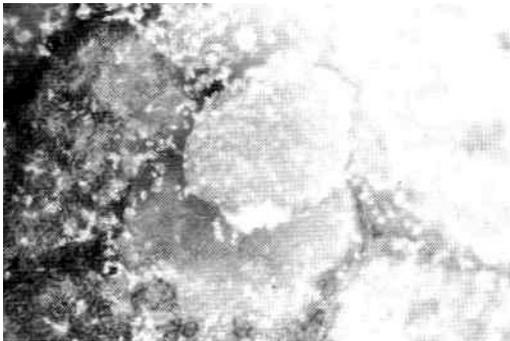


THREE MAJOR FOLIAR PATHOGENS OF POPLAR

Nursery production of poplars, such as aspen, has increased in the Pacific Northwest. Growers should be aware of three major foliar diseases of poplar which have been observed and identified in the Pacific Northwest. They are **rust**, **Marssonina leaf spot**, and **shoot blight**.

Figure 1. Rust on underside of aspen leaf.



Rust is caused by the fungus *Melampsora medusae* Thum. It occurs early in the growing season and results in early defoliation, which in turn weakens the tree leaving it more susceptible to winter kill. This disease is easily recognized by the orange spots which appear on the underside of the leaves (Figure 1). Fungicides registered for rust control are limited to Triforine EC and Acti-dione TGF.



Marssonina leaf spot is caused by the fungus *Marssonina populi* (Lib.) Magn. This disease is recognized by the black spots which appear on the leaves. If recognized very early, the spots may appear as brown flecks which have yellow margins. Wet weather enhances disease development. The disease causes premature defoliation and reduced growth. Figure 2 shows infected aspen leaves. Chlorothalonil is the only registered fungicide for use to control this disease.

Figure 2. Marssonina leaf spot on aspen.

Figure 3. Shoot blight on aspen.



Shoot blight is caused by the fungus *Venturia macularis*. It is characterized by "Shepherd's Crook" appearance of the terminals or the curling of the shoots and side branches and the blackened spots on the leaves. The black spots on the leaves have a curled appearance and are irregular in shape. The disease appears on the current year's growth only and occurs early in the season. **Figure 3** illustrates the destruction this disease can do and shows the symptoms. No chemical control is presently registered for the control of this disease.

Pesticide Use - Due to constantly changing laws and regulations, no liability for the suggested use of chemicals in this Newsletter is assumed by the ONW Newsletter. Pesticides should be applied according to label directions on the pesticide container.

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