



**EASTERN IDAHO**

# PEST ALERT

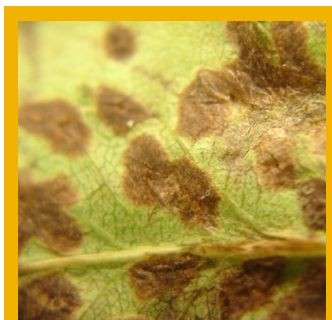
BANNOCK, BINGHAM, BONNEVILLE, CASSIA, FREMONT, JEFFERSON, MADISON, POWER AND TETON COUNTIES

## INSIDE THE ISSUE



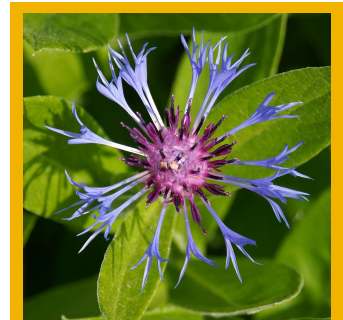
**GOOD**

PG 4



**BAD**

PG 2



**PHOTO OF THE WEEK**

PG 10



**CODLING MOTH**

PG 7



**FIREBLIGHT**

PG 9

# Blister Mites

Ron Patterson, Horticulture Educator  
University of Idaho Extension, Bonneville County  
208-529-1390

## Managing Blister Mites in Pears and Apples

As summer progresses, orchardists may begin to notice unusual brown spots on the leaves of their pear and apple trees. These symptoms are often caused by a

tiny but troublesome pest: the **blister mite**.

Though small in size, blister mites can cause significant cosmetic damage and stress to trees if left unmanaged. The damage is done in early spring so if this pest is a concern for you it is best to prepare now for late-winter or early-spring control activities. Here's what you need to know to identify and control them effectively.

### Identification

Blister mites, also known as **pear leaf blister mites** (*Phytoptus pyri*) and **apple leaf blister mites** (*Eriophyes mali*), are microscopic eriophyid mites. They are invisible to the naked eye, measuring less than 0.2 mm in length, and require a hand lens or microscope for detection.

These mites overwinter under bud scales and become active in early spring, feeding on developing leaves and causing characteristic blistering.

### Symptoms

The first noticeable sign of blister mite activity is the formation of **raised, blister-like galls** on the upper surface of leaves. These blisters may start out green but often turn **reddish or brown** as the season progresses. On the underside of the leaf, the affected area may appear **sunken and discolored**.



Photo: Reed Findlay



Photo: Ron Patterson

In severe infestations, leaves may become distorted or drop prematurely, and fruit quality can be indirectly affected due to reduced photosynthesis.

## Integrated Pest Management (IPM) Strategies

To manage blister mites effectively, it's essential to apply treatments in early fall, before leaf drop, when mites are migrating from leaves to buds or in the spring. Organic options include horticultural oil, which can be applied to the leaves and buds, and sulfur, which can be used as a dust or spray. For more severe infestations, carbaryl can be used, but it should be applied carefully and according to label instructions to avoid harming beneficial insects.

Effective control of blister mites involves a combination of cultural, biological, and chemical methods:

### 1. Monitoring

- Begin scouting in early spring, especially around bud break.
- Look for early signs of blistering on young leaves.

Use a hand lens to inspect buds and leaf undersides.

**2. Cultural Controls**—Maintain tree vigor through proper fertilization and irrigation.

### 3. Biological Controls

- Encourage natural predators such as **predatory mites, minute pirate bugs** and **lacewings**.

Avoid broad-spectrum insecticides that may harm beneficial insects.

### 4. Chemical Controls

- Dormant oil sprays applied in **late winter or early spring** can help smother overwintering mites.

In severe cases, miticides labeled for eriophyid mites may be applied **post-bloom**, but always follow local guidelines and label instructions.

### Final Thoughts

While blister mites rarely cause long-term damage, their presence can be unsightly and stressful for trees. By integrating monitoring and management strategies, growers can keep these pests in check and maintain healthy, productive orchards.

