

Mini data sheet on *Potato yellow mosaic begomovirus*

Added in 2000 - Deleted in 2003

Reasons for deletion:

Potato yellow mosaic begomovirus has been included in EPPO Alert List for more than 3 years and during this period no particular international action was requested by the EPPO member countries. In 2003, it was therefore considered that sufficient alert has been given and the pest was deleted from the Alert List.

Potato yellow mosaic begomovirus

Why	<i>Potato yellow mosaic begomovirus</i> came to our attention as causing an emerging disease of potato and tomato in the Americas.
Where	<i>Potato yellow mosaic begomovirus</i> was first described in Venezuela in 1986 on potatoes (Roberts <i>et al.</i> , 1986). A very similar virus was found on tomato crops in Venezuela (Guzman <i>et al.</i> , 1997). These findings were considered as strains or tomato-infecting isolates of <i>Potato yellow mosaic begomovirus</i> . In Venezuela, a virus called <i>Tomato yellow mosaic</i> had been described earlier (in 1963) on tomato crops, and also on potato plants growing in the vicinity of infected tomato crops. It is now considered that <i>Tomato yellow mosaic</i> and <i>Potato yellow mosaic begomovirus</i> are synonyms. <i>Potato yellow mosaic begomovirus</i> was found on tomato crops in the Caribbean: in Guadeloupe (1992), Martinique (1993), Puerto Rico (1994) (Polston <i>et al.</i> , 1998), Trinidad and Tobago (Polston & Anderson, 1997). Distribution: Guadeloupe, Martinique, Puerto Rico, Trinidad and Tobago, Venezuela
On which plants	Potato (<i>Solanum tuberosum</i>), tomato (<i>Lycopersicon esculentum</i>).
Damage	On potato, it causes a bright yellow mosaic, leaf distortion and stunting. On tomato, it causes chlorotic mottling, leaf distortion, leaf rolling and stunting. Epidemic levels were reported on tomato crops from Guadeloupe and Martinique, as many tomato fields had more than 70 % plants showing symptoms. High incidence was also reported on tomato in Trinidad and Tobago. No indication is given on the significance of the disease on potato crops.
Transmission	Transmitted by <i>Bemisia tabaci</i> , and in particular epidemic levels in the Caribbean were associated with <i>B. tabaci</i> biotype B.
Pathway	Infected potato and tomato plants, potato tubers? tomato fruits? viruliferous <i>B. tabaci</i> from countries where <i>Potato yellow mosaic begomovirus</i> occurs.
Possible risks	Potato and tomato are important crops in the EPPO region. The significance of the disease is unknown on potato, but appears to be rather high on tomato crops. The vector is present in many parts of the EPPO region.
Source(s)	Guzman, P.; Arredondo, C.R.; Emmatty, D.; Portillo, R.J.; Gilbertson, R.L. (1997) Partial characterization of two whitefly-transmitted geminiviruses infecting tomatoes in Venezuela. <i>Plant Disease</i> , 81(3), p 312. Morales, F.J., Lastra, R.; de Uzcategui, R.C.; Calvert, L. (2001) Potato yellow mosaic virus: a synonym of <i>Tomato yellow mosaic virus</i> . <i>Archives of virology</i> , 146(11), 2249-2253 (abst.) Polston, J.E.; Anderson, P.K. (1997) The emergence of whitefly-transmitted geminiviruses in tomato in the Western Hemisphere. <i>Plant Disease</i> , 81(12), 1358-1369. Polston, J.E.; Bois, D.; Ano, G.; Poliakoff, F.; Urbino, C. (1998) Occurrence of a strain of potato yellow mosaic geminivirus infecting tomato in the Eastern Caribbean. <i>Plant Disease</i> , 82(1), p 126. Roberts, E.J.F.; Buck, K.W.; Coutts, R.H.A. (1986) A new geminivirus infecting potatoes in Venezuela. <i>Plant Disease</i> , 70(6), p 603.

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