

Mini data sheet on *Zucchini lethal chlorosis tospovirus*

Added in 1999 - Deleted in 2003

Reasons for deletion:

Zucchini lethal chlorosis tospovirus 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.

Zucchini lethal chlorosis tospovirus (a new tospovirus of courgette and cucumber)

Why	<i>Zucchini lethal chlorosis tospovirus</i> came to our attention because it was recently reported as causing a new and severe disease of courgette in Brazil, which can also affect cucumber.
Where	Brazil (São Paulo State, Federal District). It is reported to occur in central areas of Brazil but without further details.
On which plants	First reported on courgette (<i>Cucurbita pepo</i>) and cucumber (<i>Cucumis sativus</i>). During a 1997-99 survey done in Sao Paulo State, the virus was detected in the following species: <i>Cucurbita moschata</i> , <i>C. moschata</i> x <i>C. maxima</i> , <i>C. pepo</i> , <i>Cucumis anguria</i> , <i>C. sativus</i> , <i>Citrullus lanatus</i> , <i>Sechium edule</i> and <i>Cayaponia tibiricae</i> (a wild species).
Damage	Infected courgettes showed symptoms of stunting and high yield losses of marketable fruits. Plants infected before flowering usually died within a few days. Plant infected after flowering showed similar symptoms, do not die but do not yield marketable fruits. Affected cucumbers showed yellowing, mottling and vein banding on the leaves (mortality is apparently not reported on this host).
Transmission	A new thrips species, <i>Frankliniella zucchini</i> , has been described and identified as a vector. The virus is not transmitted by <i>Frankliniella occidentalis</i> , <i>F. schultzei</i> and <i>Thrips tabaci</i> .
Pathway	Infected cucurbit plants from Brazil (vegetables?).
Possible risks	Courgettes, cucumbers and other cucurbits are important crops in the EPPO region. Symptoms are severe on courgettes, as plant mortality and high yield reduction is observed. However, more data is needed on the host range and epidemiology of the disease. So far, the vector <i>Frankliniella zucchini</i> has never been reported in the EPPO region.
Source(s)	Bezzera, I.C.; de Resende, O.; Pozzer, L.; Nagata, T.; Kormelink, R.; de Avila, A.C. (1999) Increase of tospoviral diversity in Brazil with the identification of two new tospovirus species, one from chrysanthemum and one from zucchini. <i>Phytopathology</i> , 89(9), 823-830. Nagata, T.; de Resende, O.; Kitajima, E.W.; Costa, H.; Inoue-Nagata, A.K.; de Avila, A.C. (1998) First report of natural occurrence of zucchini lethal chlorosis tospovirus on cucumber and chrysanthemum stem necrosis tospovirus on tomato in Brazil. <i>Plant Disease</i> , 82(12), p 1403. Nakahara, S.; Monteiro, R.C. (1999) <i>Frankliniella zucchini</i> (Thysanoptera: Thripidae), a new species and vector of tospovirus in Brazil. <i>Proceedings of the Entomological Society of Washington</i> , 101(2), 290-294. Rezende, J.A.M.; Galleti, S.R.; de Resende, O.; de Avila, A.C.; Scagliusi, S.M.M. (1997) Incidence and the biological and serological characteristics of a tospovirus in experimental fields of zucchini in São Paulo State, Brazil. <i>Fitopatologia Brasileira</i> , 22(2), 92-95. (abst. on Internet: http://www.sbfito.com.br/sumario3.htm) Yuki, V.A.; Rezende, J.A.M.; Kitajima, E.W.; Barroso, P.A.V.; Kuniyuki, H.; Groppo, G.A.; Pavan, M.A. (2000) Occurrence, distribution, and relative incidence of five viruses infecting cucurbits in the State of São Paulo, Brazil. <i>Plant Disease</i> , 84(5), 516-520.

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