

# PomeBlight

## Quickstart Guide for New Users

MAY 15, 2026

### PREPARED BY:


Michelle Cortens, Perennia Food and Agriculture Corp.


PomeBlight is an automated, web-based tool designed by Perennia to help orchardists monitor fire blight infection risks using real-time data. It provides on-demand predictions based on the Maryblyt™ model to help optimize antibiotic spray timing.

### CREATE A FREE PERENNIA ACCOUNT


Visit the Perennia Farm Data Tools website to create your free account. Click on 'Sign up today!' to register. <https://www.farmdatatools.perennia.ca>. You may need to check your spam/junk email for the verification code.


### SIGN IN AND CONFIGURE SETTINGS

Return to the Farm Data Tools page to sign in. Look to the blue side panel on the left side of the Farm Data Tools platform. Expand or hide the panel using the arrow .

At the bottom, click on the settings button .

*Here you will choose which weather stations to use with the model and whether the crop is apple or pear. The selections are organized by business > farm > field to allow flexibility for large operations.*

You can rename your existing business or create a new business (i.e. The Best Farm). Then click the accordion button next to the business name to open it .


Under the heading Farm Locations, add a new farm  (i.e. Atlanta Farm, Windsor Farm – or organize by your apple blocks vs pear blocks).

Click the accordion next to the new farm name. Under the heading 'Fields', add fields that correspond to your weather stations of interest given the following options:

- **Field name:** (i.e. Atlanta NSFGA)
- **Crop:** (i.e. All Apples)
- **Crop Type:** Choose Apple or Pear – this is very IMPORTANT because the model works differently for apple vs pear.
- **Forecast Station:** The Environment Canada weather station of interest – Kentville or Greenwood for Annapolis Valley orchards.
- **Davis Station:** Choose any on-farm weather station by typing (i.e. Atlanta NSFGA) or select from the map.

Finish by clicking the button . From now on, the field is saved for use on PomeBlight.

### ACCESS THE FREE POMEBLIGHT TOOL



Return to the blue lefthand side panel and click on . Load the model of interest by selecting from the dropdown menus under Organization, Farm, Field, and Growing Year. The sections are explained:

- **Current Conditions:** The last updated data from the chosen weather station.
- **Summary:** An outlook of infection risk that relies on user inputs like blossom date and antibiotic spray date.
- **Forecast:** The weather forecast from the chosen Environment Canada weather station. No edits made in this area are saved if you exit. *Please note: Our forecast is updated more frequently than the Env Can website and temperatures are shifted to align with a 24-hr*

*forecast rather than a morning and overnight forecast.*

- **Historical Records:** The recorded weather from the chosen weather station and associated infection risk. All edits made in this section are saved.
- **Graph:** An optional visual overview.

## BEGIN THE MODEL AT BLOSSOM

By default, the model begins each year at the phenology stage 'Preblossom'. Monitor for the first flower blossom in your orchard that signals the beginning of fire blight blossom infection risk. In PomeBlight, navigate to the row on the date that your first flower opens, then click the edit action . A dropdown menu will appear under the phenology column, select 'Blossom'. Then click the save action . The model begins.

*IMPORTANT: Any edits made to the Forecast section, including phenology, are not saved after you exit. This prevents an override of actual observed conditions with forecast conditions. Therefore, the blossom phenology will save only after you enter it in the Historical Records.*

After 'Blossom' is input in the Historical Records section it is saved indefinitely and blossom risk is modeled until the phenology stage is changed to 'Postblossom'.

## MONITOR BLOSSOM INFECTION RISK

Use the Forecast section to track upcoming fire blight blossom blight risk based on the forecasted weather.

### Four factors are responsible for infection:

1. Blossoms
2. Wetness (>0.25 mm on a given date, or >2.5 mm the previous day, or dew, or self-induced wetness from dilute nonantibiotic spray)
3. Warm average temperature (>15.6°C)
4. Bacterial population known as Epiphytic Infection Potential (EIP) that is greater than 100 (equivalent to 100%). *At 100%, there is*

*sufficient bacterial population to cause an epidemic of blossom blight. We become very concerned when values near 85% because warmer-than-forecast weather can lead to bacterial growth above the 100% threshold.*

When the text turns red, it signals that the threshold for a factor has been exceeded.

The infection risk column estimates the level of infection risk prediction based on the presence or absence of the four factors:

- NA – there are no blossoms
- Low – there are blossoms
- Moderate – blossoms plus one other factor
- High - blossoms plus two other factors
- Infection – all four factors

*Please note: In my opinion, the infection risk prediction based on the original Maryblyt model does not place enough emphasis on the EIP. **The EIP is an important factor to monitor because when the bacterial population exceeds 100%, infection is usually imminent if a wetting event occurs.***

## ENTER ANTIBIOTIC SPRAYS

Consider different management scenarios by forecasting the outcome of an antibiotic spray. In the forecast section and on the date of interest, edit the row and navigate to the column 'Antibiotic Spray', then select 'Yes'. The antibiotic kills the bacteria and resets the EIP to zero. Apply a preventative antibiotic (Streptomycin or Kasumin) based on risk level and EIP value, ensuring antibiotics are applied to open flowers BEFORE wetting triggers an infection happen.

## END THE MODEL AT POSTBLOSSOM

Navigate to the row on the date that your last flower closed, then click the edit action. In the phenology column, select 'Postblossom' from the dropdown menu and save. The model ends.