

within the shear zone represent metasomatised derivatives of the lava. This implies that, in these parts of Singhbhum, the deformation and attendant metasomatism should be given due consideration in differentiating the basic schists from the mineralogically alike pelitic schists of the Chaibasa stage, particularly in regions where they lie close together.

REFERENCES

- BARBERY, A. K., (1964) *Structure and stratigraphy of part of Northern Singhbhum, south of Tatanagar, Bihar. Proc. Nat. Inst. Sci. Ind.*, Vol. 30, A, pp. 486-510.
- BHATTACHARJEE, J., (1962) Petrology of the area in and around Chandil. *M.Sc. thesis, Calcutta University*, pp. 115-120.
- DUNN, J. A. and DEY, A. K., (1942) The geology and petrology of Eastern Singhbhum and surrounding areas. *Mem. Geol. Surv. Ind.*, Vol. 69, Pt. 2, pp. 1-456.
- IYENGAR, S. V. P. and ANANDALWAR, M. A., (1965) The Dhanjori eugeosyncline and its bearing on the stratigraphy of the Singhbhum, Keonjhar and Mayurbhanj districts. *Min. Geol. Met. Inst. Ind., Dr. D. N. Wadia Comm. Vol.*, pp. 138-162.

MEYERIPOLLIS, A NEW GENUS FROM THE TERTIARY SEDIMENTS OF ASSAM

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The present note deals with the study and naming of a characteristic pollen type met with in the Upper Eocene-Lower Miocene sediments of Assam.

Meyer (1958) illustrated a gemmate 3-syncolpate pollen from the subsurface sediments of the Naharkotiya Oil fields of Assam. The assemblage illustrated by him consists of spores of *Creopteris (cicatricosisporites sp.)*, Polypodiaceae, pollen of *Asterocaryum*, *Rhizophora* associated with the gemmate syncolpate pollen referred to here as *Meyeripollis*.

Baksi (1962, 1965) described and illustrated this type of pollen from the Simsang river section in South Shillong plateau and assigned them to the type of Meyer. He included a detailed description of the pollen. The range of this fossil, according to Baksi, is from Upper Eocene-Miocene with maximum occurrence in the Oligocene (Barail) sediments. The associated fossils are a finely striated tricolpate pollen related to *Bauhinia* (first appearance from below top in the stratigraphic sequence), *Polypodiaceasporites tuberculensis* Baksi 1962, *Leiotriletes garoensis* Baksi, 1962, *Schizaeaceasporites Knoxi* Baksi, 1962, *Tetradopites granularis* Baksi, 1962, *Tricolpopites spinosa* Baksi, 1962, *Spinospites acoporata* Baksi, 1962 and *Tricolporipites minima* Baksi, 1962.

Systematic Palynology
Meyeripollis gen. nov.
 Fig. 1, Nos. 1-6 a, Fig. 2

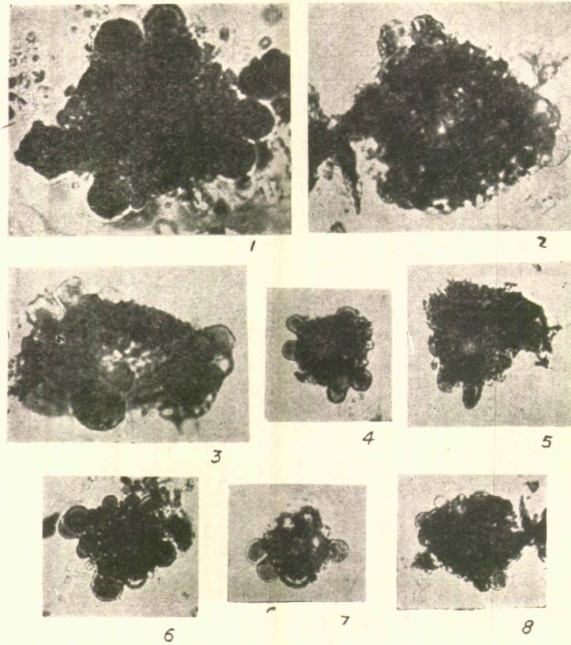
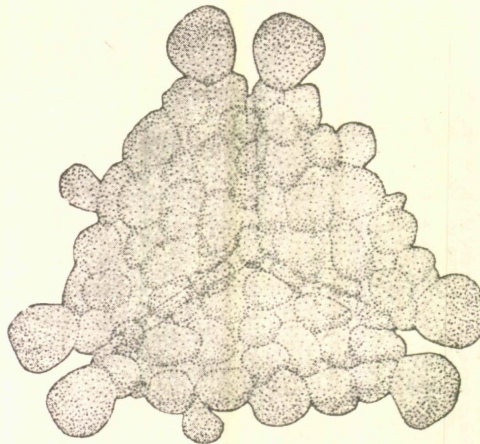


