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PERMIAN-TRIASSIC PALYNOFLORAL TRANSITION IN THE SATTUPALLI AREA, CHINTALAPUDI SUB-BASIN, GODAVARI GRABEN, ANDHRA PRADESH, INDIA

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ABSTRACT

Palynological investigation of sub-surface sediments of the borecore SSP-133 from the Sattupalli area, Chintalapudi Sub-basin has revealed presence of three palynoassemblages, one belonging to Late Permian (Raniganj) palynoflora and two belonging to Early Triassic (Panchet) palynoflora. Assemblage-I characterised by dominance of striate disaccate pollen chiefly, *Striatopodocarpites* and *Faunipollenites* alongwith presence of rare but stratigraphically significant taxa viz., *Strotersporites, Verticipollenites, Corisaccites, Guttulapollenites, Hamiapollenites, Falcisporites, Chordasporites, Crescentipollenites, Striatites, Striomonosaccites, Lunatisporites* represents Late Permian.

Assemblage II is characterised by high percentage, of taeniate disaccates chiefly, *Lunatisporites*, while Assemblage III is characterised by abundance of cingulate-cavate trilete spores, chiefly, *Lundbladispora* and *Densoisporites*. Striate disaccates show a sharp decline in these two assemblages. Early Triassic palynoflora has been recorded for the first time in the Sattupalli area indicating existence of the Panchet sediments in the Chintalapudi Sub-basin.

The study further supports the view studies of Jha and Srivastava (1996) that the Kamthi Formation represents Early Triassic (=Panchet Formation) overlying the Raniganj-equivalent sediments with a gradational contact.

Keywords: Palynology, Gondwana, Permian, Triassic, Godavari Graben