Mini data sheet on *Wheat high plains virus*

Added in 1999 – Deleted in 2002

Reasons for deletion:
Wheat high plains virus 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 2002, it was agreed that it could be deleted, considering that sufficient alert has been given.

Wheat high plains virus (a new disease of maize and wheat in USA)

Why	The High Plains disease came to our attention because it has been reported as a new disease of maize and wheat in USA since 1993.
Where	High Plains (US) (from the Texas panhandle to eastern Nebraska, to central South Dakota, to western Idaho and back through Colorado to eastern New Mexico and Texas) and in Florida (on sweet corn samples). It has also been found on samples of sweet corn from Brazil and Chile. Preliminary results of tests tend to suggest that the *High Plains virus* occurs in other countries from other parts of the world, but this awaits confirmation.
On which plants	Maize and wheat (severe symptoms). It can also infect: barley, oat, rye and grasses like *Bromus secalinus*, *Setaria glauca*, *Setaria viridis*.
Damage	Stunting, chlorosis with flecking or streaking, reddening of leaf margins on maize. In severe cases, mortality has been observed. Chlorotic spots, mosaic, general yellowing on wheat.
Possible identity	Thought to be a virus, not yet identified. It is suggested that it could be a member of a possibly new group of pathogens transmitted by eriophyid mites and which produce large double membrane-bound bodies in infected cells. This group of pathogens could include fig mosaic, rose rosette, thistle mosaic, redbud yellow ringspot and *Wheat spot mosaic virus*.
Transmission	May be vectored by the wheat curl eriophyid mite (*Aceria tosichella)*. Seed transmission has been demonstrated at a very low level in sweet maize, no data for wheat.
Pathway	Infected seeds?
Possible risks	Cereals are important crops. Symptoms can be severe. Gramineous weeds can carry the pathogen. The vector *Aceria tosichella* occurs in Europe (at least in a few countries: more data needed). Seed transmission can occur, but more data is needed.

Source(s)

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Seifers, D.L.; Harvey, T.L.; Louie, R.; Gordon, D.T.; Martin, T.J. (2002) Differential transmission of isolates of the *High Plains virus* by different sources of wheat curl mites. Plant Disease, 86(2), 138-142.

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