

# plant disease

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## Disease Notes

### Detection of *Sorghum yellow banding virus* Infecting Grain Sorghum in Venezuela

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Naturally infected grain sorghum plants (*Sorghum bicolor*) in Maracay, Aragua State, showed yellow speckles, streaks and bands with chlorosis, stunting, and necrosis. A virus was mechanically transmitted to 3 to 10% of inoculated sorghum cvs. Atlas and Himeca-303 plants in the greenhouse. They developed symptoms similar to those in the field within 20 days after inoculation. The virus infected a narrow range of the gramineous species. It was not transmitted by *Rhopalosiphum maidis*, *Schizaphis graminum*, *Peregrinus maidis*, *Dalbulus maidis*, nor *Hortensia similis*, nor by sorghum seed. The virus was purified three times from fresh infected tissue giving yields as high as 14.7 mg/100 g. The  $A_{260}/A_{280}$  was 1.55. The virions were isometric, 25 nm in diameter, and contained a single capsid protein with a molecular weight of approximately 29 kDa. The virus was highly stable in sap. The virus was not serologically related to eight small isometric viruses that infect Gramineae species but did react in agar double-diffusion tests with antiserum (supplied by R. W. Toler) to *Sorghum yellow banding virus* (SYBV), a virus that affects sorghum and sorghum x sudangrass hybrids in Texas and California (1). Based on the above characteristics, the virus is considered to be SYBV. This disease has not been found in other states in Venezuela. This is the first report of SYBV infecting grain sorghum in Venezuela.

*Reference:* (1) V. A. Klaassen and B. W. Falk. *Phytopathology* 79:646, 1989.