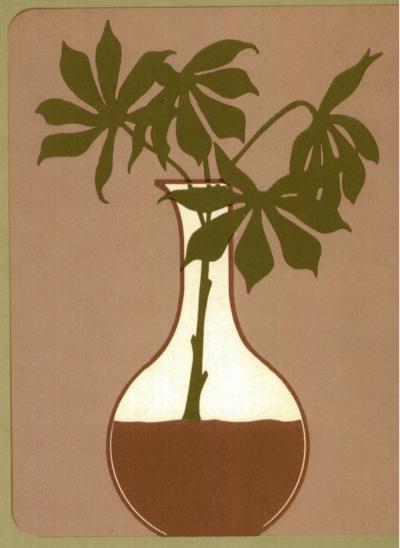
CASSAVA BACTERIAL BLIGHT

report of an interdisciplinary workshop held at IITA, Ibadan, Nigeria, 1-4 November 1976.



Cosponsored by the International Development Research Centre and the International Institute of Tropical Agriculture

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Breeding for Resistance to Cassava Bacterial Blight

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Cassava bacterial blight (CBB) has become serious in the cassava-growing areas in Africa. It is recognized as a potentially more serious disease than cassava mosaic disease (CMD) because it may often cause complete failure of the crop. Serious outbreaks have been reported in Nigeria, Zaire, Cameroon, Benin, Togo, and Ghana, and its high incidence in at least two of these countries suggests that it will be difficult to eradicate. Therefore, the most practical approach is to utilize host-plant resistance to the disease.

The Root and Tuber Improvement Program at IITA has given high priority to breeding for resistance to the disease between 1972 and 1976. Sources of resistance have been identified and efforts have been made to incorporate this resistance into other varieties that are susceptible but that possess other desirable agronomic traits.

Extensive hybridization of selected parents has been made with the resistant clones, and large numbers of progenies of the crosses have been tested for resistance in the field over the past 5 yr. Many clones and families have proven to be consistently highly resistant to the disease in a wide range of environments covering many different ecological areas in Nigeria and Zaire.

The selected individual plants have been cloned and further evaluated for lodging, resistance to other diseases, root and plant characteristics, and yield potential. The most promising clones selected have undergone evaluations in preliminary and advanced yield trials.

Significant progress has been made in producing improved cassava clones with resistance to diseases, especially CBB and CMD, high yield, improved root characteristics, and resistance to lodging. Their quality and acceptability have been tested and found to be good, and a few elite clones have shown consistently superior performance over the years. They have been multiplied and planted in farmers' fields in selected locations in Nigeria. The clones with the best performances under local conditions and cultural practices have now been made available to farmers.