Figure 1.

1 to 8 *Meyeripollis naharkotensis*

Gen. et sp. nov.

- 1, 2, Polar compression showing the prominent angular pair of gemmae and smaller sculptural elements on the pollen body $\times 1000$.
- 3 Lateral compression $\times 1000$.
- 4, 5, 8 Polar compression same as $\times 500$.
- 6, 7 Polar compression: note the irregular development of gemmae $\times 500$.

Figure 2. Diagrammatic sketch of *Meyeripollis naharkotensis* showing the syncolpate nature of the aperture and ornamentation.

Type species: *Meyeripollis naharkotensis* sp. nov.

Holotype: Meyer, 1958, pl. 1, figs, 4 & 5.

Type locality: Sediments assignable to Middle Oligocene, Naharkotiya Oil field, Assam, India.

Other illustrated specimens :

1. Gemmate syncolpate pollen—Baksi, 1962, pl. 3, figs. 37 & 38.

2. *Nonaperrturites evansii* Biswas, 1962, pl. 1, fig, 22.

Diagnosis: Triangular 26–40 μ ; with rounded angles and prominent convex sides, angles distinguished by the presence of two large tubercles or gemmae on either side; polar compression more than equatorial ones. Trisyncolpate colpi often obscured by the ornamentation. Colpi meeting at distal pole giving the appearance of a trilete mark. Exine ornamented with gemmae, tubercles and verrucae of different sizes, broad prominent gemmae present at the angles of the pollen and at distal pole.

Named after Dr. B. L. Meyer of the Shell Oil Company, who first recognised this type from the Assam Oil fields of India.

Stratigraphical range: Upper Eocene—Miocene.

REFERENCES

- BAKSI, S. K., (1962) Palynological investigation of Simsang River Tertiaries, South Shillong Front, Assam. *Geol. Min. Met. Soc. India, Bull.*, 26: pp. 1-22.
- (1965) Stratigraphy of Barail series in Southern part of Shillong plateau, Assam, India. *Bull. Amer. Assn. Petrol. Geol.* Vol. 49, no. 12; pp. 2282-2288.
- BISWAS, B., (1962) Stratigraphy of the Mahadeo, Langpar, Cherra and Tura formations, Assam, India. *Geol. Min. Met. Soc. India, Bull.* 25: pp. 1-48.
- MEYER, B. L., (1958) Palynological investigation of some samples from Nahorkatiya, Assam. *Jour. Pal. Soc. India*, Vol. 3, pp. 156-157.

A NOTE ON OCCURRENCE OF GRAYWACKE-SLATE COMPLEX IN THE ARAVALLI SYSTEM OF SOUTHERN BANSWARA DISTRICT, RAJASTHAN

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Much of the phyllites, phyllitic slates, slates and flagstones described by Gupta and Mukherjee (1938) as constituting the argillites of the Aravalli System of this southern district of Rajasthan are in fact regionally metamorphosed low grade facies of rhythmically interbedded graywackes and shales, which are well exposed in the sections of the Anas river and its tributaries. The rocks are found to extend into the adjacent Panchmahals district of Gujarat State.

The area which has been mapped by the authors largely on scale 1 : 31,680 and also partly on 1 : 63,360, using aerial photographs and toposheets respectively, fall in between Lats. (N) 23°03' and 23°22' and Longs. (E) 74°15' and 74°30'. The Aravalli sequence as deduced by them is as follows :