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
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

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Plum curculio
Pest stage
Pest status
Pest management
Pesticide information
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
(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)
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.