

Management Programs for Arthropods

Plum Curculio *Recommended Approach*



Petal Fall

Activity: Note date of Petal Fall in McIntosh apple variety

Treatment Options: Use Tree Fruit Pest Mgt Guidelines to select appropriate product at petal fall

then:

Use Petal Fall date + NEWA Apple Insect Model to determine the end of PC immigration into orchards (corresponding to the end of fruit protection period). Maintain pesticide coverage until this date has passed.

Suggested Action Threshold: 308 DD (base 50F) from petal fall in McIntosh





Petal Fall Activity:
 Treatment
 Use Peta
 into orch
 coverage
 Suggeste

Plum curculio
 Pest stage
 Pest status
 Pest management
 Pesticide information

Apple insects

NEWA Apple Insect Models

Select a pest:
 Plum Curculio

State:
 New York

Weather station:
 Crown Point

Accumulation End Date:
 06/10/2015

Calculate

Map Results More info

Plum Curculio Results for Crown Point

Petal Fall: 5/19/2015

Petal Fall date above is estimated based on degree day accumulations or user input. Enter the actual date for blocks of interest and the model will calculate the protection period after petal fall more accurately.

Accumulated degree days (base 50°F) petal fall through 6/10/2015: 287 (0 days missing)

Date	Past	Past	Current	Ensuing 5 Days				
	Jun 8	Jun 9	Jun 10	Jun 11	Jun 12	Jun 13	Jun 14	Jun 15
Daily Degree Days (Base 50BE)	14	18	18	21	17	19	17	12
Accumulation since January 1	543	560	578	600	617	636	654	665

Show Degree Day Graph

Pest stage: Adult oviposition decreasing

The pest stage above is estimated. Select the actual stage and the model will recalculate recommendations.

Pest Status	Pest Management
Plum curculio activity is beginning to decline and any curculio remaining in trees will usually not move to other locations.	Plum curculio only need to be controlled until 308 DD have accumulated after petal fall. Make sure that the predicted residual coverage (10-14 days) from the last spray will protect fruit until DD accumulation reaches this value. Pesticide information

oods



oduct at

migration
 ticide

provides
 nt opportunity.

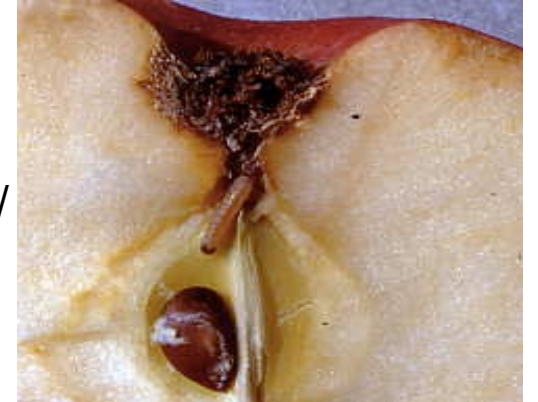
Oriental Fruit Moth *Recommended Approach*

Late Pink to Bloom

Activity: Monitor for 1st adult flight (pheromone traps); note biofix (late April-early May)

Treatment Options – Pheromone mating disruption:

Isomate OFM TT / Isomate CM/OFM TT / Cidetrak OFM Meso-L / Checkmate CM-OFM Puffer / Isomate CM/OFM Mist



Petal Fall

Activity: Use biofix + NEWA Apple Insect Model to time sprays for 1st larval generation

Suggested Action Threshold: 350-375 DD (base 45°F) from biofix

Treatment Options: Use Tree Fruit Pest Mgt Guidelines to select appropriate product (combine with Plum Curculio spray)
(Additionally, in High-risk blocks: Madex CM/OFM Virus)

Summer (July):

Activity: Use biofix + NEWA Apple Insect Model to time sprays for 2nd larval generation

Suggested Action Threshold: 1450-1500 DD (base 45F) from biofix

Treatment Options: Use Tree Fruit Pest Mgt Guidelines to select appropriate product (may need 2 applications)



Codling Moth *Recommended Approach*

Bloom

Activity: Monitor for 1st adult flight (pheromone traps); note biofix

Treatment Options – Pheromone mating disruption: Isomate CM/OFM TT / Cidetrak CMDA Combo Meso-A / Checkmate CM-OFM Puffer / Isomate CM/OFM Mist Plus
(Additionally, in High-risk blocks: Madex CM/OFM Virus)



June

Activity: Use biofix + NEWA Apple Insect Model to time sprays for 1st larval generation

Suggested Action Threshold: 250-360 DD (base 50°F) from biofix

Treatment Options: Use TF Pest Mgt Guidelines to select appropriate product (2 applications)



Summer (mid-late July):

Activity: Use biofix + NEWA Apple Insect Model to time sprays for 2nd larval generation

Suggested Action Threshold: 1260-1370 DD (base 50°F) from 1st biofix or 250-360 DD (base 50° F) from 2nd biofix

Treatment Options: Use TF Pest Mgt Guidelines to select appropriate product (may need 2 applications)



Obliquebanded Leafroller

Recommended Approach

Late Bloom

Activity: Use Obliquebanded Leafroller Sampling Form to examine bud clusters for 3% infestation threshold of OBLR larvae

Suggested Action Threshold: 3% of clusters infested

Treatment Options: Use TF Pest Mgt Guidelines to select appropriate product at bloom or petal fall



June 1

Activity: Monitor for 1st adult flight (pheromone traps); Use biofix + NEWA Apple Insect Model to time sprays for 1st larval generation

Suggested Action Threshold: High-risk blocks: 360 DD (base 43°F) from biofix

Treatment Options: Use TF Pest Mgt Guidelines to select appropriate product

OR

Suggested Action Threshold: Low-risk blocks: 600 DD (base 43°F) from biofix – Use Obliquebanded Leafroller Sampling Form to examine expanding terminals for 3% infestation threshold of OBLR larvae

Treatment Options: Use TF Pest Mgt Guidelines to select appropriate product in July (may need 2 applications)



European Red Mite

Recommended Approach

Delayed Dormant

Activity: Be familiar with past history of ERM. Examine spurs for overwintered eggs.

Suggested Action Threshold: 10% spurs with eggs.

Treatment Options:

Oil: Half-inch green – 2%; Tight cluster – 1% OR

Apollo / Savey / Zeal – Tight cluster, Pink OR

Apollo / Savey / Zeal / Agri-Mek – Petal fall

Summer: From mid-June to mid-August, leaves sampled for motiles.

Use date-appropriate sampling form to determine whether motiles are over threshold (2.5 / 5.0 / 7.5 per leaf).

Monitor for presence of predatory mite populations. 1 predator/10 leaves > potential for effective biological control
(Ref: Achieving Biological Control of European Red Mite in Northeast Apples: An Implementation Guide for Growers)

Treatment Options:

Kanemite / Nealta / Nexter / Portal / Acramite / Envidor – Summer months

(Ref: TF Pest Mgt Guidelines)



Apple Maggot

Recommended Approach

July 1

Activity: Place 2-3 volatile-baited AM sphere traps along edge of apple orchard adjacent to hedgerows or source of immigrating adults. Check traps at least twice per week.

Suggested Action Threshold: Average capture of 5 AM adults per trap.

Treatment Options: Use TF Pest Mgt Guidelines to select appropriate product during adult oviposition period. Repeat if threshold is reached again after period of spray residual efficacy has lapsed (10-14 days)

then:

Use 1st trap capture date + NEWA Apple Insect Model to determine end of oviposition period.

