



## FOSSIL SPORES *RAMANUJAMOSPORITES MOHGAOENSE* GEN. NOV. SP. NOV. FROM MOHGAONKALAN INTERTRAPPEAN BEDS OF INDIA

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### Abstract:

Present paper deals with fungal spores *Ramanujamosporites mohgaoense* gen. Nov. Sp. Nov. Spore 3-celled, uniseriate, inaperturate, elongated, dark melanin coloured, septa prominent, broken at places, spore wall irregular, basal cell processed. The present spore different from all described fossil spp. And so it is kept as separate from genus named as *Ramanujamosporites mohgaoense* gen. Nov. Sp. Nov. The generic name is after Prof. Ramanujam, an eminent palaeobotanist of India, and specific name is after the locality.

**Keywords** : Fungal spore, uniseriate, melanin, septa.

### Introduction:

The fossil fungi imperfecti from the Deccan intertrappean beds of Mohgaonkalan. Mahabale (1969) has recorded *Diplodia rodei*. Four different fossil pycnidia namely *Palaephoma intertrappea*, *Mohgaonidium deccani*, *Mohgaonidi deccani*, *Diplodia sahnii* and *Deccanodia eocenum* have been reported by Singhai (1974). Above pycnidia are from the Deccan Intertrappean beds of Mohgaonkalan in M.P. Singh and Patil (1978) reported the pycnidia *Palaeocylophaera intertrappea*, *Rabenharstinidium intertrappeum*, *Hendersonula mohgaoense*, *Sarcophoma deccani* belonging to Coelomycetes. Barlinge and Paradkar (1979) reported the Deuteromycetous pycnidia *Botryodiplodia mohgaoensis* and *Ascochytilites intertrappea* from the same beds of Mohgaonkalan. Dixit (1984) has reported same type of fructifications from the same beds. Chawhan (1987) described three different fungal pycnidia of fungi imperfecti from Nagpur. They are *Palaeosclerotopsis intertrappea*, *Phutalites deccani* and *Astermellites deccani*. Here a pycnidium showing affinities to form order Sphaeropsidales of fungi imperfecti is described.

### Material and Method:

These spores were observed on the peel which shows presence of a fossil fruit of follicle type. These fungal spores were found engulfed in the organic matter in association with the fruit.

### Description:

The present fungal spore is a 3-celled structure. It is uniseriate, inaperturate, elongated in shape and dark melanin in colour. It means 76\*47 um in size. The wall is irregular. The transverse septa among the three uniseriate cells of the spores are prominent and 6 um thick. These septa are broken at places. The median and basal cells have a process each emerging from the lateral and right side respectively. The terminal cells measures 26\*39 um, the middle is 24\*44 um and the basal is 22\*36 um in diameter. (plate-1) **Figure.-1&2**

### Discussion:

Many multicellate fungal spores have been described from different localities, under the name Multicellaeosporites (Elsik), 1971, Pleuricellasporites Elsik, 1977, Fusiformisporites (rouse) Elsik, 1968. and many other spore types are not yet assigned to any particular genus. , Puranik, S., Lanjewar & Sakundarwar, 2011, *Ustilago chitaleyii*.

The present spore is different from all, the above fossil sp, and so it is kept as separate from genus and named as *Ramanujamosporites mohgaoense* gen. nov. Sp. nov. The generic name is after Prof. Ramanujam, an eminent palaeobotanist of India, and specific name is after the locality.

### Diagnosis:

#### Generic diagnosis

*Ramanujamosporites* gen. nov.

Spore 3-celled, uniseriate, inaperturate, elongated dark melanin coloured, septa prominent, broken at places.

#### Specific diagnosis

*R. mohgaoense* sp. Nov.

Spore wall irregular, basal cells processed, 76\*47 um in diameter, septa 6 um thick.

Locality – Mohgaonkalan, M.P. India.

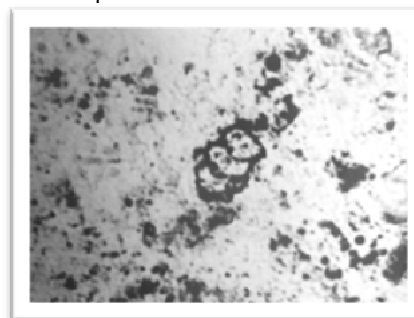
Horizon – Deccan Intertrappean series of India.

Age – Uppermost cretaceous.

*Ramanujamosporites* gen. et. sp. nov

Explanation of plate I, **Figure.s 1 and 2**

1 : The fungal spores showing 3 linear cells with a terminal and a lateral process each. \*320 2 : The fungal spores showing irregular spore wall and the broken septa. \*650



**Figure. - 1**



**Figure. - 2**

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