

INTERCEPTION OF *FUSARIUM MONILIFORME* SHELDT. VAR.
SUBGLUTINANS WOLLENW. AND REINK. IN SEEDS OF
PINUS CARIBAEA VAR. *HONDURENSIS* IMPORTED
FROM FIJI

Fusarium moniliforme var. *subglutinans* is known to cause pitch canker of slash pines (Barnard and Blackeslee, 1980) and shoot die-back of sand pines (Blackeslee *et al*, 1980). Also high mortality was recorded with pitch canker in severely infected plantations (Blackeslee and Oak, 1979). In view of above, we have inspected one consignment of 2 Kg of *Pinus caribaea* var. *hondurensis* seeds imported from Fiji and the results are reported herewith.

The seeds are examined by blotter test, where in 400 seeds are plated on moist blotters kept in transparent plastic petridishes and incubated under artificial day light (ADL)/darkness cycles of 12 h/12 h at $20\pm 2^{\circ}\text{C}$ for 8 days.

The results showed 0.5% seed infection by *Fusarium moniliforme* var. *subglutinans*. The fungal growth on seed was characterized by abundant whitish or greyish white mycelium with vinaceous purple tinge or pigmentation, floccose to felted, often with a powdery appearance. The fungus can be characterised by conidial heads, bearing microconidia on finger-like polyphialides, which develop in simple or complex sympodialiy branched conidiophores (Fig. 1). The microconidia usually abundant, aseptate, hyaline, oval to obclavate, $7.7-11.9 \times 2.5-3.0\mu$. Macroconidia rarely noticed and are falcate, 3-5 septate, $30-50 \times 3-4\mu$. The colony growth on PDA was white to greyish white at the periphery and with purplish zonations towards centre, floccose to felted. The fungal growth from below is vinaceous purple in the begining and becoming purple to dark purple later. The above description readily agrees with that of Kuhlman *et al* (1978) and confirms that the fungus recorded on the seeds of *Pinus caribaea* var. *hondurensis* to be *Fusarium moniliforme* f. sp. *subglutinans*. It is further stated that this is the first record on seed and is so far not reported from India, infecting *Pinus* species. Therefore, careful quarantine consideration may be given while importing pine seeds in future to prevent its introduction into this country.

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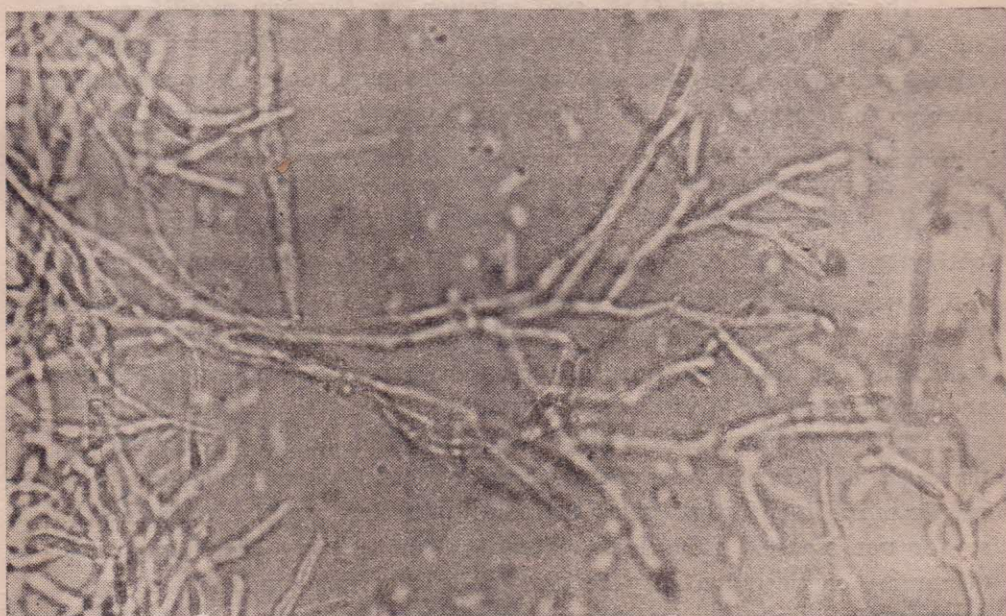
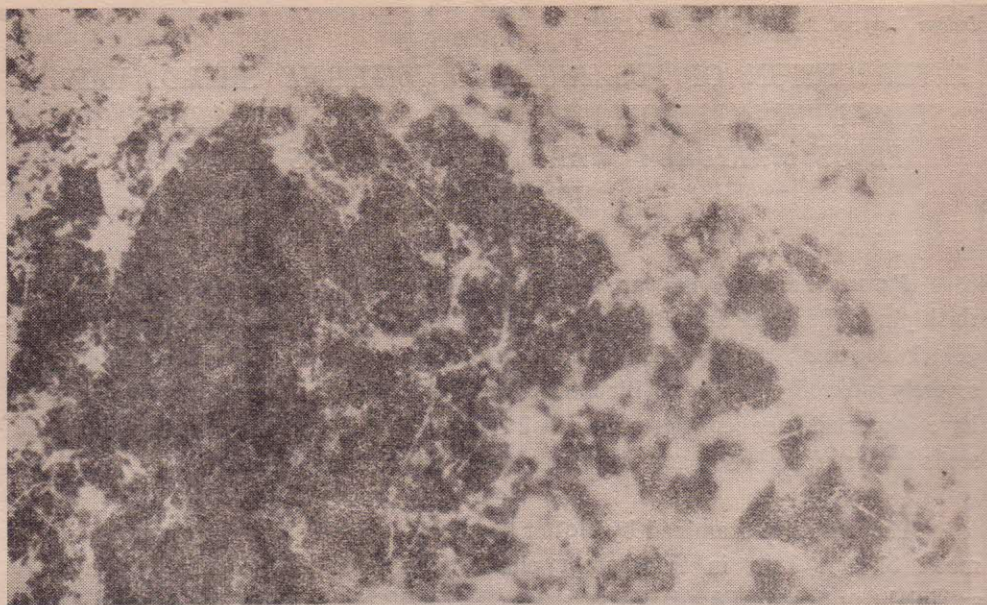


Fig. 1. *Fusarium moniliforme* var. *subglutinans*

A. conidial heads under stereobinocular (x 36) and

B. microconidia borne singly on finger-like polyphialides (x 450)

above fungus. Thanks are also due to Dr. Babuji, Department of Botany, Loyola College, Madras for rendering photomicrographic facilities and Dr. K. D. Paharia, Plant Protection Adviser to the Government of India, Directorate of Plant Protection, Quarantine & Storage for encouragement during course of investigation.

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