

***PHAIUS LURIDUS* THWAITES (ORCHIDACEAE): A NEW RECORD FOR ASSAM, INDIA**Khyanjeet Gogoi¹, Raju Das² and Rajendra Yonzone³¹Daisa Bordoloi Nagar, Talap, Tinsukia- 786156, Assam, India²Nature's Foster, P.Box 41, Shastri Road, P.O. Bongaigaon, 783380, Assam, India³St. Joseph's College, P.O. North Point, District Darjeeling, W. B., India
khyanjeetgogoi@gmail.com**ABSTRACT**

Extended distribution of *Phaius luridus* Thwaites, a rare species of Orchidaceae from Manas Biosphere Reserve and Tinsukia district, Assam is described here. Detailed description, photographs, distributional and ecological details are provided.

Key words: *Phaius luridus*, Orchidaceae, new record, Assam.

INTRODUCTION

The genus *Phaius* was established in 1790 by Jao De Loureiro during 1790, in his *Flora Cochinchinensis*. It is a terrestrial genus represented with about 40 species, distributed in tropical Africa, Madagascar, tropical and subtropical Asia to Oceania; six species are estimated from India (Misra 2007); four species were recognized in Assam viz. *Phaius flavus*, *P. longipes*, *P. mishmensis*, *P. tankervillae* (Chowdhury 2005). Extensive study during 2009-2011 on the terrestrial orchid species in various parts of Assam, we came across one rare *Phaius* species. After consulting the literature and herbarium we came to conclusion that the species is *Phaius luridus* Thwaites is a new record for the state. This species were encountered from two localities, the first one was recorded from Bhuyapara range of Manas Biosphere Reserve, Assam, on 30th January 2010 and the second one from the Lakhapani Reerve Forest, Tinsukia District, on 18th January 2011. This study provides the description, habitat and photographs of *Phaius luridus* Thwaites in Assam.

Phaius luridus Thwaites, Enum . Pl. Zeyl. 300. 1861; Hook. F., Fl. Brit. India 5: 817. 1890; Kumar et. Monilal, Cat. Ind. Orch. 83, 1994; Mishra. Orch. India 313. 2007. [PLATE – I]
Terrestrial. Plants with leaves 50-100 cm long. Pseudobulb conic, ovoid, or subglobose, 6-10×3-6

cm. Leaves 5-6, lanceolate, acuminate, 30-60×12-15 cm, trigonal. Inflorescence arising from base of pseudobulb or axils of leaves, exceeding height of leaves, 50-100 cm, loosely 10-15 flowered. Floral bracts oblong, lanceolate, acute, 5.6-6×2.5cm. Flowers widely opening, large, 10cm across, sepals and petals yellowish or greenish yellowish outside, reddish brown inside. Sepals similar, oblong- lanceolate, acuminate to acute, 6.5×1.9cm. Petals oblong- lanceolate, acuminate to acute, 6.5×1.8cm. Lip yellow toward base, white or yellow with purple toward entrance, 5-5.5×4-4.5 cm, broadly rhombic-ovate, 3-lobed; lateral lobes short, margin undulate, apex rounded; mid-lobe orbicular, margin undulate; disk usually with 2 or 3 ridges; spur hooked, yellow, narrowly cylindrical, 1.5×0.3 cm, apex unequally 2-lobed. Column yellow, 2-2.2 cm.

Flowering: May- June.

Specimen Examined: Lakha Pani Reserve Forest, Gogoi 0712, ASSAM; Manas Biosphere Reserve Forest, Das 1098, ASSAM.

Habitat: Terrestrial in shaded and damp places in forests.

General Distribution: India and Srilanka.

Status: Rare, the species was found only in Manas Biosphere Reserve Forest and Lakhapani Reserve Forest of Assam And Arunachal Pradesh.

