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**A PINK-BROWN *OPHIOGLOSSUM* L. (OPHIOGLOSSACEAE)
FROM RAJASTHAN (INDIA)**

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ABSTRACT

A population of *Ophioglossum* L plants (2.5-3.6cms) with pink to brown trophophyll, petiole and stalk of the spike is briefly presented here as a new find hitherto unknown for any species of the genus in the world flora.

Key Words: Pink *Ophioglossum*; *Ophioglossum* in Rajasthan

As far as known, there has not been any report of even a variant of any species of the genus *Ophioglossum* L to possess pink (when young) trophophyll, its petiole and stalk of the spike among any of the 45 or more species known in the world flora (Wieffering, 1964; Dixit, 1984; Khullar,1994; Goswami, 1987,2008 and Sharma *et al*, 2008). Almost all species possess green to dark green colouration which on maturity assumes pale to yellow texture. However, Goswami (1987, 2008) has mentioned pink to brown colour in the basal part of the trophophyll and stalk of the spike in *O. lusitanicum* but never a population of plants producing pink to brown leaves. Such plants have also not been seen in any of the studies describing occurrence of seven species, viz. *O. costatum* R.Br, *O. gramineum* Willd, *O. nudicaule* L, *O. petiolatum* Hook, *O. polyphyllum* A.Br. ex Seub, *O. reticulatum* L and *O. vulgatum* L from Rajasthan including the author himself (Gena,1998; Yadav and Tripathi, 2002; Sharma *et al* 2008)

Obviously, this note becomes of special significance.

Observations and Comments

These small pink plants grow intermixed with green plants of many other species of *Ophioglossum*, mainly *O. lusitanicum* and *O. nudicaule* at Mainal locality (District Chittorgarh). Brief description is presented below.

Pink Ophioglossum : Plant height 2.5 – 3.6 cm (Fig 1); Rhizome subglobose or knob shaped, stoloniferous, 0.4 – 0.6cm ; Trophophyll generally -1, sometimes -2 elliptic or elliptic - lanceolate, thick, entire, acute, without midrib, pink in color; Fertile spike arises adaxially below the face of lamina, pink in color, fertile part 0.4 -0.6 cm, peduncle 1.1 – 1.2 cm, spike with minute sterile tip, sporangia 7 – 10 pairs ; spores round, mu in diam, three distinct layers with wide perisopre. Exine (exospore) thick and warty, trilete 16- 28 mu in diam , three distinct layers (Fig. 2) with distinct perispore cover.

