

Department for Environment Food & Rural Affairs

Recommendation for interceptions and findings of Spiranthes Mosaic Virus 3

November 2014

This is the result of a brief assessment of readily available literature which indicates that statutory action against this organism is unlikely to be appropriate.

Species / Taxonomic group	Spiranthes Mosaic Virus 3 (SpiMV3)
Reason for	Spiranthes Mosaic Virus 3 was detected on plants of Phlox at a propagating
assessment	nursery during routine inspections in 2013. This was the first UK finding of the
	virus.
Pest	<i>SpiMV3</i> has only been reported from the USA. The infected <i>Phlox</i> mother plants
distribution	had been imported from the Netherlands four years previously. It may be more
	widespread than currently reported.
Hosts	The current virus host range is reported as various species of <i>Phlox</i> and the
	orchid Spiranthes ceruna. SpiMV3 is a potyvirus, and very likely to be
	transmitted in a non-persistent manner by aphids.
Pest status	Symptoms in S. ceruna are described as leaf distortion with mild to severe
	mosaic and occasional mild chlorotic blotching. Symptoms observed in <i>Phlox</i>
	were mild mottling and delamination of the lower epidermis of the leaf.
Potential	The status of the pest in the UK is unknown. The infected mother plants were
distribution	destroyed, but had been used for propagation for four years. Potential aphid
and impact	vectors of the pest are also widespread and common. Thus SpiMV3 is very likely
•	to be able to establish in the UK. Potential impacts are likely to be limited –
	viruses of <i>Phlox</i> are a common problem and there is no evidence that <i>SpiMV3</i> is
	more damaging than other viruses found in <i>Phlox</i> . Significant impacts have also
	not been reported in <i>S. ceruna.</i>
No statutory action is recommended because:	
The pest is likely to already be established in the UK	
Viruses of <i>Phlox</i> are a common, and many have similar symptoms, making future detection of the	
pest difficult.	
It is unlikely to be more damaging than other viruses of <i>Phlox</i>	