FUNGAL REMAINS FROM THE RAJPARDI LIGNITE, BROACH DISTRICT, GUJARAT

Fungal spores, fruiting bodies and mycelia are quite common in the Tertiary sedimentary rocks. In some of the lignite deposits of India—Panandhro in Kutch District, Gujarat; Palana in Bikaner District, Rajatsthan; Neyveli in South Arcot District, Tamil Nadu; Quilon and Varkala lignites in Quilon District, Kerala—the fossil fungal remains are found in plenty.

The present note deals with the fungal entities recovered from the Rajpardi lignite, Broach District, Gujarat. Rajpardi is situated on the southern part of Gujarat and is well known for its lignite deposits. It is about 20 ft thick and is of Lower Eocene in age.

Twentyfive samples from Rajpardi lignite were macerated out of which 20 samples yielded 38 genera and 42 species. The palynological assemblage comprises fungal bodies, spores and hyphae, pteridophytic spores and angiospermic pollen grains. Fungal elements are represented by 6 genera and 7 species and these are quite common in the assemblage. These are: *Phargmothyrites eocaenica* Edwards emend. Kar & Saxena (1976), *Parmathyrites indicus* Jain & Gupta (1970), *Parmathyrites robustus* Jain & Kar (1979), *Notothyrites setiferus* Cookson (1947), *Kutchiathyrites eccentricus* Kar (1979), *Inapertusporites kedvesii* Elsik (1968) and *Pluricellaesporites planus* Trivedi & Verma (1969).

Rajpardi lignite exhibits the dominance of fungal bodies, palm pollen and pteridophytic spores. The high land angiospermic pollen are found comparatively more in the lower part and the mangrove pollen are more or less absent throughout the assemblage. The assemblage suggests that the lignite was deposited in a deltaic condition rich in terrigenous detritus where the fungal elements thrived.

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