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AN INVESTIGATION ON SOME ASPECTS OF
PASSION MOTTLE VIRUS

By

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Abstract

Passion mottle is a destructive virus among viral diseases of P. edulis in Sri Lanka. Typical foliage mottle and malformed fruit are the characteristic symptoms of the disease and causes a marked reduction in productivity. It is highly sap transmissible; spread very rapidly mainly by mechanical means and young leaves with symptoms are the best inoculum for the sap transmission.

It loses infectivity in sap after dilution to 1:100 - 1:1000; heating for ten minutes at 50 - 55°C or storage at room temperature (28°C) for 29-46 hours.

The common weeds C. occidentalis, P. foetida and C. ameranticolo with nine varieties of P. vulgaris act as other susceptible hosts.

In certain instances expression of mild mottle was recorded with some isolates from P. foetida, designated 'mild strains'. Host range and physical properties as thermal inactivation point, longevity in vitro and dilution end point; of these strains resemble the severe strain'. Only difference is in the degree of symptoms expression. In systemic hosts it produces mild symptoms and in local lesion hosts lesser number of necrotic spots. Experiments also started on protection of P. edulis seedlings using these 'mild strains'. These are of long term nature and are continuing.