## A NEW SPECIES OF ARTHROMERIS (POLYPODIACEAE) FROM INDIA

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#### **ABSTRACT**

A new species *Arthromeris mukhopadhyayi* (Polypodiaceae) is described from Arunachal Pradesh. India.

Keywords: Arthromeris mukhopadhyayi, Arunachal Pradesh, India, Polypodiaceae.

## साराँश

भारतवर्ष के अरूणाचल प्रदेश से एक नई प्रजाति *आर्थोमेरिस मुखोपाध्यायी* (पोलीपोडिएसी) का वर्णन किया गया है।

#### Introduction

Ten species of *Arthromeris* (T.Moore) J.Sm. (Polypodiaceae) are reported to occur in India (Mazumdar, 2015). During revision of ferns of Eastern India, two specimens of *Arthromeris* collected from Arunachal Pradesh, India (Fig. 1, 2) were found to be distinct from other known species. Here I considered them as a new species and named in honour of Dr. Radhanath Mukhopadhyay, Prof. (Retired) of Botany, The University of Burdwan for his memorable contribution on Taxonomy of Indian lycophytes and ferns.

# Arthromeris mukhopadhyayi Mazumdar sp. nov.

**Type:** India. Arunachal Pradesh, Duphla Hills, 1874, 6800 ft, *J.L. Lister s.n.* (Holotype CAL0000027026; Isotype CAL). (Fig. 1, 2).

**Description:** Epiphyte; rhizome absent; fronds imparipinnate, more than 60 cm long & 16 cm wide; stipe and rachis light brown, glabrous; pinnnae articulate to rachis, sessile, up to 6 pairs, ovate to lanceolate, apex acuminate to caudate (Fig. 1), margin broadly cartilaginous, entire; lamina and costae

densely hairy beneath; sori large, round, up to 5 rows in each side of costa and two rows in between costules (Fig. 2).



Figure 1: Holotype of Arthromeris mukhopadhyayi (Polypodiaceae) (J.L. Lister CAL0000027026). Image © the Director, Botanical Survey of India, reproduced with permission.

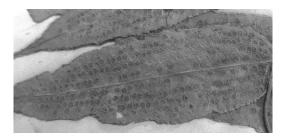


Figure 2: Part of pinna showing densely hairy lamina, broad cartilaginous margin and two rows of sori in between costules (*J.L. Lister* CAL0000027026). Image © the Director, Botanical Survey of India, reproduced with permission.

**Diagnosis:** Arthromeris mukhopadhyayi differs from Arthromeris lehmannii (Mett.) Ching in having densely hairy lamina, broader pinnae and broader prominent cartilaginous margin. Arthromeris lehmannii has glabrous

to sparsely hairy lamina, narrower pinnae and narrow to unrecognizable cartilaginous margin. *Arthromeris mukhopadhyayi* differs from *Arthromeris wardii* (C.B.Clarke) Ching in having densely hairy lamina and sori in two rows between costules. *Arthromeris wardii* has glabrous lamina and sori in one row in between costules.

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#### REFERENCES

Mazumdar, J. (2015). New distributional records of *Arthromeris elegans* Ching in India and Bhutan and lectotypification of *A. himalayensis* (Hook.) Ching (Polypodiaceae). *Telopea* **18**: 159-163.