

Mucor circinelloides Van Tieghem, an Entomogenous Fungus of the Banana Aphid *Pentalonia nigronervosa* Coq. (Aphididae : Hemiptera)

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Pentalonia nigronervosa Coq. is an important pest of banana, cardamom and colôcasia in Kerala. It is a vector of the virus causing the 'bunchy top' disease of banana and 'Katte' disease of cardamom. In a survey conducted during January 1988, dead aphids were observed inside the leaf axils of banana at Sreekaryam, Trivandrum district. The pathogen was isolated from the dead aphids in pure culture on potato dextrose agar medium and it was identified as *Mucor circinelloides* Van Tieghem.

Sporangiophores were erect forming very short turff, light grey, shining bluish-brown, 0.3 to 1 cm tall and branched sympodially, the branches alternating right and left, short and more or less curved, always terminated by a sporangium. Secondary branches were variable in length, grey brown and erect, columella free, hemispheric, smooth 35 x 45 μ m in diameter. Spores were globose 3 x 4 μ m in size, colourless when single, and pale grey in mass.

Spore suspension prepared from five day old culture of the fungus when sprayed on the aphids caused 100 per cent mortality in three days. External growth of the fungus was seen

on dead aphids from the third day after treatment and the colour turned greenish white on the fifth day and eventually it became brown.

This is the first record of a fungal pathogen on *P. nigronervosa*. Harper and Huang (1986) reported the entomogenous fungus *Verticillium lecanii* from four species of aphids, *Acyrtosiphon pisum*, *Metopodophium dirholum*, *Myzus persicae* and *Therioaphis maculata* which caused population reductions of 60-97, 32-85, 50-100 and 37-75 per cent respectively.

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Key Words : *Pentalonia nigronervosa*, *Mucor circinelloides*

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