



EASTERN IDAHO

PEST ALERT

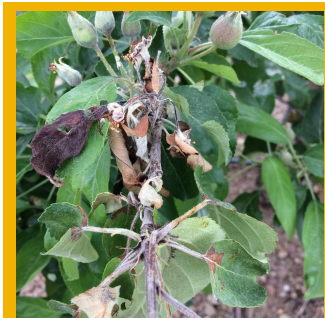
BANNOCK, BINGHAM, BONNEVILLE, CASSIA, FREMONT, JEFFERSON, MADISON, AND TETON COUNTIES

INSIDE THE ISSUE



CODLING MOTH

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FIREBLIGHT

PG 2



PHOTO OF THE WEEK

PG 6



Fireblight

By Ron Patterson, Extension Educator

Fire blight is the most common apple and pear disease in eastern Idaho. Some years it doesn't seem to have a strong presence and others it seems like everything gets hit.

Fire blight is a bacterial infection happens most often during warm, wet weather, through open blossoms. The bacteria can be spread from plant to plant or blossom to blossom by wind-driven rain and pollinating insects. In order for the blossom infection to be completed there needs to be a wetting event while blossoms are open, which can be just a heavy dew.

Most backyard growers will not need to apply an antibiotic if they are diligent. Fire blight symptoms begin to show up two weeks after full bloom. New infections can be pruned out on a dry day as soon as they show up. Pruning tools need to be disinfected between each pruning cut. Rubbing alcohol, 10% bleach solution or disinfectant wipes work. If spray is warranted, it should be applied just before or after a wetting event and is effective for four or five days. Most garden centers carry streptomycin (don't use too often or resistance may develop).

Fire blight risk based on weather forecast—remember that in addition, blossoms must be open, and a wetting event must occur. This is a description of the key words and suggested actions in the chart.

Burley and Pocatello may have open apple blossoms soon.

Exceptional—Outbreak may occur if blossoms are wetted, no matter the blight history of your orchard. Apply antibiotic within 24 hours before or after the wetting event. Biological products should already be present on flowers and may not work as well if only applied at this risk period.

Extreme— Outbreak may occur if blossoms are wetted, no matter the blight history of your orchard. Apply antibiotic within 24 hours before or after the wetting event. Biological products should already be present on flowers and may not work as well if only applied at this risk period.

High—If unprotected flowers are wetted, infection is possible. If flowers are numerous, you may choose to protect every 2 - 3 days with biological product during the high-risk period. Or, apply antibiotic within 24 hours before or after the infection (wetting) event.

Caution—Wetting at this point is not likely to lead to infection, except within a few yards of an actively oozing canker. Continue to closely monitor the fire blight forecast, and consider applying biological sprays to reduce the potential build-up of blight bacteria if High risk is forecast in three or four days.



Burley	May 12 May 13 May 14 May 15 – 18 May 19 May 20 - 28	Caution High Extreme Exceptional Extreme Caution
Pocatello Eastside	May 12 May 13 May 14 May 15 May 16 – 18 May 19 May 20 – 21 May 22 – 28	Low Caution High Extreme Exceptional Extreme Caution High
Pocatello Airport	May 12 May 13 May 14 May 15 May 16 – 18 May 19 May 20 – 28	Low Caution High Extreme Exceptional Extreme Caution
Fort Hall	No open blossoms	
Blackfoot	No open blossoms	
Idaho Falls/Ammon/Shelley	No open blossoms	
Idaho Falls Airport	No open blossoms	
Ucon	No open blossoms	
Rigby	No open blossoms	
Rexburg	No open blossoms	
Sugar City	No open blossoms	
St Anthony	No open blossoms	
Driggs	No open blossoms	

Chemical Controls For Fire Blight	Brand Name	Chemical Name	Application Timing
	Bonide	Fixed-copper	Pre-bloom
	Drexel	Copper Sulfate	When wet weather coincides with flowering
	Kocide	Copper Hydroxide	Note: copper can damage foliage and fruit
	Miller	Lime Sulfur oil	Early bloom, Dormant
	FireLine	Oxytetracycline	Early bloom to petal fall
	Actigard	Kasugamycin Acibenzolar-S-methyl	Early bloom to petal fall

