

Mayhaw Pest Management

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Mayhaw Diseases

RUST ON MAYHAWS

G. clavipes – Quince Rust (Most Important)

G. juniper-virginianae – Cedar Apple Rust

G. Globosum – Hawthorn Rust

***GYMNOSPORANGIUM* RUST**

REQUIRE ALTERNATE HOSTS

Winter Hosts

Junipers, Red Cedar

Spring, Summer Hosts

Rose Family over 480 species 11 generic groups

**(Apple, Hawthorn, Quince, Pear, Photinia,
Cotoneaster, Serviceberry, etc)**



Quince Rust on Red Cedar Limb

**Quince Rust
Sporulation On
Alternate Host
(Red Cedar)**



**Quince Rust
on
Mayhaw fruit**



Quince Rust Deformed Stem





Cedar-Apple Rust and Hawthorn Rust infect leaves.



Severe Leaf Infection can Cause Leaf Drop



Cedar Apple Gall on Red Cedar



Hawthorn Rust Telia Horns on Cedar

Mayhaw Fungicides

- **Rally**
- **Sovran**
- **Flint**
- **Rampart**
- **Inspire Super**
- **Topguard**
- **Aliette**
- **Serenade**
- **Sonata**
- **Pristine**
- **Phostrol**
- **Other ??**

CHECK LABELS

Before Using Pesticides

- **Safety Requirements**
- **Crops Labeled**
- **Pests Controlled**
- **When and How to Use**
- **Usage Rates**
- **Reentry Period (REI)**
- **Time Between Application & Harvest (PHI)**

**Information Provided in this
Presentation are Guidelines**

**Usage Rates and Application
Methods, Crop Labeled, Safety
Requirements, etc. may Change
with Formulation and Label
Changes**

**No Endorsement or
Discrimination of Listed or
other Unlisted Labeled Products
is Intended.**

**Information Provided for
Educational Purposes Only.**

Rally 40WSP

(Myclobutanil)

Rusts, Powdery Mildew, Scab

2.6 – 6.0 oz/acre

REI = 24 hours PHI = 14 days

Flint

(trifloxystrobin)

Rust, Scab, Powdery Mildew

2.0 – 2.5oz/acre

REI = 12 hours PHI = 14 days

7 – 10 day interval

do not use more than 4 times

Topguard Fungicide

(Flutriafol)

**Quince Rust, Cedar Apple Rust,
Powdery Mildew**

8 –12 fl oz/acre

REI = 12 hours PHI = 14 days

Pristine

(Combination Boscalid & Pyraclostrobin)

Quince Rust Suppression

14.5 - 18.5 oz/acre

REI = 12 hours PHI = 0 days

7 -14 day schedule

Inspire Super

Combination Difenoconazole & Cyprodinil

Rusts, Powdery Mildew, Scab

12 oz/acre

REI = 12 hours PHI = 14 days

7 – 10 day schedule

Fosphite, Rampart

(Potassium Salts of Phosphorous Acid)

Fire Blight, Phytophthora, Pythium

1 – 3 qts/acre in 100 gal of water

REI = 4 hours

PHI = 1 day

4 -21 day schedule

Serenade OPTI

(QST 713 strain of *Bacillus subtilis*)

Fire Blight Suppression

Quince Rust ?

