

Trunk and Root Rot of Hill Banana (*Musa acuminata*) in Palni Hills

Hill banana (*M. acuminata*) is an important fruit crop of Tamil Nadu grown in an area of about 30,000 acres in Palni Hills. The banana is grown under rainfed conditions at an altitude of 1500 to 2500'. The banana in this region is commonly affected by fungal diseases like wilt (*Fusarium oxysporum* f. *cubense*), sigatoka leaf spot (*Cercospora musae*) and a virus disease, bunchy top of banana. The present note reports the occurrence of a new disease called trunk and root rot caused by *Marasmius semiustus* in Palni hills in Tamil Nadu.

Trunk and root rot disease caused by *M. semiustus* has been reported from Jamaica (Ashby, 1913), Hawaii (Lee, 1921), Fiji (Campbell, 1925), Ceylon (Gadd, 1925), Mauritius (Stevenson, 1926), Uganda (Hansford, 1928), Brazil (Wardlaw and Mc Guire, 1933) and in Gold Coast (Auchinleck, 1934).

The affected plants showed the following symptoms. The growth of the plants was arrested and the outer leaves and leaf sheaths dried leaving one or two small green leaves in the centre. Layers and patches of white mycelium in and between the dried leaf sheaths was visible. The inner leaf sheath exhibited large oval patches of dark brown colour with water soaked appearance. On these lesions, white patches of mycelium was seen. Rhizomorphs of the fungus and small creamy white mushroom like fructifications were seen on the dried leaf sheaths on the

plant as well as on the soil around the diseased plants. In severely infected plants the attack was seen even in the centre of the pseudostem. The fungus attacked the roots leading to death and decay. Fresh roots were found to be covered by mycelial growth. The symptoms closely agree with those described by Wardlaw (1972). The mushrooms seen on the infected plants are creamy white with widely separated gills. The spores are hyaline, oval, papillate at the point of attachment to the basidium. Pileus measures 20mm diameter, stalk 19.4 mm long and the spores measure $10.8 \times 7.2 \mu$. The measurements of mushroom and spores slightly vary from the measurements given by Wardlaw (1972). The pathogen was isolated in pure culture which agreed with the mycelium present in the lesions of infected plants. A large number of trees covering a wide area in Ovamalai region of Palni hills found to be seriously affected by this pathogen, bore the mushrooms on the base of the trunk and the radiating rhizomorphs on the soil around. This is the first report of this disease in India affecting hill banana (*M. acuminata*).

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First Record of Tomato Spotted Wilt Virus from the Nilgiris in India

Smith (1975) has listed not less than 33 viral diseases to occur on tomato all over the world. In India valid descriptions are available for seven virus diseases affecting tomato (John, 1957). Tomato spotted wilt virus has not so far been reported to occur in India.

A severe infection of a virus disease was noticed on Marglobe tomato variety during 1964 in the Nilgiris which resembled tomato spotted wilt virus. The field symptoms on the infected plants are bronzing of the leaves with brown necrotic lesions which are found to spread systemically followed by wilting of the plants with the advance-

ment of the disease. Young growing bud is also necrosed. The ripening fruits exhibit spots with circular markings about 1 cm in diameter as concentric bands of red and yellow broken rings. The centres of these spots are sometimes raised and the spots have roughened appearance.

A number of test plants were inoculated with the sap of the infected leaves of tomato under glasshouse conditions. Tomato seedling reacted with systemic brown necrotic lesions on the leaves 12 days after inoculation. Top necrosis occurred later. On tobacco (var:white burley) and *Nicotiana glauca*, this virus isolate caused light