### Learn More:

<https://treefruit.wsu.edu/crop-protection/opm/blister-mites/>

<https://ipm.ucanr.edu/PMG/GARDEN/FRUIT/PESTS/pearlfblmite.html>



Blister Mite damage, Utah State University

# Native Allies: Welcoming the Painted Lady Beetle to Your Garden

Article and Photos: Ron Patterson, Horticulture Educator



This summer I have had a couple of encounters with a beautiful native ladybug beetle.

In the world of beneficial insects, ladybug beetles (ladybugs, lady beetles, ladybird beetles) are often celebrated for their pest-fighting prowess. While many gardeners are familiar with the classic red-and-black ladybugs, fewer know about the subtle and striking *Mulsantina picta*, also known as the **painted lady beetle**. This native species is a quiet hero in natural pest control and deserves a place in every pollinator- and predator-friendly garden.

## Identification

*Mulsantina picta* is a small, oval-shaped lady beetle,

typically measuring **3.5–5 mm** in length. It can be identified by:

- **Coloration:** Pale yellow to tan elytra (wing covers) with **variable black markings**, often forming a marbled or painted appearance.
- **Thorax:** The pronotum (area behind the head) is usually pale with a central dark marking.

**Larvae:** Like other lady beetles, the larvae are elongated, dark, and covered in small spines.

This species is often found in **coniferous forests**, but it also visits gardens and orchards, especially where aphids and scale insects are abundant.

## Benefits in the Garden

Painted lady beetle is a **voracious predator** of soft-bodied insects, including:

- **Aphids**
- **Scale insects**
- **Mites**

## Mealybugs

By feeding on these pests, it helps reduce the need for chemical insecticides and supports a balanced garden ecosystem. Its presence is a strong indicator of a healthy environment.



## How to Encourage and Protect Painted Lady Beetles

To attract and support this beneficial beetle in your garden, consider the following strategies:

### 1. Plant Native Vegetation

- Include **native flowering plants and shrubs**, especially those that support aphid populations early in the season.

Conifers like **pine and spruce** can provide overwintering habitat.

### 2. Provide Shelter

- Leave **leaf litter, bark, and mulch** undisturbed in parts of your garden to offer hiding and overwintering spots.

Avoid excessive cleanup in fall and early spring.

### 3. Avoid Pesticides

- Refrain from using broad-spectrum insecticides, which can harm both adult beetles and their larvae.

Use **integrated pest management (IPM)** strategies to control pests selectively.

### 4. Create a Diverse Habitat

- Encourage a mix of **flowering plants, shrubs, and trees** to support a wide range of insect prey and microhabitats.

Include **early-blooming plants** to provide nectar and pollen when insect prey is scarce.

## Final Thoughts

*Mulsantina picta* may not be as flashy as its spotted, red cousins, but its role in natural pest control is just as important. It's presence indicates a resilient and ecologically balanced landscape.

# Codling Moth

## Conventional production options

### •*High fruit damage* in past years:

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

Unusual weather patterns this year have given us odd egg hatch data. This table will provide spray dates for codling moths at the given region. Select the region that has similar climatic conditions to determine when to begin spraying. These tables will adjust as the actual weather conditions dictate as opposed to forecast weather.

1 <sup>st</sup> Generation Spray Timing Table					
Location	Option A Apply First Spray	Option B		Greatest Period of Egg Hatch 1 <sup>st</sup> Generation	End of 1 <sup>st</sup> Genera- tion
		Apply Oil	Apply First Insecticide		
Burley	passed	passed	passed	passed	July 12
American Falls	passed	passed	passed	passed	July 15
Preston	passed	passed	passed	passed	July 11
McCammon	passed	passed	passed	passed	passed
Pocatello East & South Side	passed	passed	passed	passed	passed
Pocatello Airport/Chubbuck	passed	passed	passed	passed	July 11
Fort Hall	passed	passed	passed	passed	July 14
Blackfoot	passed	passed	passed	passed	July 16
South Idaho Falls, Ammon. Iona	passed	passed	passed	passed	July 16
Idaho Falls Airport	passed	passed	passed	passed	July 17
<a href="#">Ucon</a>	no trap	no trap	no trap	no trap	no trap
Rigby	passed	passed	passed	passed	July 25
Ririe	passed	passed	passed	June 20 – July 18	July 31
Rexburg	passed	passed	passed	passed	July 19
Sugar City	passed	passed	passed	June 22 – July 12	July 28
St Anthony	passed	passed	passed	June 24 – July 14	July 29
Driggs	passed	passed	passed	June 30 – July 16	July 31
Star	passed	passed	passed	passed	passed

