MICHIGAN STATE Integrated Pest Management

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Apple scab

Scab, caused by the fungus Venturia inaequalis, is the most important disease of apples in the northern United States. All unprotected green tissue and fruit of apple are attacked by the scab pathogen. Scab lesions on fruit and leaves can distort growth, reduce fruit value. cause defoliation and fruit drop, and weaken the tree. In the early spring, scab fungus, overwintering in apple leaves on the orchard floor, ejects ascospores during rain periods. The ascospores that land on green tissue of the host may initiate new infections if environmental conditions are favorable. The primary scab period ends with the cessation of ascospore production a few weeks after petal fall. However, if scab infections were established during the primary scab period, conidia produced in these infections can infect new tissue in secondary phase of the disease cycle.

Are conditions right for apple scab?

Forecast models for apple scab are available at Enviroweather. Select a weather station from the map that is closest to your location. Then click on "fruit" for a list of weather resources and models for fruit production.

References:

Gadoury and MacHardy, Phytopathology, 72:7, 1982.

A.Stensvand, T. Amundsen, L. Semb, D.M. Gadoury, and R.C. Seem. 1997. Ascospore release and infection of apple leaves by conidia and ascospores of Venturia inaequalis at low temperatures. Phytopathology 87:1046-1053.

Jones, A. L., Lillevik, S. L., Fisher, P. D. and Stebbins, T. C. 1980. A microcomputer-based instrument to predict primary apple scab infection periods. Plant Dis. 64:69-72.

Biggs, A. R. "Apple Scab" in Jones, A. L., and Aldwinckle, H. S. (editors). 1990. Compendium of apple and pear diseases. APS Press, St. Paul, MN.





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