800 species spread in all the continents except Antarctica (Seidenfaden, 1977). In India, it has 73 species (Singh et al., 1990) 26 of which met with in North East India. Five species, *Habenaria dentata* (Sw.) Schltr., *H. furcifera* Lindl., *H. khasiana* Hk.f., *H. maliefera* Hk.f., *H. stenopetala* Lindl. are reported from Mizoram (Chowdhery, 2009).

During the month of November (2007), many orchids were collected for research purposes study from Thingsai forest, Lunglei district, Mizoram by the first two authors. One of the species collected in vegetative condition was very interesting resembling the Jewel orchids. Out of curiosity, the species was grown in orchid house (Mizoram University) where it flowered in July, 2008. With critical observations and literature studies (Seidenfaden, 1977, 1992), it was identified as *Habenaria rhodocheila* Hance. Though reported earlier from Thailand, Malaya, China, Philippines, the species was unrecorded from India (Chowdhery, 2009; Fischer, 1938; Rao, 2007; Singh et al., 1990, 2001). The present report thus represents its first record in India from Mizoram. A detailed description, illustrations Figs. 1(a-c), 2(a-g), and relevant notes are given here to facilitate its identification in the field.

Species Description

***Habenaria rhodocheila* Hance.** Ann. Sci. nat. 5.s.5:243, 1866; Rolfe, in Orch. Rev. 3:242.1895; Hook.f., in Bot. Mag. 123:T.7571.1897; Seidenf. in Bull. Mus. Paris 3. s. 71, Bot.5:133.1973; Dansk Bot. Tidsskr. 71:134; Op. Bot. 114:69.1992. *Habenaria pusilla* Rchb.f., Otia Hamb. 2: 33, 1878.

Habit terrestrial, erect. Roots bulbous fleshy. **Stem** 18-25 cm long. **Leaves** 2-4, oblong, acuminate, olive green with darker fine networks, mid vein distinct, margin



Fig.1 a-c. *Habenaria rhodocheila*: a, Red flower type; b, Pink flower type; c, Inflorescence (close up).

