First Confirmation Of Soybean Vein Necrosis In Ontario

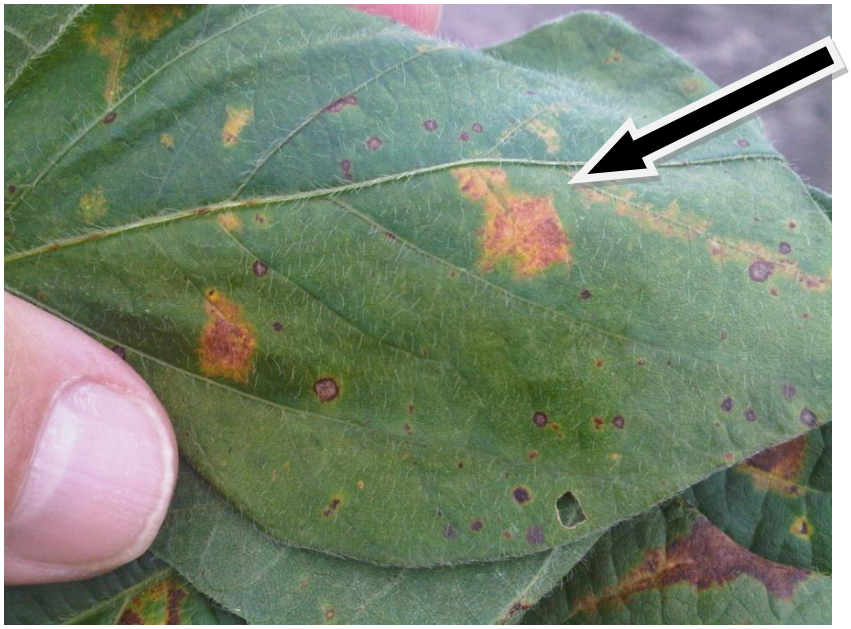
Soybean Vein Necrosis Virus (SVNV) was confirmed in September, 2012 by the University of Guelph Pest Diagnostic Clinic from soybean leaf samples collected in Chatham-Kent and Elgin counties as part of OMAFRAs participation in North American monitoring efforts for soybean foliar diseases such as soybean rust, frogeye leafspot, etc.

SVNV is a new soybean disease which was first identified in Tennessee in 2008. Since then the disease has been reported in many other States and most recently in bordering Great Lake States such as Ohio, New York and Michigan. The disease has most likely been present in soybeans for many years but could have gone misdiagnosed since symptoms look very similar to Cercospora leaf blight (Cercospora kikuchii), scald (sunburn), plant stress response and others.

What is SVNV?

The virus belongs to the Tospovirus group which includes Tomato Spotted Wilt Virus which is vectored by thrips and possible other insects. The hot and mostly dry conditions this year were good for not only spider mites but thrips as well. There is not a lot known about SVNV and many questions need to be answered before we get a better understanding of the potential impact of this new disease in Ontario. Currently SVNV poses a low economic, or yield risk to Ontario soybean fields. But further studies are needed especially where infection or defoliation of fields, is occurring earlier in the season.

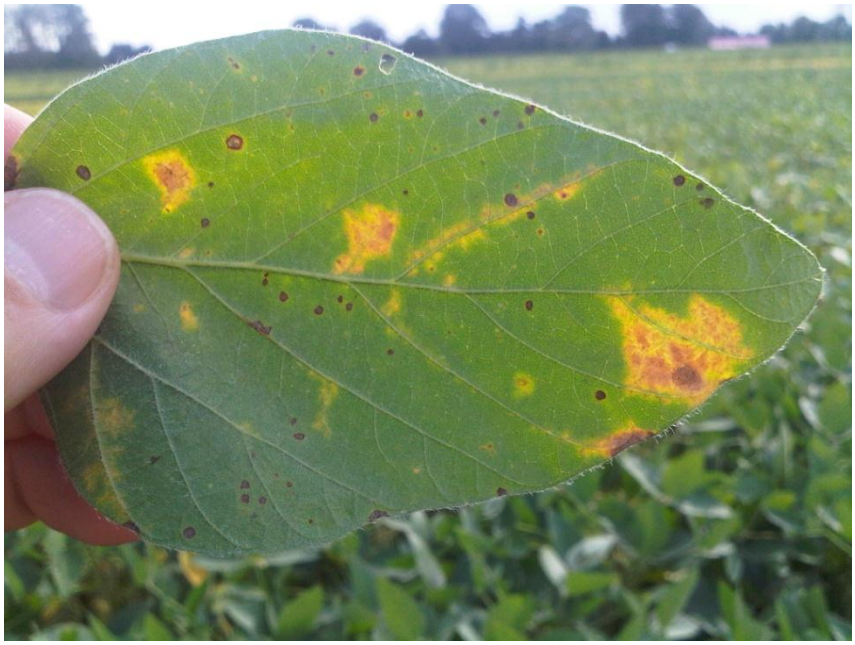
What to Look For?



Symptoms often begin as chlorotic (light green to yellow) patches near the main veins which may enlarge eventually becoming necrotic (brown) areas.

The veins may appear clear, yellow or dark brown in colour.

The browning of the veins may be especially noticeable on the lower leaf surface but this may not always occur. Holding a leaf up to the sun (backlight) will help in viewing foliar leaf symptoms).



Next Steps:

OMAFRA will continue to monitor for SVNV as well as other field crop diseases and pests in 2013.

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