

**Preliminary studies on two viruses infecting two wild plants: *Talinum triangulare* (Jacq) Willd and *Desmodium tortuosum* (SW) DC in Samaru, Zaria, Kaduna State**

**Daudu Oladipupo Yusuf, Yusuf L, Abejide D. R., Dangana, M.C., Thomas T and Adeniyi K**  
Federal University of Technology, Nigeria

In order to find alternative hosts of virus diseases of cowpea in Zaria area, two virus disease symptoms were observed on two wild plants growing near each other at the edge of an experimental field, Department of Biological sciences, Ahmadu Bello University, Zaria. The virus isolate in *Talinum triangulare* was found not to be sap transmissible in all the buffers used at different molarities and pH values; although the virus was found to be seed transmissible in *T. triangulare* and also transmissible through grafting to healthy looking seedlings of *Vigna unguiculata* var. IAR-01-1006. Also symptoms were not observed in whiteflies (*Bemisia tabaci*) inoculated seedlings of the test plants. The virus isolate in *Desmodium tortuosum* however, was found to be sap transmissible to healthy looking seedlings of *D. tortuosum* and a number of other plant diseases especially members of Fabaceae family. Chlorotic local lesions were observed in *Chenopodium amaranticolor*. 0.1M phosphate buffer, pH 7.4 was found to be suitable for isolation and purification of the virus in *D. tortuosum*. The present study has also shed some light on the possible propagation host (*V. unguiculata* var. IAR-01-1006) for *T. triangulare* virus isolate, a propagation and assay hosts (*V. unguiculata* var. IAR-01-1009 and *C. amaranticolor*) for *D. tortuosum* virus isolate. The results obtained suggested that the symptoms observed in the two wild plants were induced by two different virus isolates. It is therefore suggested that further studies like molecular and immunological techniques need to be carried out in order to explore more of the properties of these viruses with the view to develop control measures; since the viruses have shown to be a potential threat to some of the most important Leguminosae crops in the area studied.

dauduoladipupoyusuf@yahoo.com