Table and information from Cornell University Extension

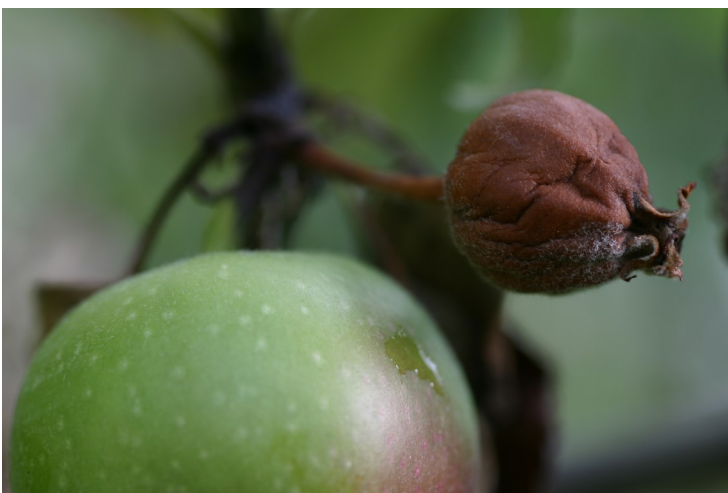
Read and follow pesticide labels with any product

To manage fire blight, it is important to remove diseased wood during the dormant time (before buds form in spring). A general antimicrobial can be put on green tips to lessen chance of disease. Defense inducers can be applied before bloom. Protectants can also be applied during blooming. Protectants should be applied with the onset of wetting events (heavy rain or moisture). Sometimes post-bloom applications to blossoms give continued protection to shoots.

For more information: <https://blogs.cornell.edu/biocontrolbytes/2019/04/26/battling-fire-blight-with-biologicals/>

Biological products for Fire Blight: Cornell University Extension

Product	Active Ingredient	Mode of Action
Firewall	Streptomycin	antibiotic – kills pathogen
Blossom Protect	<i>Aureobasidium pullulans</i> strains DSM14940 & 14941	competitive with pathogen
Bloomtime Biological	<i>Pantoea agglomerans</i> strain E325	competitive with pathogen
BlightBan	<i>Pseudomonas fluorescens</i> strain A506	competitive with pathogen
Serenade Optimum	<i>Bacillus amyloliquefaciens</i> strain QST713	antibiotic metabolites
Double Nickel	<i>Bacillus amyloliquefaciens</i> strain D747	antibiotic metabolites
Serifel	<i>Bacillus amyloliquefaciens</i> strain MBI600	antibiotic metabolites
Regalia	extract of <i>Reynoutria</i> (giant knotweed)	resistance inducer
LifeGard	<i>Bacillus mycoides</i> isolate J	resistance inducer



Codling Moth

By Ron Patterson, Extension Educator

Codling moth

There have been no codling moths in our traps yet. As you prepare for what we hope will be warmer temperatures, consider the following guidelines.

Conventional production options

High fruit damage in past years:

Apply the first application for either Option A (insecticide) or Option B (oil) at the listed date.

For Option A, repeat the insecticide spray 14 days later, for a total of 2 applications in the first generation.

For Option B, apply the insecticide spray at the listed date once.

When the “start date” for the 2nd generation is provided, spray every 10-18 days until Sept. 15.

Pick a different product to use for each generation.

Low fruit damage in past years:

Apply the first application for either Option A (insecticide) or Option B (oil) at the listed date.

For Option A, do not spray again.

For Option B, apply insecticide at the listed date.

Wait until the “start date” for the 2nd generation is provided, and spray on that date, and repeat 14 days later, for a total of 2 sprays.

Do the same for the 3rd generation.

Pick a different product to use for each



generation.

Organic production options (other than bagging)

High fruit damage in past years:

Apply the first application for either Option A (insecticide) or Option B (oil).

For Option A, repeat twice, spaced 7-10 apart, for a total of 3 applications in the first generation.

For Option B, apply insecticide at the listed date and re-apply 7-10 days later.

When the “start date” for the 2nd generation is provided, spray every 7-10 days until Sept. 15.

