WALNUT NOTES

Walnut Anthracnose

Walnut anthiacnose is the most common leaf disease of black walnut. Caused by a fungus, this disease makes walnut trees lose their leaves prematurely. This premature defoliation slows the trees' growth and reduces the quantity and quality of nut crops. Wet weather in which the foliage is covered with moisture for prolonged periods makes the disease more severe.

Dark spots first appear on the leaf blades and petioles in spring as the leaves approach their mature size (fig. 1). The spots may range from a few mm to around one-half inch in diameter. As the season progresses, more spots appear. Eventually, affected leaflets drop prematurely.

Figure 1.-Walnut anthracnose leaf spots.

Control

Control may not be required where trees are being grown exclusively for timber and where disease does not appear each year. But control measures may be needed where trees are being grown for a nut crop or where the site has a history of annual anthracnose epidemics.

Cultural.-Interplant walnut with autumn-olive or Russian olive. The olives interfere with spread of the disease spores from tree to tree, and olive leaves cover fallen infected walnut leaves on the ground. The olives also fix nitrogen in the soil. This helps create a more favorable nitrogen balance in the walnut leaves that makes them more resistant to infection. Nitrogen fertilization of young plantations also suppresses anthracnose infestations.

Chemical.-Apply the fungicide benomyl as a foliar spray, beginning in mid-June. Repeat every 3 weeks. At least four applications may be required for control.

References

Berry, Frederick H. 1981. Walnut anthracnose. Forest Insect & Disease Leafl. 85. Washington, DC: U.S. Department of Agriculture, Forest Service. 3 p.

Black, W. M.; Neely, Dan; Matteoni, James A. 1977. How to identify and control leaf spot diseases of black walnut. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 6 p.

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