



# Fossil Fungal Spores *Dicellaesporitesdeccani* sp. nov. of Fungi Imperfecti From Mohangaonkalan M.P. India

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## Abstract:

The present investigation deals with fossils spores from the Deccan Intertrappean Beds of Mohangaokalan M.P. India. The fossils micro flora of Mohangaonkalan is very rich, spores and pollen grains have been described this beds. Many form genera belonging to class *Deuteromycetes* have been recorded from this horizon . Spores inaperturate, melanin coloured, bicelleduniseriate, capsular, barrel shaped 61\*31um in size, spore wall 7mu thick, transverse septum 5um in thick, surface psilate. It shows similarity with *Dicellaesporites*hence, named as *Dicellaesporitesdeccanisp.nov.* The specific name is given after the deccan traps.

**Keywords:** Intertrappean, Spores, Deuteromycetes, Fungal, Deccan India.

## Introduction:

**Spores recorded, these are follows.**

Sphaeropsidales	<i>Ascochyrites intertrappea</i>	Berlinge and Paradkar, 1979
	<i>Botryodiplodiamohqaoensis</i>	-do-
	<i>Deconodiaeocenum</i>	Singhai, 1974
	<i>D. Rode i</i>	Mahabale, 1969
	<i>D. Sahnii</i>	Singhai, 1974
	<i>Mohgaonidium deccani</i>	--do--
	<i>Palaeophome intertrappea</i>	--do--
	<i>Phomitesg mohaoense</i>	Chitaley and Patil, 1972
Sphaeropsidales	<i>Hendersonulemohqaoense</i>	Singh 1964
(Coelomycetes)	<i>Palaeocytophaeria intertrappea</i>	--do--
	<i>Rabenhorstinidium intertrappeum</i>	--do--
	<i>Sarcopohomadeccanii</i>	--do--
	<i>Sirophoma</i>	Patil& Singh, 1974
Moniliales	<i>Dactylosporium dicotylophylli</i>	Paradkar, 1974
	<i>Helicominites megasalvinites</i>	Barlinge&Paradkar, 1979
	<i>Helminthosporium mohgaoense</i>	Chitaley& Sheikh, 1971
	<i>Monodictys intertrappea</i>	Barlinge&Paradkar, 1979
	<i>Tetracosporium eocenum</i>	Biradar&Mahabale, 1974
Imperfect fungi	<i>Arbusculites dicotylophyll</i>	Paradkar, 1974
	<i>Deccanosporium eocenum</i>	Singhai, 1972
	Sphaeropsidales <i>Selenophomites deccanii</i> , <i>Dothiorella deccanii</i> , <i>Coniothyrites</i>	





*deccanii*, *Phyllostictites deccanii*, *Leptothyrites deccanii*, *Pyronochaetites deccanii*, *Rhynochophomites deccanii* (Dixit, 1984), *Ustilag chitaleyi* (Puranik, Lanjewar & Sakundawar, 2011).

### Material and Methods:

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 spores is inaperturate and melanin colored. It is dicellate, uniseriate and capsular. The shape is somewhat barrel like. It is 61 x 41  $\mu\text{m}$  in size with the sporewall

7 $\mu\text{m}$  thick, the transverse septum is 5 $\mu\text{m}$  in thickness. Thus it is slightly thinner than the spore wall. The surface is more or less psilate (Plate 1, Figs. 1 & 2). The two cells are almost equal in size. The two ends of this elongated fungal spore are blunt are somewhat rounded and are 7 $\mu\text{m}$  in diameter.

### Discussion

The size, shape and structure of the present spore brings it very near to *Dicellaeosporites* (Elsik) Sheffy, 1977. Ramanujam and Rao (1978) described *Dicellaeosporites elongatus* and *D. aculeolatus*.

Ambawani described *D. campanulatus* and *D. disphaericus* from Neyveli Lignite, South India. of the above, the present spore is comparable to *D. elongatus*. *D. elongatus* is ellipsoid to oblong. However it differs in size. *D. elongatus* measure 21-26 x 6- 8 $\mu\text{m}$ , while present spore is 61 x 31  $\mu\text{m}$  in size. Further the transverse septum in *D. elongatus* is much thicker, often more than twice is thick as the wall. On the contrary in present spore, the transverse septum is somewhat less thicker than the wall.

Thus it is evident that the present spore though resembles *D. elongatus* in certain respects. Therefore we keep it as a new sps. Of *Dicellaeosporites*, named as *Dicellaeosporites deccani* sp. nov. The specific name is given after the Deccan Trap, the peninsular region of India.

### Diagnosis:

*Dicellaeosporites deccani* sp. nov.

Spores Inaperturate, melanin coloured; dicellate, uniseriate, capsular; barrel shaped; 61 x 31  $\mu\text{m}$ , in size spore wall 7  $\mu\text{m}$ . thick, transverse septum 5 mm thick ; surface psilates.

Locality: Mogaonkalan, M.P., India.

Horizon – Deccan Intertrappean series of India.

Age - ? Uppermost cretaceous.

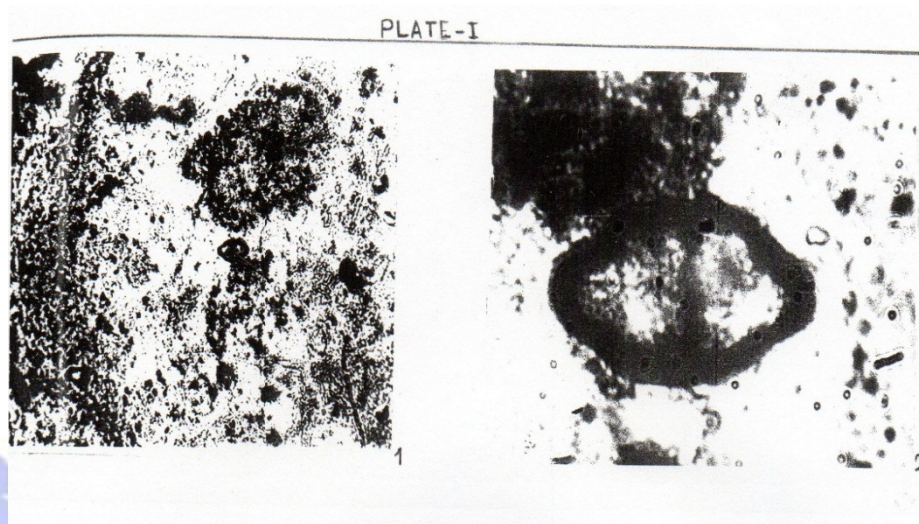




*Dicellaeosporites deccani* sp. nov.

Explanation of plate. Figs. 1 & 2.

1. The dicelled spore seen engulfed in organic matter x 80.
2. The fungal spore showing smooth wall, transverse septum and inclusion x 835



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