Pick a different product to use for each generation.

Low fruit damage in past years:

Apply the first application for either Option A (insecticide) or Option B (oil).

When the “start date” for the 2nd generation is provided, spray every 10-14 days until Sept. 15.

Pick a different product to use for each generation.

Codling moth spray schedule

Cool spring temperatures have delayed codling moth emergence and apple trees are just starting to bloom in Pocatello. There have not been any moths trapped yet, but the traps are out and we are keeping an eye on them. This table will provide spray dates for codling moth at the given region. Select the region that has similar climatic conditions to determine when to begin spraying.



Spray Timing Table				
Location	Option A Apply First Spray	Option B		Greatest Period of Egg Hatch
		Apply Oil	Apply First Insecticide	
Burley	unknown	unknown	unknown	unknown
Pocatello Airport	unknown	unknown	unknown	unknown
Pocatello East Side	unknown	unknown	unknown	unknown
Fort Hall	unknown	unknown	unknown	unknown
Blackfoot	unknown	unknown	unknown	unknown
Idaho Falls Airport	unknown	unknown	unknown	unknown
South Idaho Falls	unknown	unknown	unknown	unknown
Ucon	unknown	unknown	unknown	unknown
Rigby	unknown	unknown	unknown	unknown
Ririe	unknown	unknown	unknown	unknown
Rexburg	unknown	unknown	unknown	unknown
Sugar City	unknown	unknown	unknown	unknown
St Anthony	unknown	unknown	unknown	unknown
Driggs	unknown	unknown	unknown	unknown

Ingredient	Efficacy	Residual length (days)	Comments
Conventional			
Carbaryl (old Sevin products)	Good	14	
Gamma-cyhalothrin (Spectracide Triazicide)	Good to Excellent	14 – 17	Last application at least 21 days prior to harvest
Malathion (Bonide Malathion, Hi Yield Malathion)	Good	5 – 7	Max 2 applications; some products are pears only
Zeta cypermethrin (Garden Tech Sevin)	Good to Excellent	14 – 17	Last application at least 14 days prior to harvest
Organic			
Azadirachtin (Safer BioNeem)	Fair to Good	7 – 10	
Codling moth virus (Cyd-X)	Good (if populations low)	7	Works best when used at beginning of generation
Kaolin clay (Surround)	Fair	7	Produces protective barrier
Oil (All Seasons Oil, EcoSmart, Neem)	Fair	3	Recommended for the first application of the generation only
Pyrethrin (Ortho Fruit Spray, Fertilome Fruit Tree Spray, Safer End All)	Good	3 – 5	
Spinosad Monterey/Fertilome Spinosad	Good	7 – 10	Max 6 applications

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UPCOMING EVENTS

MAY 23 IDAHO HOME GARDEN TIPS**FRUIT THINNING****RON PATTERSON, EXTENSION EDUCATOR**

May 23 | 7:00pm MT

This class will cover why it is important to thin fruit in your home orchard. Ron will cover timing and methods of fruit thinning. Come ready to learn and ask your home orchard questions!

PLANT TALK**RON PATTERSON & REED FINDLAY**

May 23 | 7:30pm MT

Following our class on transplants, we will have our Plant Talk question and answer session. Feel free to join us on zoom to ask any of your gardening questions!

JUNE 27 IDAHO HOME GARDEN TIPS**SUMMER WEED CONTROL****TOM JACOBSEN, EXTENSION EDUCATOR**

June 27 | 7:00pm MT

Make sure you get on top of those stubborn weeds this summer! Learn how to identify weeds and the best ways to manage them.

PLANT TALK**RON PATTERSON & REED FINDLAY**

May 23 | 7:30pm MT

Following our class on transplants, we will have our Plant Talk question and answer session. Feel free to join us on zoom to ask any of your gardening questions!



PHOTO OF THE WEEK: Photo credit: Lena Allen

PHOTO OF THE WEEK:

Our wonderful Master Gardeners came on a blustery Saturday morning to help us plant an education orchard in our demonstration garden at the fair grounds. We planted cherries, currants, elderberries, apricots, plums, peaches, apples, and pears. We hope to have many good classes in our orchard in the future!

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