SOME FRAGMENTARY PLANT FOSSILS FROM NARSINGHPUR DISTRICT, MADHYA PRADESH, INDIA

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ABSTRACT

A few hitherto unreported fossil plants from the Jabalpur series are described here. They are Bucklandia sp., ? Baiera sp., Coniferocaulon rajmahalense Gupta, stems with longitudinal ridges and grooves and an axis with spindle-shaped scars.

INTRODUCTION

THE collection on which the present work is based was made in March 1957 from two different localities in Narsinghpur district. They are:

1. Sher river, near the village Sehora, about 4 miles east of Bachai Rest House.

2. Māchārewa river, near Marhpiparia, about 4½ miles south-east-south of Bachai Rest House.

DESCRIPTION

Cycadophyta

Bucklandia sp. Pl. 1, Fig. 3

The specimen consists of a portion of a decorticated stem having only six leaf-bases. The leaf-bases are oval or rhomboidal in shape. Scar of the fallen leaf is seen at the top of some of the leaf-bases and in some of these leaf-trace bundles can be seen. The maximum number of leaf-trace bundles counted is 7. In the number and arrangement of the bundles the present specimen may be compared with Bucklandia indica Seward (1917) and B. sahnii Bose (1953).

Locality - Māchārewa river, near Marh-

piparia

Collection — Specimen No. 29542 of the Birbal Sahni Institute of Palaeobotany Museum.

A Cycadean leaf-base Pl. 1, Figs. 1, 2

A single detached leaf-base was collected. To the rhomboidal leaf-base is also attached a portion of the petiole. Leaf-trace bundles are not preserved.

Locality — Māchārewa river, near Marh-

piparia.

Collection — Specimen No. 29502 of the Birbal Sahni Institute of Palaeobotany Museum.

Ginkgoales

Genus Baiera Braun

? Baiera sp.

Pl. 1, Fig. 4

The only specimen found in the collection is incomplete both at the base and the apex. The lamina as a whole is wedge-shaped and deeply lobed. It is divided into two primary segments by a deep incision nearly reaching the base. These are in turn divided into six secondary segments, each one of which seems to be further incised. Veins are not preserved.

The specimen is too imperfectly preserved for generic and specific determination. It is only provisionally placed under *Baiera*.

Ginkgo lobata described by Feistmantel (1877) from Sher river differs from the present specimen in having much less segments. The other specimen Ginkgo sp. described from Bansa, South Rewa Gondwana basin, by Feistmantel (1882) is without any segment.

Locality — Sher river, near Sehora.

Collection — Specimen No. 28950 of the
Birbal Sahni Institute of Palaeobotany

Museum.

Coniferales

Genus Coniferocaulon Fliche

Coniferocaulon rajmahalense Gupta

Pl. 1, Figs. 9, 10

The stems are fairly well preserved and are in the form of impressions and incrustations, measuring 3.5-8.5 cm. in breadth. The surface is marked with irregularly running transverse grooves, some of the grooves having slight elliptical protuberances or depressions.

The specimens resemble, in external features, Coniferocaulon sp. described by Bancroft (1913) and Sahni (1931) from the Rajmahal Hills, Bihar, and C. rajmahalense Gupta (1954), also from the Rajmahal Hills. They, however, differ from C. colymbeaeforme Fliche (1900) in having bigger diameter, larger and broader transverse grooves and elliptical protuberances.

Locality - Sher river, near Sehora. Collection — Specimen Nos. 29073 (PL. 1, Fig. 9) and 28978 (PL. 1, Fig. 10) of the Birbal Sahni Institute of Palaeobotany Museum.

Incertae Sedis

Stems with longitudinal ridges and grooves

Pl. 1, Figs. 7, 8

The collection from Marhpiparia includes a number of stems, showing ridges and grooves in the longitudinal direction. The stems are 0.3-3.2 cm. broad and are of various sizes, breadth of the grooves and ridges varying according to the diameter of the stem. As the stems are not differentiated into nodal and internodal regions, their idenification

is not possible. The present specimens may be compared with Equisetites (?) sp. cf. lehmannianus Göppert described by Salfeld (1907).

Locality — Māchārewa river, near Marh-

piparia.

Collection — Specimen Nos. 29516 (PL. 1. Fig. 7) and 29530 (PL. 1, Fig. 8) of the Birbal Sahni Institute of Palaeobotany Museum.

Axis with spindle-shaped scars

Pl. 1, Figs. 5, 6

Unbranched stem, about 5 cm. long and 0.5 cm. broad, with numerous closely set, narrow, elongated spindle-shaped scars. Due to imperfect preservation it is extremely difficult to determine its exact affinity. The scars of the present specimen resemble to some extent the scars of the stem described by Turutanova-Ketova (1930, Pl. IV, Fig. 28) from the Jurassic of Kara-Tau.

Locality - Māchārewa river, near Marh-

piparia.

Collection — Specimen No. 29515 of the Birbal Sahni Institute of Palaeobotany Museum.

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EXPLANATION OF PLATE 1

- 1. A detached cycadean leaf-base. No. 29502.
- \times 1. 2. The above magnified. \times 2.
 - 3. Bucklandia sp. No. 29542. × 1. 4. ? Baiera sp. No. 28950. × 1.

- 5. An axis with spindle-shaped scars. No. 29515.
- \times 1. 6. The above magnified. $\times 2$.

- 7. A stem with longitudinal ridges and grooves No. 29516. × 1.
- 8. Another stem with longitudinal ridges and grooves. No. 29530. \times 1.
- 9. Coniferocaulon rajmahalense Gupta. No. 29073.
- 10. Coniferocaulon rajmahalense Gupta. No. 28978.

