Mini data sheet on *Sinaloa tomato leaf curl begomovirus*

Added in 2000 – Deleted in 2001

Reasons for deletion
Sinaloa tomato leaf curl 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.

Sinaloa tomato leaf curl begomovirus

Why	*Sinaloa tomato leaf curl begomovirus* came to our attention as causing an emerging disease of tomato and capsicum in the Americas.
Where	*Sinaloa tomato leaf curl begomovirus* was first observed in Sinaloa, Mexico, in tomato and capsicum crops in 1989 (Brown *et al*., 1993). It was then partially characterized by Idris & Brown (1998) and considered as a distinct virus. Recently, it was found in Costa Rica. Symptoms were observed, in October 1998, in tomato plantings near Turrialba, and *Sinaloa tomato leaf curl begomovirus* was detected in diseased tomato plants (Idris *et al*., 1999). A virus showing 97-99% similarity with *Sinaloa tomato leaf curl begomovirus* was found in Nicaragua (Rojas *et al*., 2000). Distribution: Costa Rica, Mexico (Sinaloa), Nicaragua.
On which plants	Tomato (*Lycopersicon esculentum*), capsicum (*Capsicum annuum*). Tobacco (*Nicotiana_tabacum*) is reported as a natural host. Experimentally, the virus can cause symptomless infection in aubergine (*Solanum melongena*) which is an unusual feature among begomoviruses from the Americas. However, aubergine crops have not been surveyed and it is not known whether the virus can latently be present on them.
Damage	Tomato: foliar curling and chlorosis, unique purpling on the abaxial side of leaves, and shortened internodes. Capsicum: green-yellow foliar mosaic, shortened internodes and stunting. In Sinaloa, the disease is reported as widespread.
Transmission	Transmitted by *Bemisia tabaci*.
Pathway	Infected tomato, capsicum plants and possibly aubergines?, fruits?, viruliferous *B. tabaci* from countries where *Sinaloa tomato leaf curl begomovirus* occurs.
Possible risks	Tomato and capsicum are important crops in the EPPO region, both indoor and outdoor. The vector is present in many parts of the EPPO region. Data on disease significance in the field is lacking. It is also difficult to appreciate the potential risk presented by latent infections on aubergines.
Source(s)	Brown, J.K.; Idris, A.M.; Fletcher, D.C. (1993) Sinaloa tomato leaf curl virus, a newly described geminivirus of tomato and pepper in west coastal Mexico. Plant Disease, 77(12), p 1262. Idris, A.M.; Brown, J.K. (1998) Sinaloa tomato leaf curl geminivirus: biological and molecular evidence for a new subgroup III virus. Phytopathology, 88(7), 648-657. Idris, A.M.; Rivas-Platero, G.; Torres-Jerez, I.; Brown, J.K. (1999) First report of Sinaloa tomato leaf curl geminivirus in Costa Rica. Plant disease, 83(3), p 303. 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. Rojas, A.; Kvarnheden, A.; Valkonen, P.T. (2000) Geminiviruses infecting tomato crops in Nicaragua. Plant Disease, 84(8), 843-846. 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/STLCV.html (description and pictures)

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