

## FRUIT ROT DISEASE OF BANANA cv. NENDRAN CAUSED BY *FUSARIUM PALLIDOROSEUM* (COOKE) SACC., A NEW RECORD

Banana (*Musa paradisiaca* L.) is an important crop of Kerala occupying about 15,000 ha and the most extensively cultivated and commercially important variety is Nendran. During 1985, a severe fruit rot disease of banana cv. Nendran was noticed in a garden at Chittarikkal village in Kasaragod district. Later it was observed in several gardens in Kasaragod and Cannanore districts. Usually a few fingers in a bunch were affected. However, in certain gardens severe attack was also noticed. The disease adversely affects the development of the bunch and render unfit for marketing.

Generally immature and half ripe fruits are affected. The infection starts at the base of perianth and progresses along the finger causing blackening, wrinkling of the skin, rotting of the tip and premature yellowing of the fruit. The rotting may extend up to 4-5 cm of the fruit length. The diseased portion was sharply delineated from the uninvaded healthy tissues. The hyphae and spore beds of the fungus were present on the decayed tissues. In the decayed portions the internal tissues became blackened, rotted and water soaked.

Repeated isolations from the diseased parts consistently yielded a species of *Fusarium*. When the fungus was inoculated into young healthy fruits it caused typical symptoms in the course of 4-7 days. Slight wounding of the fruit was necessary for getting successful infection. It is possible that the onslaught of fungi is aided by insects, sun scorch or mechanical agencies. The mycelium at first is white and later light pink. The conidia scattered in the aerial mycelium, spindle shaped, lanceolate, slightly curved, apedicellate, appendicular, when small 0-2 septate and when large 3-5 septate. The fungus was identified as *Fusarium pallidoroseum* (Cooke) Sacc. (IMI No.32129). In certain instances, *F. moniliforme* was also found associated with the disease. Wardlaw (1972) has reported the association of *Fusarium moniliforme* and *F. lateritium* with tip rot disease of immature banana fruits. There is no previous report of tip rot of banana caused by *F. pallidoroseum* (Cooke) Sacc. and this constitutes the first record.

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### REFERENCE

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