Fire blight of apple blossoms

Fireblight of apples and pears, caused by the bacterium Erwinia amylovora, is a very destructive and difficult disease to manage. The name is due to the blackened appearance of branches, leaves, fruit, and blossoms following a fire blight infection. The pathogen overwinters in cankers. Insects, wind, and rain move ooze from surfaces of reactivated cankers in the springtime to susceptible plant tissue. Warm temperatures, moisture, and physical injury favor spread, entry, and multiplication of the pathogen.

Blossoms are easily infected under warm, wet conditions even without noticeable injury. Infection following petalfall is initiated with trauma such as hail or winds accompanied by warm, wet conditions.

Are conditions right for fire blight?

Forecast models for fire blight available at Enviro-weather. 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:

Steiner, P. W. and G. W. Lightner. 1990. Predicting apple blossom infections by Erwinia amylovora using the Maryblyt model. Acta Horticulturae 273:139-148.

Steiner, P. W. and G. W. Lightner. 1992. Maryblyt, a predictive program for forecasting fire blight disease in apples and pears. University of Maryland, College Park, MD.