

## MILD STRAIN PROTECTION IN COMBATING THE PASSION MOTTLE VIRUS DISEASE

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Passion mottle is a serious virus disease of passion fruit (*Passiflora edulis*) limiting production. The virus is not seed transmitted but healthy seedlings get infected quickly when set in the field because the common weeds, *Passiflora foetida* and *Cassia occidentalis*, are carriers of the virus. This virus is also easily transmitted mechanically and is spread in the field through human and animal agencies.

In an attempt to live with the disease, many isolates of the virus from passion fruit and weed hosts, collected from various localities, were studied to identify possible mild strains. Seedlings sap inoculated with these isolates which showed only mild symptoms or were almost symptomless were set in a field at Horatapola, near Wadumunnegedera, a site where the disease occurred in a severe form. A "clone" from this planting designated 1.3, which showed very good vigour and virtually no virus symptoms, was selected and propagated. Grafts raised with scions from this clone were grown under field conditions in coconut plantations at Walpita

## **SECTION B**

and Madampe. At Walpita, where field conditions were generally favourable and weed hosts almost absent, vines made vigorous growth and produced abundant foliage with no apparent symptoms of virus infection. Few fruits, however, were set. At Madampe, where site factors were adverse, with severe moisture stress periodically and weed hosts abundant, vines showed stress symptoms of the adverse growing conditions and also mild symptoms of virus infection. Few fruits were set.

The field tests so far indicate that the mild strain protected clone will perform well if grown under conditions of good management with adequate irrigation and weed hosts of the virus kept in check. Hand pollination is essential to secure satisfactory fruit set.