

BATTLE RIVER AGRONOMY UPDATE

As if we don't have enough evidence that it is important to maintain a good crop rotation, we received another reminder of it in a recent Grainews article telling us that verticillium wilt was identified in some canola crops in Manitoba this past summer. While this is a new disease to us here in the Canadian prairies, it is a common one in northern Europe and is the #1 disease of oilseed crops in Sweden.

According to a bulletin from the Manitoba Agriculture, Food and Rural Development website, symptoms of the disease most often appear near the end of the season as ripening occurs. While the stem is still green, a vertical yellow or brown band extending up one side of the stem becomes visible. The symptoms appear in these pictures (courtesy of the same Manitoba agriculture article)



Like clubroot, this is a soil borne disease as the microsclerotia overwinters in the soil, and can survive for 10 to 15 years. These microsclerotia germinate in the spring when they are stimulated by chemicals given off by the roots of host plants. The fungus then infects the plant through the roots and spreads upward through the plant's xylem (water transportation system).

While the microsclerotia can survive for years in the soil, their viability will decrease every year.

In Europe they recommend a 3 year minimum rotation to help control the soil populations. However, a 3 year rotation alone is not enough to eliminate the disease. There are presently no crop protection options or genetic resistance in our canola crops for this disease, so the only options are rotation and the kind of sanitation procedures that are recommended for clubroot.

The purpose of this newsletter is not so much that we need to be on the lookout for this particular disease, but to drive home the point that poor rotations lead to problems. Not a new message, but one that we should reflect on as crop plans are being made for the upcoming season.