



Reporting *Ophioglossum reticulatum* L. for the first time from the campus of Farook College (Autonomous), Kozhikode, Kerala

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Abstract

The Snake-tongue fern *Ophioglossum* is a taxonomically bewildering genus due to its simple, but confusing morphological characters. The genus gets more noticed among taxonomists after the report of the highest chromosome number in *O. reticulatum*. The species was collected and documented for the first time from the campus of Farook College, Kozhikode district, Kerala state.

1. Introduction

The genus *Ophioglossum* which belongs to the family Ophioglossaceae, was discovered by Bauhin (1620) and the genus status was confirmed by Linnaeus (1753). *Ophioglossum* has 53 accepted species world-wide and has cosmopolitan distribution. The name *Ophioglossum* was formed by combining two Greek words, 'Ophios' meaning snake and 'glossa' meaning tongue. The report of highest chromosome number in *O. reticulatum* ($n = c.630$, $2n = c.1260$), by Abraham *et al.* (1962) was a great discovery in the taxonomic history. In India, the genus is represented by 13 species, out of which 8 species are from the Western Ghats (Patil & Dongare, 2014; Fraser-Jenkins *et al.*, 2017). This study reports *O. reticulatum* for the first time from the campus of Farook College, Kozhikode district of Kerala state.

2. Methodology

Fresh *O. reticulatum* plants were collected from the Farook College Campus during the monsoon period and photographs were taken using Canon EOS R digital camera. The morphological characters of the plants were studied under Leica stereo microscope. Descriptions was prepared and the plants were identified using relevant literatures.

3. Results

Ophioglossum reticulatum L., Sp. Pl. 2: 1063 (1753). (Fig. 1)

Ophioglossum reticulatum is a terrestrial herb and comparatively larger species attaining a height up to 27 cm. The plants are characterised by quadrate tropophylls, fusiform rhizome and long stipes. One-two tropophylls were present in a single plant, up to 6 cm long and 2 - 4 cm broad, fertile segment up to 15 cm long, with a stalk up to 12 cm long,

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spike up to 3 cm long, up to 35 pairs of sporangia, arranged alternatively on the spike. Spores are trilete, globose-ellipsoid in nature, granulose, reticulate, the triradiate leasural arms are wavy and jointed, "Polar axis 15.55 -23.72 μm , equatorial axis (proximal face) 28.2 - 40.82 μm , mean P/E ratio $0.55 \pm 0.01 \mu\text{m}$, large spores" (Khan *et al.*, 2023).

Due to the variations in the morphological characters and the existence of many morphotypes within the same species, many synonyms were present under the name *O. reticulatum* viz., *O. ovatum* Bory., *O. cordifolium* Roxb., *O.*

peruvianum C. Presl., *O. cognatum* C. Presl., *O. cumingianum* C. Presl., *O. timorense* Miq., *O. obovatum* Miq., *O. moluccanum* f. *dilatatum* Miq., *O. vulgatum* var. *minutum* F.M. Bailey., *O. reticulatum* var. *acutius* Christ., *O. reticulatum* var. *polyangium* Christ., *O. usterianum* Christ., *O. raciborskii* Alderw., *O. pedunculatum* Desv. & Nakai., *O. ramosii* Copel., *O. austroasiaticum* Nishida., *O. reticulatum* f. *dilatatum* (Miq.) Wieff., *O. holm-nielsenii* B. Ollg., *O. aletum* M. Patel, M.N. Reddy & H.K. Goswami and *O. chaloneri* H. K. Goswami, M. Patel & K.K.Nag.



Fig.1: *Ophioglossum reticulatum*: A. Habitat, B. Entire plant.



4. Conclusion

Previously *O. reticulatum* was recorded from Kozhikode, Thiruvananthapuram, Thrissur and Wayanad Districts of Kerala. During this study *O. reticulatum* was collected and documented for the first time from the campus of Farook College, Kozhikode District, Kerala.

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