

Case Study Summary: Combatting Cassava Mosaic Virus in Uganda

from Conference Paper 12a. and 12b.

“Saving a Nation Beseiged” by the University of Greenwich

“From Crisis to Confidence: How Improved Cassava Turned the Tide”, by the Gatsby Foundation

1. The Threat

- new, virulent form of mosaic virus appears in Uganda in 1988
- within 6 years the epidemic destroys 80% of cassava production

2. The Response

- NARO imports resistant TMS varieties from IITA
- begins crash breeding with local varieties
- assembles a broad coalition of private and public groups into the National Network of Cassava Workers (NANEC)
- mass multiplication and distribution of improved varieties by NANEC beginning in 1993

3. Why is it considered a success?

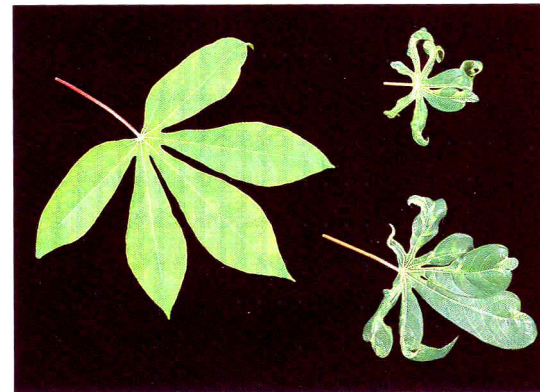
- averted a food crisis, production recovered to pre-epidemic levels within 5 years of introducing resistant varieties
- varietal identification (3 years), multiplication and distribution of cuttings (5 years) all achieved in record time

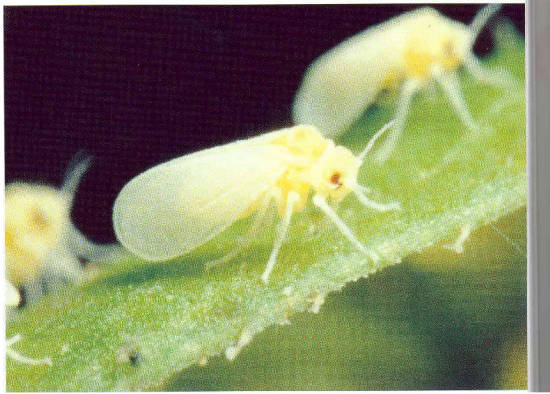
4. Aggregate Impact

- 500 local cassava varieties disappeared
- new resistant varieties restore production back above pre-crisis levels

5. Lessons for Building Future Successes

- strong benefits to regional collaboration and sharing of genetic material
- sustained scientific capacity instrumental in ensuring effective crisis response as well as ongoing productivity gains
- initial multiplication of cutting requires one-time coordinated push by public agencies; private seed companies face negligible financial incentives to propagate cassava cuttings





White fly transmits CM virus.

Infected plants (right) wither.

