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FOR IMMEDIATE RELEASE  
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## Bacterial Stalk Rot and Leaf Drop in Tobacco

If you are a tobacco producer you know what 2018 was like. Many producers dealt with crop loss late in the season, and this was one of the problems in many crops. This information is from the Kentucky Pest News and was written by Dr. Emily Pfeufer, Extension Plant Pathologist. You can find this information, including pictures, at <https://kentuckypestnews.wordpress.com>

In 2018, several tobacco crops were severely affected by bacterial stalk rot and leaf drop. This disease does not frequently occur in Kentucky tobacco, but it can result in over 50% leaf loss in the span of only a few days. Some 2018 crops were declared total losses due to this disease.

Last year, symptoms appeared soon after tobacco was topped. Dark brown, elongated lesions extended from the topping wounds. Brown lesions also frequently appeared where leaves join the stalk (leaf axils), and leaves softened and wilted. Leaf veins also darkened and large sectors of leaves quickly became limp and discolored. After only a few days, total leaf loss in the lower half of the tobacco canopy occurred.

The bacterial pathogen *Pectobacterium carotovorum* causes both bacterial stalk rot and leaf drop as well as blackleg in greenhouse transplants. This pathogen is very common in the environment and has a broad host range, including vegetables, fruit, and ornamentals. The bacteria can be found relatively easily in soil, associated with crop debris, and on surfaces and equipment. The pathogen is easily spread by splashing water.

Like many other bacterial diseases, wounded tobacco tissue is more likely to be infected by (susceptible to) the stalk rot pathogen. 2018 fields with significant tobacco stalk rot issues only developed problems when significant rainfall occurred shortly after topping. No agrichemicals would be expected to be effective against bacterial stalk rot and leaf drop.

### Management

- Do not transplant into fields with significant amounts of bacterial stalk rot-affected debris, including those spread with diseased stalks
- Over-fertilization and sidedressing nitrogen applications may worsen bacterial stalk rot
- Avoid topping tobacco if heavy rain is forecasted in the next 24 hours
- Sanitize tools, equipment, and hands after working in a field with bacterial disease symptoms
- Top and harvest fields in order from least to most diseased



## Fire Blight Alert and Risk Map Overview

Every year there are issues with fruit trees in our area. Fire Blight is one of the early problems that we need to be on the lookout for here in Adams County. The following information is from Kentucky. Kentucky is a good source of information for diseases throughout the growing season, as many diseases seem to migrate north as we warm up. This is from Nicole Ward Gauthier, Extension Specialist and Kimberly Leonberger, Extension Associate.

Apple and pear trees are approaching bloom, especially in southwestern Kentucky. Infection by the fire blight bacterium occurs during bloom, thus, protectant antibiotics should be applied when risk is high.

Risk for infection can be assessed using the Fire Blight Disease Prediction Model. Growers can assess local risk by selecting their county and orchard history. This model incorporates the previous 4 days of weather data plus adds a 7-day forecast for estimating leaf wetness and temperature (thereby estimating risk for bacterial growth and infection). There are 66 Mesonet weather stations throughout Kentucky, thus, weather information for the model is based on data from the closest weather station. For a mobile (phone or tablet) friendly version of this site, visit <http://weather.uky.edu/dim.html>.

Remember that apple and pear trees **must be in bloom** for predictions to be accurate. The map overview indicates fire blight risk as of March 17, 2019. According to the current assessment, risk is low due to the cool dry weather. A rain event, however, can increase that risk. Growers are encouraged to check the model regularly for the most accurate analyses and county-specific forecasts.

Information regarding prevention and management of fire blight can be found in:

- Plant Diseases of Fruit Prediction Models for Kentucky Counties ([PPFS-FR-T-07](#))
- Commercial Fruit Pest Management Guide ([ID-232](#))
- Backyard Apple Disease Management Using Cultural Practices ([PPFS-FR-T-21](#))
- Fire blight ([PPFS-FR-T-12](#))
- Fire blight of Apple ([Video](#))

## Dates to Remember

- April 11      2019 Perennial School at the Clermont County Fairgrounds in Owensville. Starts at 8:00 a.m. Register before April 1 for \$40. After April 1 is \$50. Cost includes a continental breakfast, buffet lunch and handouts. To register go to [Clermont.osu.edu](http://Clermont.osu.edu) or call 513-732-7070. Payable by cash, check or money order to “OSU Extension Clermont.” Please return registration form with payment to PO Box 670, Owensville, OH 45160 by April 1. Sorry no refunds.
- April 13      Ohio Tobacco Museum Reverse Raffle at Ripley Elem. School. Tickets still available.
- April 18      Seminar on Herbs – hosted by the OSUE Brown County Master Gardener Volunteers from 7:00 p.m. until 8:00 p.m. Room 208 at the Mt. Orab campus of Southern State Community College. Free and open to the public.