14 – 20 oz/acre

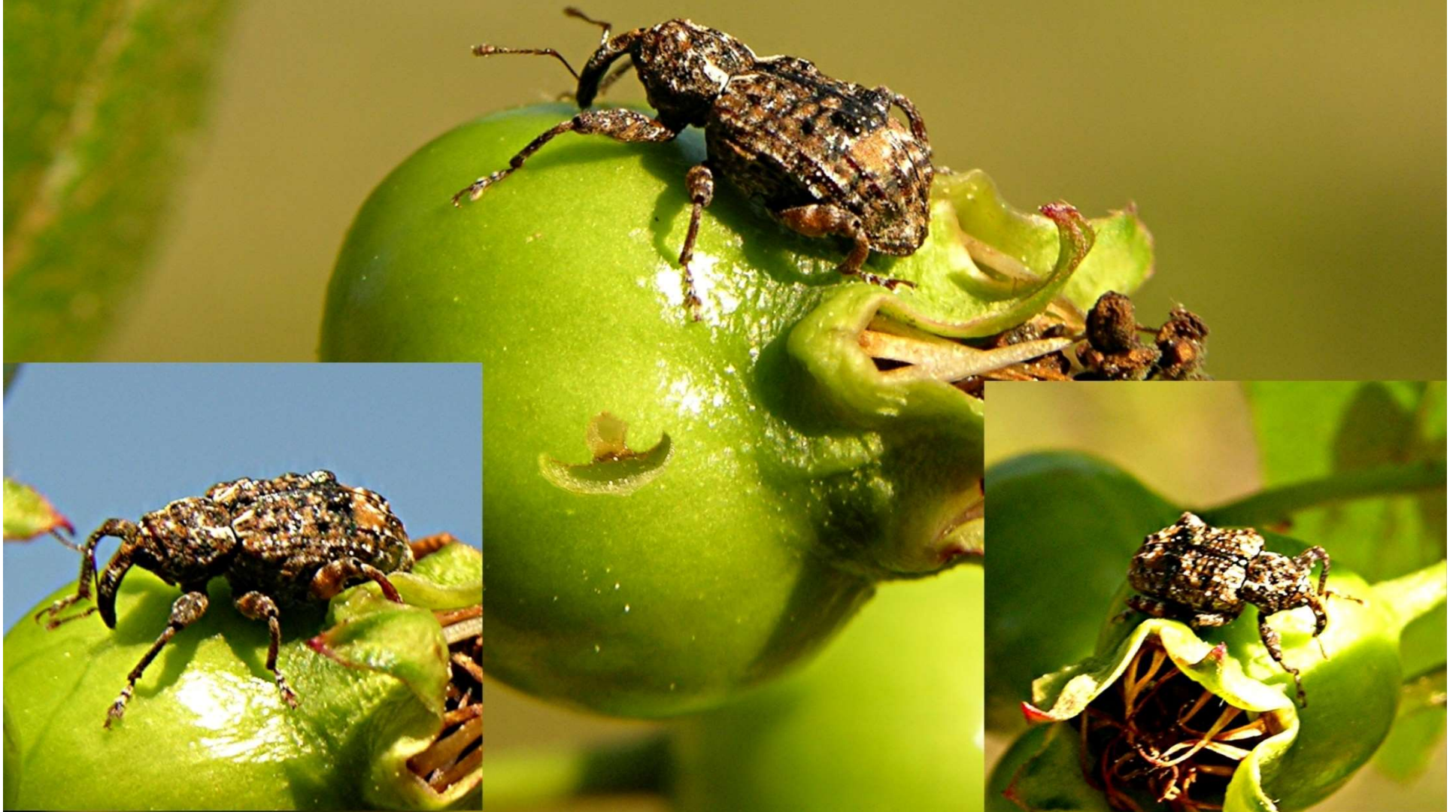
REI = 4 hours PHI = 0 days

2-7 days during peak bloom

7 day interval after bloom

Mayhaw Insects

Plum Curculio





Plum Curculio

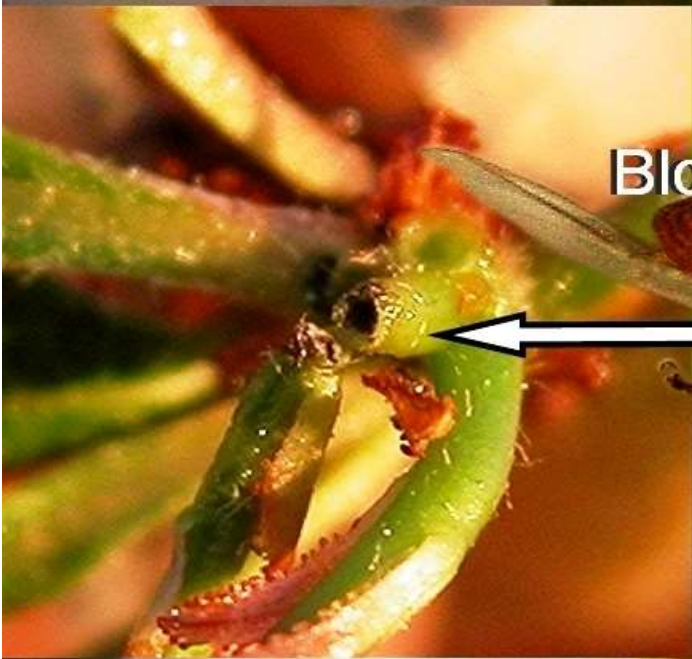
Hiding on a mayhaw bud

Plum Curculio infected berry

Plum Curculio larva



Cranberry Weevil



Bloom Bud damage



Pear Borer in Mayhaw



**Terrapin Scale
on
Mayhaw**



**Green Stink bug
On
Mayhaw**





Aphids on Mayhaw

**Cicada Damage
(Egg Laying)
on
Mayhaw**



**May Beetle
Damage
on
Mayhaw**



Mayhaw Insecticides

- **Confirm**
- **Provado**
- **Impulse**
- **Ecozin**
- **Actara**
- **Warrior**
- **Spin Tor 2SC**
- **Savey 50 DF**
- **Trilogy**
- **Proaxis**

Mayhaw Insecticides 2

- **Acramite 50 WS**
- **Success**
- **Couraze 1.6 F**
- **Esteem 0.86 EC**
- **Admire Pro**
- **GF – 120 NF**
- **Entrust**
- **Intrepid 2 F**
- **Esteem Ant Bait**
- **Brigade 2EC**

Mustang Max EC

(Zeta-Cypermethrin)

**Aphids, Japanese Beetle, Oriental
Fruit Moth, Plum Curculio,
Stink Bugs, Tarnish Plant Bug**

1.28 – 4.0 oz/acre

REI = 12 hours PHI = 14 days

**Warrior
Proaxis
(Cyhalothrin)**

**Plum Curculio, Aphids, Tent
Caterpillars, Oriental Fruit Moth,
Stink Bugs, Plant Bugs**

2.6 -5.1 oz./acre

REI = 24 hours PHI = 21 days

Brigade 2EC

(Bifenthrin)

Plum Curculio

5.12 – 6.4 floz/acre

in at least 25 gal/acre

At least 7 day intervals

REI = 12 hours PHI = 30 days

Provado 1.6 Flowable