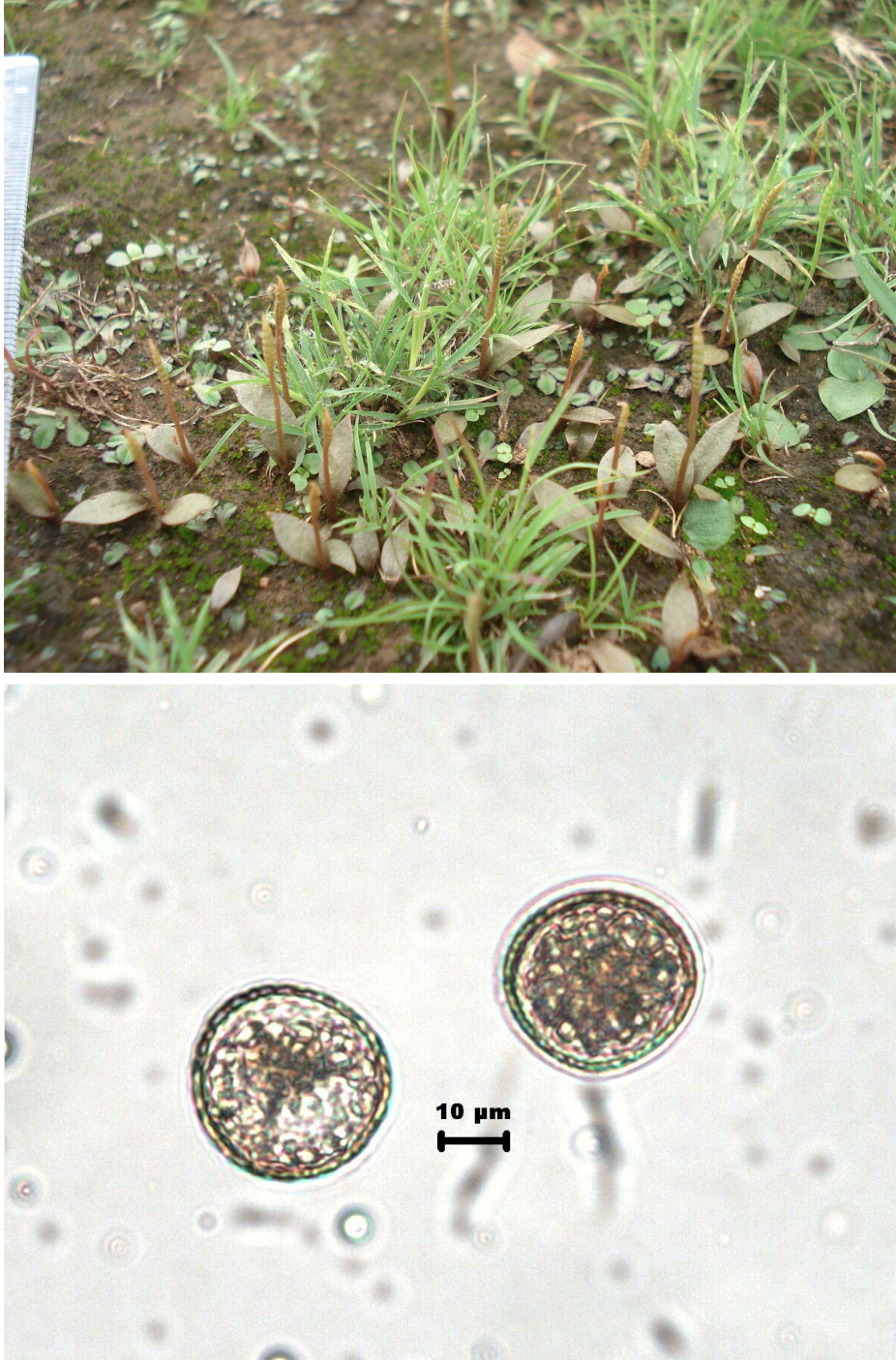


Fig. 1. Pink-brown plants in the field; Fig.2. Trilete spores with wide perispore

Fertile : July - August

Locality : Mainal Chittorgarh, Rajasthan

Ecological note : Grows in dense colony at flat damp grassy area along with *O.nudicaule*

Status : Exclusively restricted to Mainal area, Chittorgarh

Specimen/Herbarium : Yadav 3011, Mainal (Chittorgarh), MLVGCB Herb.

This is intriguing that young pink tropophyll (leaf) gradually turns brownish green on maturity probably due to compelling increase of photosynthetic activity so as to nurture the

development of spike, sporangia and spores. It would be worthwhile to conduct some physiological experiments besides ongoing morphological, anatomical and cytological studies.

Acknowledgement:

I am thankful to Prof. S.C. Verma and Dr F. Jenkins for advice. Many thanks are due to Professor H.K.Goswami for examining the material and slides with useful improvements.

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B. D. SHARMA HONOURED BY D. D. PANT MEDAL

Professor Dr B. D. Sharma, former Professor and Head of the Department of Botany, J.N. Vyas University, Jodhpur (Rajasthan) was felicitated by the D. D. Pant Oration Medal (2007) instituted by Bionature in collaboration with Society of Bionaturalists. The Medal presentation ceremony and the lecture was organized at the School of studies in Botany at Jiwaji University Gwalior (MP) on 15th April 2010. Former Vice Chancellor and also former Head of the

Department of Botany, Dr R. K. S. Chauhan honoured him by the medal and the citation was presented by Professor Ashok K. Jain, the present Head of the Department of Botany at Jiwaji University, who is also the president of the Society of Bionaturalists.

H. K. Goswami, Chairman Governing Council, Bionature informed about the great academic contributions to palaeobotany and anatomy on a large number of plants by Professor B. D. Sharma. He specifically invited the young botanists also to concentrate on classic branches of botany in particular morphology, anatomy and palaeobotany. He categorically remarked that on one hand we are talking and talking on saving biodiversity and on the other hand we are unable to attract and support researches in these areas with special reference to taxonomy and morphology. "How can we protect our flora and fauna" remarked Professor R. K. S. Chauhan, in his address as the chairman of the function, "if we do not teach and learn these vital branches of botany".

Dr B. D. Sharma gave a scholarly talk on "Antiquity of Angiosperms" which was greatly appreciated by teachers, research scholars and PG students of the University Department and also from sister colleges in Gwalior who had come and graced the prestigious felicitation. Professor K. K. Kaul presented a vote of thanks. The function was very well conducted by Professor Avinash Tiwari.

Our students attending function were not only academically enlightened by the scholarly merit of the Pant Oration but also were delighted to hear personal reminiscences as narrated by speakers of their earlier interaction with Professor D. D. Pant (Allahabad)

(H. K. Goswami)