2nd Generation Spray Timing Table			
Location	Beginning of egg hatch	Greatest Period of Egg Hatch 2 <sup>nd</sup> Generation	Continue protection through Sep 15
Burley	July 22	Aug 3 – unknown	Sep 15
American Falls	July 24	Aug 6 – unknown	Sep 15
Preston	July 20	July 31 – unknown	Sep 15
McCammon	July 17	July 29 – Aug 11	Sep 15
Pocatello East & South Side	July 14	July 25 – Aug 9	Sep 15
Pocatello Airport/Chubbuck	July 21	Aug 8 – unknown	Sep 15
Fort Hall	July 25	Aug 8 – unknown	Sep 15
Blackfoot	July 25	Aug 6 – unknown	Sep 15
South Idaho Falls, Ammon. Iona	July 26	Aug 9 – unknown	Sep 15
Idaho Falls Airport	July 27	Aug 10 – unknown	Sep 15
Ucon	no trap	no trap	no trap
Rigby	Aug 8	unknown	Sep 15
Ririe	Aug 10	unknown	Sep 15
Rexburg	July 29	unknown	Sep 15
Sugar City	Aug 7	unknown	Sep 15
St Anthony	Aug 8	unknown	Sep 15
Driggs	Aug 10	unknown	Sep 15
Star	passed	July 1 – July 13	Sep 15

## Codling Moth

Backyard: The table below provides some options for backyard trees. This table is not all-inclusive, but just provides some examples. The products listed are not an endorsement. For the product you decide to use, the “active ingredients” are listed in small print on the lower right or left of the front label. Sometimes there are several ingredients, sometimes, just one. Some materials last longer than others, and the time between sprays is not always listed on the label.

Product Name	Efficacy	Residual Length (days)	Comments
<b>CONVENTIONAL</b>			
Spectracide Triazicide (gamma-cyhalothrin)	Good to Excellent	14-17	wait 21 days to harvest
Monterey Bug Buster 11 (esfenvalerate)	Good to Excellent	14-17	wait 21 days to harvest
Bonide Fruit Tree & Plant Guard (lambda-cyhalothrin)	Good to Excellent	14-17	wait 21 days to harvest
Bonide Malathion; Hi Yield Malathion	Good	5-7	max 2 applications; some products are pears only
GardenTech Sevin (zeta-cypermethrin)	Good to Excellent	14-17	wait 14 days to harvest
<b>ORGANIC</b>			
AzaSol, EcoGarden (azadirachtin)	Good	7-10	
Cyd-X (codling moth virus)	Good (if populations are low)	7	works best when used at beginning of generation; expensive and purchase online
oil such as All Seasons Oil, EcoSmart, Neem oil	Good on eggs only	3	recommended for first application of the generation only
Ortho Fruit Spray; Fertilome Fruit Tree Spray; Safer End All; Bonide Orchard Spray (all contain pyrethrin)	Good	3-5	
Monterey / Fertilome Spinosad; Captain Jack's Deadbug Brew; Natural Guard (all contain spinosad)	Good	10	max 6 applications per season; if applying to peach or cherry, can re-apply after 7 days

## Fireblight

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 you do still have open blossoms on your apples and pears you only need to worry about spraying just before or after a wetting event like rain or heavy dew.

