

MOLECULAR SCREENING OF TISSUE CULTURE BANANA FOR BANANA STREAK VIRUS (BSV)



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ABSTRACT

Banana and plantain (*Musa spp.*) provide millions of people throughout the tropics and sub-tropics with an essential staple food and account for one of the most widely exported fruit in the world. Mass production of in vitro plantlets remains a widely used method for distributing banana plantlets. However, plant tissue culture is only able to clean the plant of fungi and bacteria but not the viruses. Therefore there is a need to screen and index the propagated plants to ensure that only the virus free plantlets are issued from the tissue culture laboratories to the farmers. The objective of this study will be to establish the prevalence of BSV isolates and screen tissue culture banana for BSV and BBTV. Tissue culture banana seedlings will be collected from the screen house at a 4-8 leaf stage and indexed for the presence of BSV using immunocapture PCR and BBTV using PCR. At the end of this study it's expected that the prevalence of BSV and the status of BSV and BBTV in tissue culture banana will be known.