

Disease Model Forecasts

Fungal and bacterial pathogens are dependent on free moisture for a minimum time and appropriate temperatures. If these two parameters are met and they are on a susceptible host, disease can develop. All three computerized models below rely on weather station input to function.

Cougarblight and Maryblyt are two forecast models to help predict the potential for fire blight disease in pome fruit. They use the presence of flowers, the historical level of disease pressure in the orchard, and the temperatures that have occurred over the last 4 days or 96 hours to determine the threat level. Based on the information gathered, a warning will be issued when disease is eminent. At this time, apply preventative applications of Blossom Protect™ on your trees.

Maryblyt - Fire blight model:

Use when at least three of the following conditions are met:

- Open and healthy blossom (pistil and anther present)
- > 110 hours at 65°F (18.3°C)
 - Builds the epiphytic population level of the pathogen
- Free moisture (rain or dew) the same day or the day before
- Daily average temperature over 60°F (15.6°C)

For more information, visit:

<http://www.caf.wvu.edu/KEARNEYSVILLE/Maryblyt/index.html> *

Cougarblight - Fire blight model:

Major Parameters:

- The presence of flowers
- The historical level of disease pressure in the orchard
- The temperatures that have occurred over the last four days (96 hours)
- The documentation of a two-hour or more blossom wetting event.

For more information, visit:

http://county.wsu.edu/chelan-douglas/agriculture/treefruit/Pages/Cougar_Blight_2010.aspx *

Xanthocast is a forecast model that helps to predict the potential for walnut blight disease in walnuts. This model is a 7-day cumulative index based on temperature and leaf wetness.

Xanthocast - Walnut blight model:

For more information, visit:

<http://agtelemetry.com/Walnut-Blight-Forecast.php> *

* Westbridge provides these resources as a service and is not responsible for their content or effectiveness.

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