ERLANSONISPORITES POTONIÉ, MEGASPORES FROM THE SRIPERUMBU-DUR BEDS OF PALAR BASIN, TAMIL NADU

The present note deals with the occurrence of a megaspore type, Erlansonisporites Potonié, 1956 for the first time from the Lower Cretaceous (Neocomian-Aptian) Sriper-umbudur beds of Palar basin, Tamil Nadu (Figs. 1 & 2). A rich, varied and excellently preserved spore and pollen assemblage has been recorded earlier from the Sriper-umbudur beds (Ramanujam & Sri ailam, 1974; Ramanujam & Varma, 1977, 1981).

The material investigated constitute bore hole CK-3 (between 37.50 to 45.10m depth) from the Kattavakkam (57 p/13, 12° 49′: 70° 53′) area near Conjeevaram, Chengleput district of Tamil Nadu.

Infraturma

Murornati Potonié & Kremp, 1954

Genus

Erlansonisporites Potonié, 1956

Type species

E. erlansonii (Miner) Potonié, 1956

Erlansonisporites sp.

Figs. 1 & 2.

Trilete megaspores, preserved in off-polar compression, 300-350 μ m; \pm circular in outline; Y-mark not discernible because of heavy sculpture, surface coarsely reticulate, reticulum all over spore body, muri 5-6 μ m thick, prominent 18-20 μ m high, forming unequal-sized polygonal meshes and membranous lamellar structures at periphery; lumina 20-25 μ m broad and conspicuously granular.

The present sporomorph shows similarity with the megaspore designated as Erlansonisporites sparassis (Murray) Potonié, 1956, recorded from the Lower Cretaceous of Alberta, Canada (Singh, 1964), but is distinguishable in its indistinct Y-mark and granular lumina. Inspite of the differences of the South Indian megaspore with the Canadian megaspore, the author has refrained from instituting a new species of the former, as only few grains were encountered in this study.

From India the genus Erlansonisporites has been recorded earlier in the Jabalpur beds of Madhya Praesh (Dev, 1961) and the Umia beds of Kutch (Singh, Srivastava & Roy, 1964). The megaspore type recorded from the Nipania chert of Rajmahal hills, Bihar by Vishnu-Mittre (1954; pl. 2, fig. 34) also appears to be referable to Erlansonisporites.

The genus Erlansonisporites appears to be characteristic of the Lower Cretaceous (Neocomian-Aptian) deposits. The record of this megaspore type from the Sriperumbudur beds of the Palar basin dated as Neocomian-Aptian on the basis of palynological and micropalaeontological evidences (Murthy & Sastri, 1961; Ramanujam & Varma, 1977, 1981), thus is of certain significance.

The author is grateful to Prof. C. G. K. Ramanujam, P. G. College of Science, Saifabad (O. U.), Hyderabad for encouragement and laboratory facilities.

REFERENCES

- Dev, S. (1961). The fossil flora of the Jabalpur series. 3 Spores and pollen grains. *Palaeobotanist*, 8 (1 & 2): 43-56.
- MURTHY, N. G. K. & SASTRI, V. V. (1961). Foraminifera from the Sriperumbudur beds near Madras. Rec. geol. Surv. India, 89: 445-456.
- RAMANUJAM, C. G. K. & Srisailam, K. (1974). Palynology of the carbonaceous shale from a bore hole at Kattavakkam near Conjeevaram, Tamil Nadu, India. *Pollen Spores*, **16**: 68-107.
- RAMANUJAM, C. G. K. & VARMA, Y. N. R. (1977). Palynological evidence for the age of Sriperumbudur beds, encountered in a bore hole at Orikkai near Conjeevaram, Tamil Nadu. Jour. geol. Soc. India, 18 (8): 429-435.
- RAMANUJAM, C. G. K. & VARMA, Y. N. R. (1981). Hilate spores from the Upper Gondwana deposits of Palar Basin, Tamil Nadu. *Palaeobotanist*, 28 & 29: 308-315.
- SINGH, C. (1964). Microflora of the Lower Cretaceous Mannville Group, East Central Alberta. Res. Council Alberta Bull., No. 15: 238.
- SINGH, H. P., SRIVASTAVA, S. K. & ROY, S. K. (1964). Studies on the Upper Gondwana of Kutch. 1. Mio-Macrospores. *Palaeobotanist*, 12: 282-306.
- VISHNU-MITTRE. (1954). Petrified spores and pollen grains from the Jurassic rocks of Rajmahal hills, Bihar. Palaeobotanist, 3: 117-127.

Y. N. R. VARMA

Department of Botany, Sardar Patel

College, 14, Padmarao Nagar,

Secunderabad-500 025

EXPLANATION OF PLATE 1

Figs. 1 & 2 Erlansonisporites sp. (in different foci, X 200).

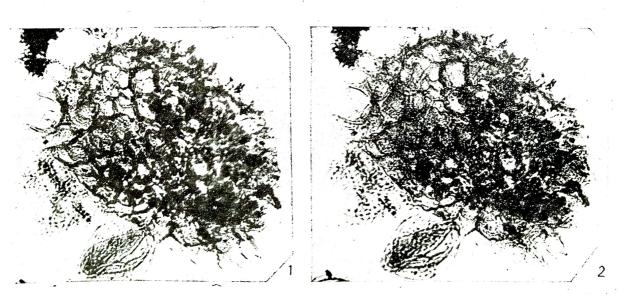


PLATE 1