Chemical Controls For Fire Blight	Brand Name	Chemical Name	Application Timing
	<a href="#">Bonide</a>	Fixed-copper	Pre-bloom
	<a href="#">Drexel</a>	Copper Sulfate	When wet weather coincides with flowering
	<a href="#">Kocide</a>	Copper Hydroxide	Note: copper can damage foliage and fruit
	<a href="#">Miller</a>	Lime Sulfur oil	Early bloom, Dormant
	<a href="#">FireLine</a>	Oxytetracycline	Early bloom to petal fall
	<a href="#">Actigard</a>	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. Resistance 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

## EASTERN IDAHO

## PEST ALERT

## UPCOMING EVENTS

**JULY 22** IDAHO HOME GARDEN TIPS

CHIP BUD GRAFTING FRUIT TREES  
BRACKEN HENNDERSON,  
EXTENSION EDUCATOR

July 22 | 7:30pm MT

<https://uidaho.zoom.us/j/92616335377>

**PLANT TALK Q&A**

RON PATTERSON & REED FINDLAY

July 24 | 7:30pm MT

**AUGUST 12** IDAHO HOME GARDEN TIPS

DEER PROOFING YOUR YARD  
SARA MAHDAVI, CLINICAL ASSISTANT  
PROFESSOR

August 12 | 7:00pm MT

<https://uidaho.zoom.us/j/92616335377>

**PLANT TALK Q&A**

RON PATTERSON & REED FINDLAY

August 12 | 7:30pm MT

**AUGUST 19** IDAHO HOME GARDEN TIPS

LATE SEASON FLOWERS

**AUGUST 26** IDAHO HOME GARDEN TIPS

DEHYDRATING YOUR HARVEST

**SEPTEMBER 9** IDAHO HOME GARDEN TIPS

OTHER SPECIES FECES-  
UNDERSTANDING MANURES

**SEPTEMBER 23** IDAHO HOME GARDEN TIPS

FREEZE DRYING YOUR HARVEST

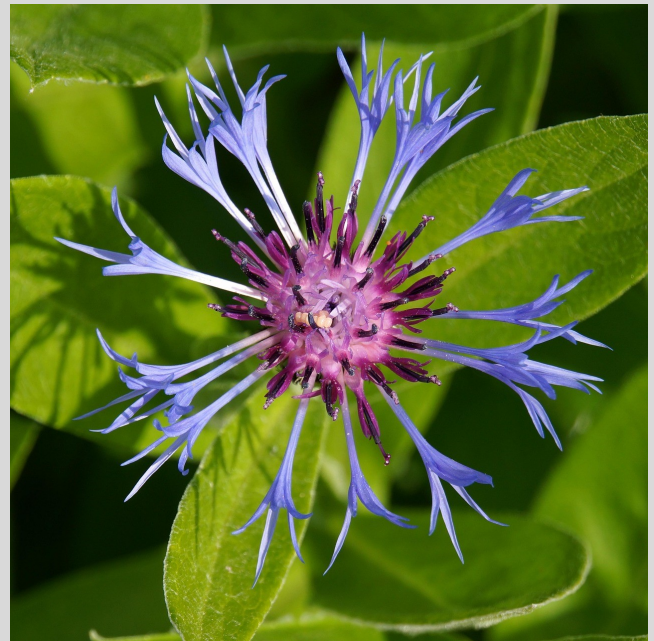


PHOTO OF THE WEEK: Photo credit: Hietaparta

## PHOTO OF THE WEEK:

I was recently introduced to perennial centaurea or bachelor buttons/cornflower by a neighbor who has the most beautiful patch of them! They do seem to spread, but not as readily as their annual counterparts. And look at that interesting flower!

UNIVERSITY OF IDAHO  
EXTENSION, BONNEVILLE COUNTY

1542 E 73rd S

Idaho Falls, ID 83402

Phone: (208)529-1390

Fax: 208-888-8888

Email: Bonneville@uidaho.edu

Web: [uidaho.edu/extension/county/bonneville](http://uidaho.edu/extension/county/bonneville)



Facebook.com/  
UIExtensionBonneville



[https://www.instagram.com/  
bonnevilleidaho/](https://www.instagram.com/bonnevilleidaho/)