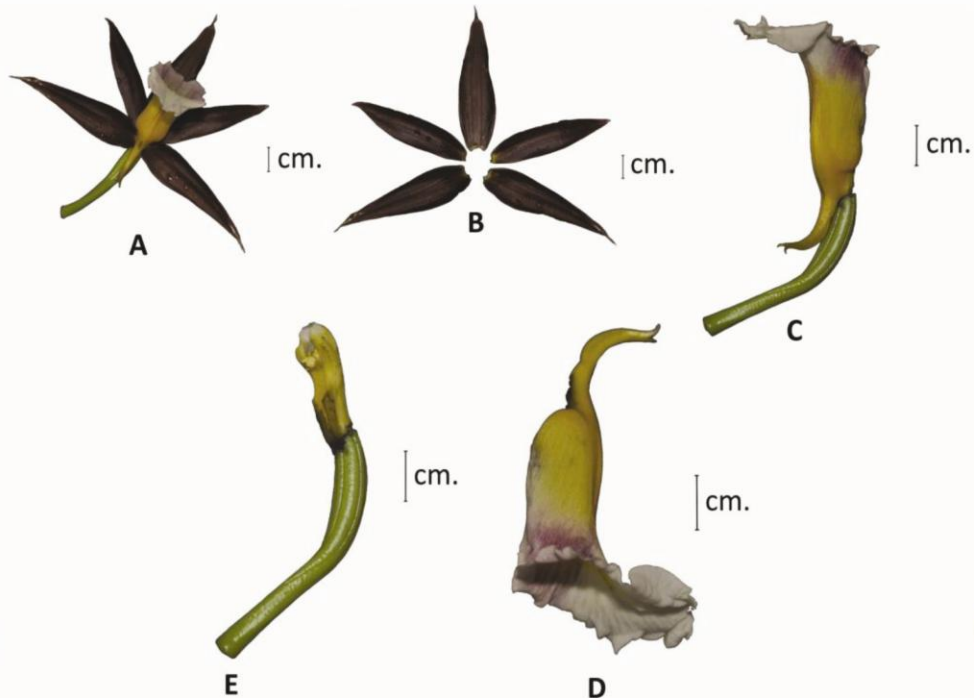
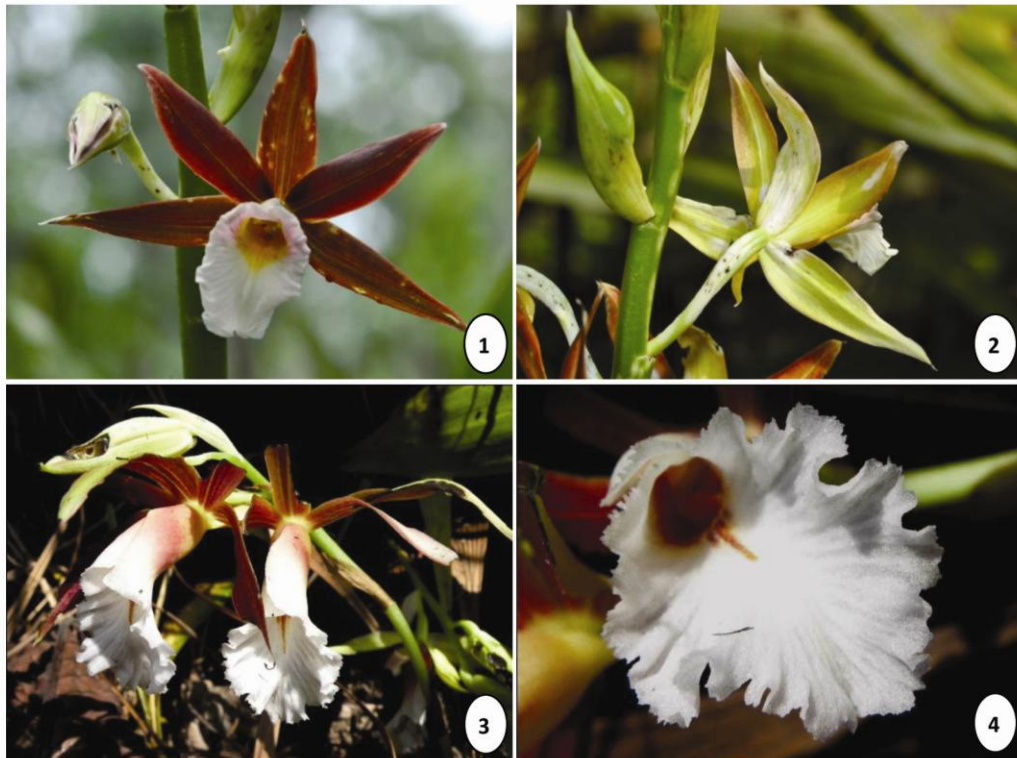


PLATE - I: *Phaius luridus* Thwaites. Fig. 1, 2. Front and back view of flowers [Photograph from Lakha Pani Reserve Forest]; **Fig. 3, 4.** Inflorescence and lip [Photograph from Manas Biosphere Reserve Forest] **Fig. 5: A.** flower, **B.** perigone, **C.** lip with ovary, **D.** lip, **E.** ovary & column.

CONCLUSION

It is observed that the present status of *Phaius luridus* is rare in habitat and the natural population in the study regions is very meager. If a regular threat persists in the regions, it will push the species in threatened status in natural habitat. Therefore, conservation of habitat is most necessary for the protection of this species in Assam.

ACKNOWLEDGEMENT

Divisional Forest Officer- Digboi Division, Tinsukia, Range officer and Field Director of Manas Biosphere Reserve Forest of Assam for constant supervision and valuable suggestions during the course of present studies.

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