D-07 Characterisation of a virus infecting cassava *(Manihot esculenta* L.) growing in Colombo

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Cassava is an important part of the diet of the rural population in Sri Lanka, providing major contributions to calorific content of the diet. It also earns foreign exchange for Sri Lanka. This crop is reported to be infected by a number of viruses worldwide. A disease caused by a gemini virus has been reported locally, but no detailed information is available.

A preliminary survey conducted in Colombo suburbs revealed that cassava is affected by a mosaic type virus infection. Symptoms include mosaic, yellowing and distortion of leaves and stunted growth. Severe infection resulted in poor root yield.

Investigation showed that the virus is both mechanically and graft transmitted to cassava. It is also easily transmitted through contaminated tools and infected cuttings. In mechanically or graft inoculated plants, the foliar symptoms expressed most prominently when the plants were kept at temperatures < 30°C. The virus has a narrow experimental host range and infected only *Chenopodium amaranticolor*, producing necrotic local lesions. In SDS-gel diffusion, it produced a weak precipitin line when an antiserum to papaya ringspot virus (PRSV)-P type was used. The reaction was also weakly positive in an indirect ELISA test. However, the virus did not infect papaya which is a diagnostic host of PRSV-P, suggesting that it could be an isolate of PRSV-W type (previously known as water melon mosaic virus 1,WMV1) which is serologically indistinguishable from PRSV-P.

The disease can be controlled by using virus-free planting materials. The risk of spreading of the virus by vectors should be recognised.