

HUPERZIA ARUNACHALENSIS (LYCOPODIACEAE) A NEW LYCOPOD FROM INDIA

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ABSTRACT

A new lycophyte species *Huperzia arunachalensis* (Lycopodiaceae) is described from Arunachal Pradesh, India.

Keywords : Arunachal Pradesh, *Huperzia arunachalensis*, *H. quasipolytrichoides*, India, Lycopodiaceae, new species, *Phlegmariurus cryptomerinus*.

Introduction

Dixit (1988) described some specimens stored at CAL from Aka Hills, Kameng and Subansiri of Arunachal Pradesh, India under the name *Phlegmariurus cryptomerinus* (Maxim.) Satou with following description (Fig. 1):

Stems 20–30 cm, sub-erect, two to four times dichotomously branched. Leaves linear, 12–15 mm long and 0.5–1 mm wide, crowded, horizontally spreading and usually recurved towards the tip, pale green on drying, midrib indistinct or slightly distinct at the base only. Sporophylls slightly shortened otherwise like vegetative leaves. Sporangia crowded in the axil of slightly shortened leaves. A few bulbils like dissected leaves present. The sporangiferous region ends with the cluster of vegetative leaves at the tip. Spores 25–35 μ , trilete, exine foveolate.

But they differ from *P. cryptomerinus* in having more crowded, thinner and narrower leaves. Fraser-Jenkins (2008) identified them as *H. quasipolytrichoides* (Hayata) Ching and considered similar with plants from Taiwan. But, their leaves are longer and not strongly reflexed from top to bottom of branches like *H. quasipolytrichoides* from Taiwan (Hayata 1915; Mr. Ralf Knapp *pers. comm.* 2014) and here considered as new species and named after its place of occurrence that is Arunachal Pradesh, India.

Huperzia arunachalensis Mazumdar & R.Mukhop. *sp. nov.*

Type— India. Arunachal Pradesh: Aka Hills, August 1884, *N.L. Bor 2140* (Holotype CAL, Fig. 1; Isotype CAL; designated here).

Paratypes— India. Arunachal Pradesh: Subansiri F.D. (N.E.F.A.), Yazali Campon Kimin-Hapoli Road, 30 April 1965, *S.R.K.*



Fig. 1. Holotype of *Huperzia arunachalensis* (N.L. Bor 2140, CAL). Image courtesy, the Director, Botanical Survey of India.

Sastry 42179 (CAL), Kameng F.D. (N.E.F.A.), Chalko to Parila Briddle Path, 2 April 1957, G. Panigrahi 6365 (CAL Acc. No. 9063, 9064 two sheets).

Diagnosis— *H. arunachalensis* resembles *H. quasipolytrichoides* in external morphology. But its leaves are about 0.6 mm more elongated and not strongly reflexed from top to bottom of branches like *H. quasipolytrichoides*.

Acknowledgements

We thank the Director, Botanical Survey of India, Howrah for providing opportunity to examine the specimens. First author thanks Dr. A. Bhattacharya and Mr. P.S. Paul for helping in herbarium study; Mr. R. Knapp, Taipei, Taiwan; Prof. X.-C. Zhang, Chinese Academy of Sciences, China and Dr. A.R. Field, James Cook University, Australia for useful discussions.

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