Mini data sheet on *Tomato golden mosaic begomovirus*

Added in 2000 – Deleted in 2001

Reasons for deletion:
Tomato golden mosaic begomovirus was already covered by the list of *Bemisia*-transmitted viruses in EU regulations. It was not considered to be an alert situation. In 2001, it was therefore removed from the EPPO Alert List.

Tomato golden mosaic begomovirus

Why	*Tomato golden mosaic begomovirus* came to our attention as causing an emerging disease of tomato in the Americas. The disease was first reported in Brazil in 1975, and more recently in Costa Rica (Rosset *et al*., 1990).
Where	Brazil, Costa Rica.
On which plants	Tomato (*Lycopersicon esculentum*).
Damage	Stunting and severely deformed young leaves and shoots, bright yellow mosaic. The disease was first reported in Brazil in 1975, but did not cause significant losses. However, since 1994, a sharp increase of symptoms has been observed on tomato in several areas occurring simultaneously with the appearance of the B biotype of *Bemisia tabaci*. Several begomoviruses were found including *Bean golden mosaic*, *Tomato golden mosaic* and *Tomato yellow vein streak begomoviruses*. Damage caused by begomoviruses of tomato are reported to be severe in Brazil (Ribeiro *et al*., 1998; SBV Web site).
Transmission	Transmitted by *Bemisia tabaci*.
Note	It is not clear whether *Tomato yellow mosaic begomovirus* in Venezuela and *Tomato golden mosaic begomovirus* in Brazil are caused by distinct begomoviruses.
Pathway	Infected tomato plants, fruits?, viruliferous *B. tabaci* from countries where *Tomato golden mosaic begomovirus* occurs.
Possible risks	Tomato is an important crop in the EPPO region, both indoor and outdoor, and insect vector is present in many parts of the EPPO region. Data is also lacking on the relationships of this virus with other begomoviruses of tomato present in Brazil, such as *Tomato golden mosaic*, as well data on severity and extent of the disease in Brazil.
Source(s)	Polston, J.E.; Anderson, P.K. (1997) The emergence of whitefly-transmitted geminiviruses in tomato in the Western Hemisphere. Plant Disease, 81(12), 1358-1369. Ribeiro, S.G.; de Avila, A.C.; Bezerra, I.C.; Fernandes, J.J.; Faria, J.C.; Lima, M.F.; Gilbertson, R.L.; Maciel-Zambolim, E.; Zerbini, F.M. (1998) Widespread occurrence of tomato geminiviruses in Brazil, associated with the new biotype of the whitefly vector. Plant Disease, 82(7), p 830. Rosset, P.; Meneses, R.; Lastra, R.; gonzalez, W. (1990) Estimation of loss and identification of the geminivirus transmitted to tomato by the whitefly *Bemisia tabaci* Genn. (Homoptera: Aleyrodidae) in Costa Rica. Manejo Integrado de Plagas, no. 15, 24-35 (abstract). INTERNET GEMINI DETECTive Web site by Dr. Judith Brown, University of Arizona and Dr. Stephen D. Wyatt, Washington State University (US) http://ipmwww.ncsu.edu/nipmn/GEMINI/descriptions/TGMV.html (description and pictures) ITCV Web site - Tomato golden mosaic virus http://www.ncbi.nlm.nih.gov/ITCVdb/ICTVdB/29030038.htm (description) Sociedade Brasileira de Virologia Web site Informativo da SBV, Ano: XII Número: 30 Maio - Agosto de 1998. Opinião: Expansão de geminivirus no Brazil: um grave problem em várias culturas de importância econômica by Bezerra, I.; de Avila, C.; Resende, R.O. http://www.dbbm.fiocruz.br/sbv/inf.html

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