AN ANGIOSPERMOUS INFLORESCENCE FROM THE DECCAN INTERTRAP-PEAN SERIES OF INDIA

While breaking pieces of chert collected from the Deccan Intertrappean beds of Mohgaon Kalan, Madhya Pradesh, we came across an inflorescence about 3.5 cm long, exposed in an oblique longitudinal plane. On closer study it has been found to form a racemose spikelet with flowers arranged in acropetal succession (Fig. 1).



Fig. 1. Median longitudinal section of the inflorescence showing flowers (F), perianth (P) and well developed bracts (B). X 6.

The flowers are sessile, bracteate and hypogynous, measuring 3—5 mm in length and 1.5—3.0 mm in diameter, each subtended by a well developed bract. The bract is about 3—5 mm in length and attached to the main axis at various angles. Typically monocotyledonous fibrovascular bundles are present in the bract. The perianth is persistent, made up of at least three separate, similar whorls attached below the ovary. Both fibrous and fibrovascular bundles are seen in the perianth lobes. The stamens could not be observed. The gynoecium is syncarpous and superior with a small style. The number of carpels could not be ascertained and nothing is known about the ovules and the placentation, as it has not been possible to obtain any transverse section of the inflorescence.

The structure of vascular bundles in the bract and in the perianth lobes indicates that the inflorescence probably belongs to the monocotyledons. Other characters like racemose nature of the inflorescence, with a well developed bract subtending the flowers, three similar whorls of perianth and a syncarpous, superior ovary suggest its close resemblance with the members of Liliaceae, Xanthorrhoeaceae, Palmae and Restionaceae. However, at the present state of our knowledge it is not possible to identify it with any modern taxon of the monocots. A detailed description of this interesting fossil will be published when more specimens are available, revealing further data to enable us establish its definite affinities.

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