

ABSTRACT

Studies on Cassava Bacterial Blight
Xanthomonas campestris pv *manihotis*
in Trinidad

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Studies on Cassava Bacterial Blight indicated the presence of the disease in all cassava growing areas of Trinidad. The incidence of the disease was found to be related to total rainfall and its distribution during the wet season.

Highly specific antiserum produced to the pathogen was used to confirm the identity of CBB samples collected throughout fields in Trinidad. Also, the antiserum was used in studies on the dissemination of the pathogen in irrigation and flood waters. Using this technique *Xanthomonas campestris* pv *manihotis* was located as far as 300m from an infected field and specifically in a water catchment area. This finding could be used to explain the local spread of the disease.

Field, greenhouse and tissue culture trials were conducted to determine the degree of resistance in several local and imported cassava materials. Results indicated that several varieties particularly Point Fortin Fine Leaf and CMC 40 showed high levels of resistance and gave good yields under prevailing environmental conditions. On screening for resistance using tissue culture, a new method of testing by determining the depth of penetration of the pathogen in callus tissue was investigated. By this method it was possible to separate the varieties as early as two days after inoculation. The method appears promising and is recommended for further study.