Soybean Vein Necrotic Virus Beginning To Emerge In Some Fields

DR. DON HERSHMAN

PRINCETON, KY.

newly described soybean virus disease, soybean vein necrosis virus (SVNV), is beginning to appear at in many Kentucky soybean fields at this time. The range of symptoms is displayed in Figure 4. The earliest symptoms (Figure 4)

appear as a diffuse clearing of veins in spots with irregular margins. The spots range in size from 0.25 to 0.5 inches in diameter. This symptom will progress into a distinct oak-leaf pattern that is whitish to bright yellow. Over the course of a month, the oak-leaf symptom will turn from yellow to brown. Older lesions (Figure 5) are commonly infected by saprophytic/secondary fungi, especially *Cercospora* spp. Symptoms tend to be most evident in the upper 1/3 of the canopy.

SVNV is thought to be transmitted to soybean by various species of thrips. Thus, the greater the incidence of thrips, the more virus we can expect to see. Very little is known about this disease, including possible yield and/or quality impacts. These aspects of the disease, including the potential for transmission of the virus in seed, are being studied this year in a joint UK-University of Tennessee study funded by the Kentucky Soybean Promotion Board. Evidence to date suggests that the virus is NOT systemic in the plant and is confined to symptomatic areas in leaves. If true, this could limit (but not eliminate) the potential for seed transmission of the virus. Cultivars appear to differ in susceptibility to SVNV, but resistance to the virus has not been confirmed.

As we learn more about SVNV, I will pass along important information. In the meantime, I wanted you to be aware that the virus is now active in Kentucky. $\boldsymbol{\Delta}$

DR. DON HERSHMAN: Extension Plant Pathologist, University of Kentucky



Figure 4. Range of symptoms caused by soybean vein necrosis virus.



Figure 5. Old lesions of soybean vein necrotic-associated virus colonized by a host of secondary fungi, especially *Cercospora* spp. Photos: D. Hershman