Impulse 1.6 FL

(Imidocloprid)

**Aphids, Leafminers, San Jose Scale,
Leaf Hoppers**

Suppression: Plum Curculio, Stink Bugs ?

8 fl. oz./acre, 2 oz./100 gal.

REI = 12 hours

PHI = 7 days

Admire Pro

(Imidacloprid)

Aphids, Leafhoppers

REI = 12 hours PHI = 7 days

Apply post bloom

Highly Toxic to bees

Ecozin 3% EC

(Azadirachtin)

**Aphids, Beetles, Budworms,
Leaf hoppers, Leafminers, Leaf Rollers,
Scales, Weevils, White Flies,
Plum Curculio, Borers**

8 - 10 oz./acre

Use mix spray within 8 hours

Water pH between 5.5 and 6.5

REI = 12 hours

PHI = 0 days

Trilogy

(neem oil extract)

Aphids, Mealybugs, Mites, Soft Scale

**1% solution in 25 – 100 gal.
water/ acre (1 gal. per 100 gal. solution)**

REI = 4 hours PHI = 1 day

Organic (OMRI)

Mayhaw Herbicides

Preemerge Herbicide (Oryzalin)

**Surflan A.S.
Oryzalin 4 A.S.**

**Can be applied to new plantings
After soil has settled.
Apply as strip in tree row.**

Herbicide
Post & Preemerge
(Oxyfluorfen)

Goal 2XL

Goaltender

Dormant application only

Post Emerge Herbicide (Glyphosate)

- Roundup Original
- Roundup Ultra
- Honcho
- Glyphomax
- Cornerstone
- Mirage
- Durango
- Razor
- Glyfos
- Other ??

Rely 280, Cheetah

(Glufosinate-ammonium)

**Post Emergent Weed Control
Grass & Broadleaf**

Directed Spray

REI = 12 hours

Broadleaf Burndown Herbicide

(Carfentrazone-ethyl)

AIM EC

AIM EW

Directed spray application

REI = 12 hours PHI = 3 days



Surflan + Roundup





