

## **CYCLEA PELTATA - A NEW HOST OF *PHYTOPHTHORA PALMIVORA* (BUTLER) BUTLER**

*Cyclea peltata* (Lam) Hkf. & Thoms. (Menispermaceae) is an important medicinal plant commonly called as 'padakkizhangu' in Malayalam. Medicines are isolated from the conn of the plant for the diseases viz., jaundice, leprosy, asthma etc. These plants are found to be seriously affected by a leaf and vine rot disease during the south west monsoon months of 1994 at the Main Campus of the Kerala Agricultural University, Vellanikkara, Trichur. Almost all plants showed leaf and vine rotting symptoms.

The initial symptom of the disease appeared as minute water soaked lesions on the upper surface of the leaves. Later these lesions enlarged as rotting turned brown and covered the entire width of the leaf blade. The lesions proceeded up and down on the leaves and caused the breaking of leaves at the rotted portion. All the leaves and vines were infected in similar manner causing complete blighting of the plant. The causal agent was isolated from the freshly infected leaves and brought into pure culture on oat meal agar. On artificial inoculation, the pathogen produced characteristic symptom of the disease.

The fungus was grown on carrot agar for studying cultural and morphological characters. The mycelium of the pathogen was hyaline, profusely branched and non-septate. It produced numerous sporangia in sympodial

fashion on sporangiophores measuring 33.0-39.5 x 22.0-37.5  $\mu\text{m}$ . The sporangia were papillate, lemoniform and caducous having short and thick pedicel measuring 2.0 to 5.0  $\mu\text{m}$ . The sporangium germinated readily in water with the production of zoospores. The fungus was identified as *Phytophthora palmivora* (Butler) Butler based on its morphological and cultural characters. According to the classification of Zentmeyer *et al.* (1977) this isolate could be placed under Group I or Group II. Das and Cheeran (1985) were also not able to place the isolate of *P. palmivora* obtained from black pepper in Kerala in a single group due to overlapping characters. Cross inoculation of this pathogen into pepper, rubber and colocasia produced the symptoms of *P. palmivora* typical to the respective host, further confirming the identity of the pathogen. Chee (1974) listed 138 hosts of this pathogen which did not include *Cyclea peltata*.

A perusal of the literature revealed that there is no report of the leaf and vine rot of cyclea caused by *Phytophthora palmivora*.

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Communication Centre  
Mannuthy, Trichur 680 651, India

S. Estelitta, A. Sukumara Varma  
T. N. Vilasini, Vimi Louis, P. Raji

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