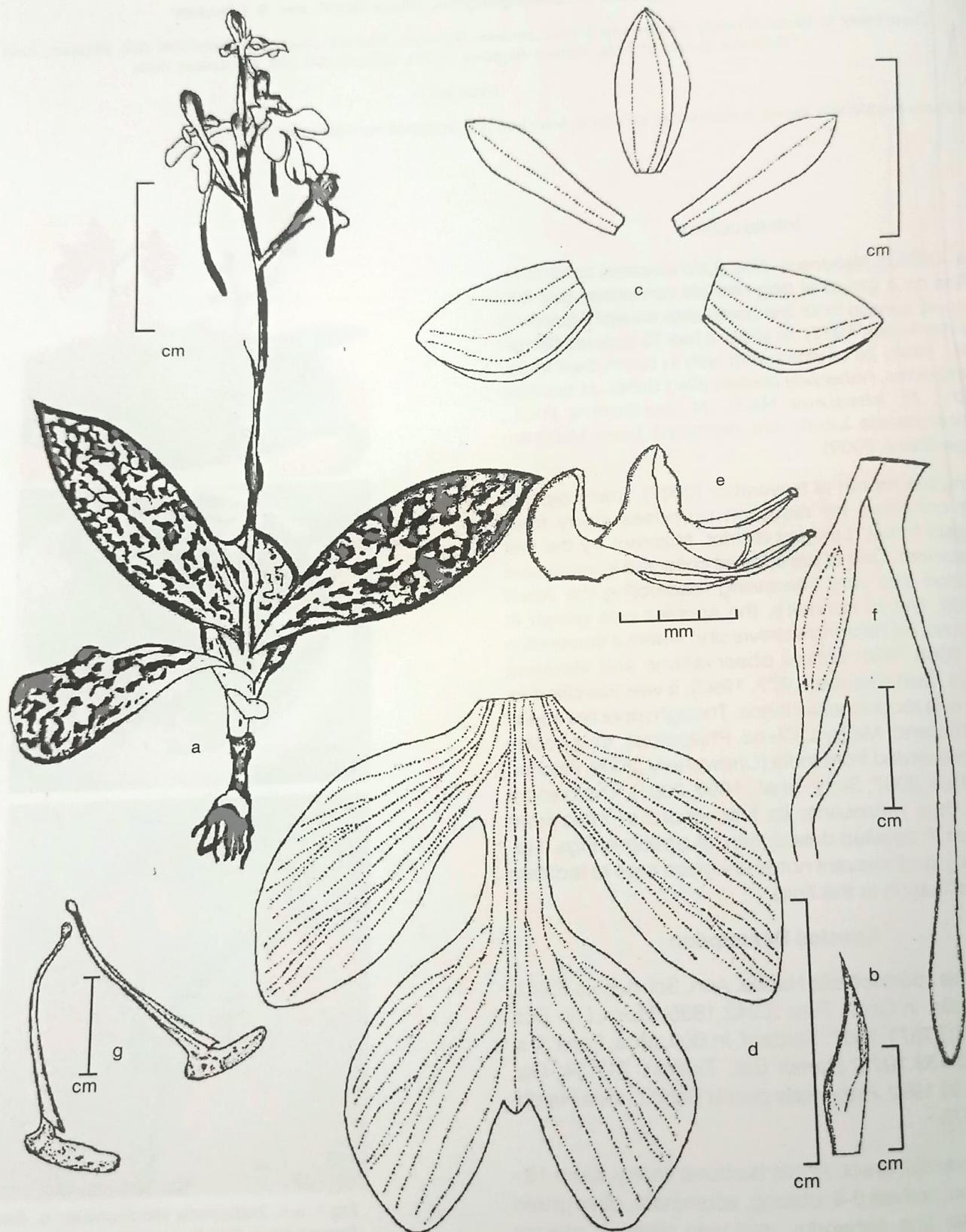


Fig. 2.a-g. *Habenaria rhodocheila* Hance. a, Habit; b, Floral bract; c, Floral parts; d, Lip front view; e, Column; f, Ovary pedicel & column foot; g, Caudicles with pollinia.

reddish brown, 4-9 × 1.5-3 cm. Inflorescence 10-16 cm long, less dense, erect, usually 4-6 flowers, racemose. Pedicel and ovary 35 mm long. Floral bracts 20 - 22 × 4-6 mm, ovate acuminate. Flowers 15 - 25 mm across, pinkish-reddish. Sepals unequal, dorsal sepal 9 - 11 × 4 - 5.5 mm, concave, elliptic, obtuse, 3-veined; lateral sepals 9 - 10 × 5 - 5.5 mm, decurved, elliptic-lanceolate, obtuse, 3-4-veined; petals 10 × 2 mm, slender, sub-equal, slightly spatulate, linear-lanceolate sub-acute-acute, 1-veined. Lip 4-lobed, 16-21 × 20 - 22 mm, 10-veined with branching nerves running from the base to the apices of lateral and mid-lobes; lateral lobes sub-equal, obtuse; mid-lobe sub-equal, bilobed with a small erect apex at the centre; spur 45-55 mm long, slender. Column 6 - 6.5 mm broad, with large protruding rostellum, reddish brown, staminodes slender triangular obtuse raising above anther channels, stigmatic processes short, fat. Pollinia, oblong, caudicles slender, long.

Flowering: July

Distribution: India, Thailand, Indo-China, Malaya, North to South China, and Philippines.

Note: *Habenaria rhodocheila* in the wild is rare and was found growing in subtropical forest in the ground below tall grasses along with other terrestrial species.

Specimen Examined: India: Mizoram, Lunglei District, Thingsai Forest, 1650 m alt., Saithantluangi Zote 0562

(MZU).

Acknowledgement

The authors are thankful to Dr. T. M. Hynniewta, ex-Jt. Director & Head, Botanical Survey of India, Eastern Regional Centre, Shillong for encouragement and consultation of ASSAM herbarium. The first two authors (S.Z & H.L.) also express thanks to Mr. C. Ramhluna & Lal Ramthanga, Environment & Forest Department, Govt. of Mizoram for granting permission to conduct field research programme.

References

Chowdhery, H.J. 2009. Orchid diversity in North-Eastern States of India. *J. Orchid Soc. India*, 23(1-2): 19-42.

Fischer, C.E.C. 1938. *The flora of Lushai Hills. Rec. Bot. Surv. India*, 12(2) : 75-161.

Rao, A.N. 2007. *Orchid flora of North East India*. An upto date analysis. *Bull. Arun. For. Res.*, 23(1&2): 6-38.

Seidenfaden, G. 1977. Orchid genera in Thailand 5. Orchidoideae. *Dansk Bot. Ark.*, 31(2) :134.

Seidenfaden, G. 1992. The orchids of Indochina, *Op. Bot.*, 114: 69.

Singh, D. K., B.M. Wadhwa, and K.P. Singh. 1990. A conspectus of Orchids of Mizoram: Their status and conservation. *J. Orchid Soc. India*, 4(1-2): 51-64.

Singh, K.P., S. Phukan, and P. Bujarbarua. 2001. Orchidaceae. In: *Floristic Diversity and Conservation Strategies in India* Vol. 4 (eds. N.P. Singh and D.K. Singh) pp.1735-1846. Botanical Survey of India, Calcutta, India.