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# plant disease

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## Disease Notes

### First Report of Cucumber Mosaic Cucumovirus Subgroup 1 in South Africa, from Banana with Infectious Chlorosis

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Cucumber mosaic cucumovirus (CMV) is the etiological agent of infectious chlorosis disease in bananas (*Musa* spp.). In South Africa, diagnosis of CMV on banana has been based only on symptoms (1). A Grande Naine (Cavendish, AAA) plant with typical infectious chlorosis disease was obtained from Letsitele. Sap from this plant was inoculated to indicator plants. Virus was isolated by two serial local lesion transfers on *Chenopodium quinoa* and maintained on *Nicotiana benthamiana*. It was identified as a subgroup I CMV based on its reaction to CMV DTL-, but not CMV ToRS- monoclonal antibodies in double antibody sandwich (DAS)—enzyme-linked immunosorbent assay (ELISA). The identity was further confirmed by the polyhedral particle morphology under the electron microscope by negatively staining, and decoration in immunoelectron microscopy with antiserum to a local tomato isolate of CMV. Infectious chlorosis disease symptoms were induced by sap inoculation to healthy Grande Naine plants, and the virus detected by ELISA. This is the first confirmed diagnosis of CMV on bananas in South Africa. The isolate was deposited in the PPRI Virus Collection.

*Reference:* (1) B. Q. Manicom. 1993. Pages 102–103 in: Handbook of banana growing in South Africa. J. C. Robinson, ed. Agric. Res. Council, Inst. Trop. Subtrop. Crops, Nelspruit, South Africa.

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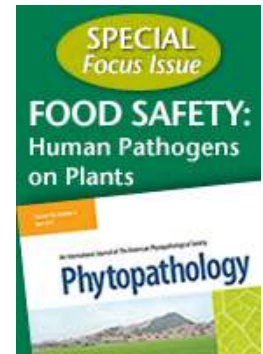
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