

# Updates to the 2019 Midwest Fruit Pest Management Guide

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UNIVERSITY OF MISSOURI  
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# Outline

- Introduction to the 2019 Spray Guide
- General comments
- Apples
- Peaches
- Weeds

## Midwest Fruit Pest Management Guide 2019-2020

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University of Arkansas Cooperative Extension Service  
AG1304

Illinois  
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KSG-18

Indiana  
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Wisconsin  
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# Introduction

- Who compiles the Guide?  
Fruit extension and research specialists from 13 universities
- The Guide is updated annually
- Locate the Guide at:
  - <https://ag.purdue.edu/hla/hort/documents/id-465.pdf>
  - hard copy from local Extension office
- Check the online guide regularly – labels change and the online guide is updated accordingly

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# Introduction

- Guide has sections...
  - Tips on using the guide
  - Tree Fruit spray schedules: apple, pear, cherry, peach, plum
  - Small Fruit spray schedules: grape, blueberry, bramble strawberry
  - REI and PHI for fungicides
  - REI and PHI for insecticides
  - Special insect control problems
  - Weed control in fruit crops

## Midwest Fruit Pest Management Guide 2019-2020

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## Foreword

Commercial fruit production has become a highly skilled, technical profession. Concerns about pesticide residues, operator risks, and the environment dictate that all fruit growers exercise extreme caution in the use of all pesticides, and indeed, all chemicals. The Environmental Protection Agency (EPA) has designated a number of fruit pesticides as "restricted use." Growers who plan to use these restricted materials must be certified as private applicators.

Certification requires that applicators understand the following: labels and labeling, safety factors, potential environmental concerns, identification of common pests encountered, pesticides and their use, proper equipment use, application techniques, and applicable state and federal regulations. Training programs are offered to help you in certification. Contact your county Extension office for information.

The pest management recommendations in this guide have been formulated to provide you with up-to-date information about pesticides and their applicability to your problem. We suggest that you use this information to set up your own spray program.

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You should keep accurate records of materials used, application dates, areas treated, growth stages, and weather conditions. Sample record sheets are on pages 158-159. In case of questions, nothing beats a good set of records. The EPA requires records for restricted use pesticide applications. Some states may require records for general use pesticides (e.g., Kentucky has this requirement).

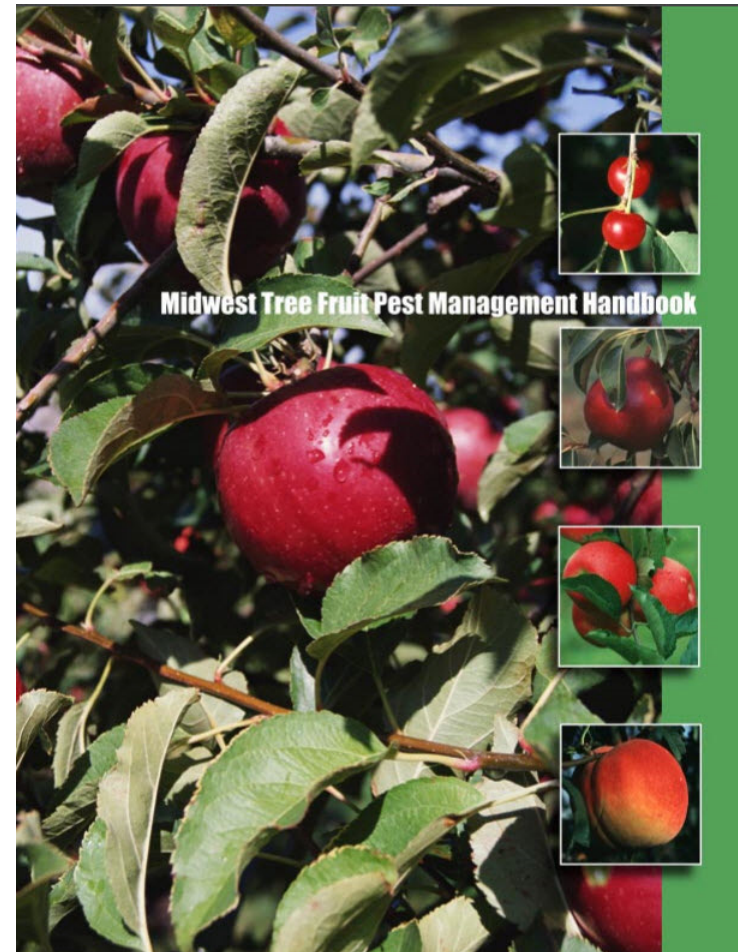
## Handling Pesticides

1. Know the pesticide toxicity and act accordingly.
2. When mixing pesticides do not breathe the dust, powder, or vapor. Always mix outdoors.
3. Do not use tobacco, eat, or drink when handling or applying pesticides.
4. Stay out of drift from spray or dust.
5. Rinse liquid containers with water at least three times and pour rinse into spray tank as it is being filled. Punch holes in metal and plastic containers and crush. Dispose of these and all other pesticide containers where no contamination of crops or

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# Midwest Tree Fruit Pest Management Handbook

- Companion to the Midwest Fruit Pest Management Guide
- Available as a free download at:  
<http://www2.ca.uky.edu/agcomm/pubs/id/id93/id93.htm>





# Changes in 2019 – General Comments

- Fourth year of a combined tree fruit and small fruit pest management guides
- Guide is now reviewed every 2 years
- Organization of specialized sections improved
- Few changes in pesticide labels
- Increased emphasis on the importance of FRAC/IRAC/HRAC code designations and resistance management



# Changes in 2019 – New Fungicide Labels

| Trade Name | FRAC | Apple | Peach |
|------------|------|-------|-------|
| Rhyme      | 3    | X     | X     |
| Aprovia    | 7    | X     |       |
| Fireline   | 41   |       | X     |



# Changes in 2019 – New Insecticide Labels

| Trade Name                | IRAC | Apple | Peach |
|---------------------------|------|-------|-------|
| Versys Inscalis<br>0.83SC | 9D   | X     | X     |
| Centaur 70WDG             | 16   | X     | X     |
| Cidetrak OFM-L            | N/A  |       | X     |
| Belay 2.13EC              | 4A   | X     | X     |
| Avaunt 30WDG              | 22   | X     | X     |
| Apta 1.31EC               | 21A  |       | X     |





# Changes in 2019 – New Herbicide Labels

| Trade Name    | HRAC | Apple | Peach | Plum |
|---------------|------|-------|-------|------|
| No new labels |      |       |       |      |



# Apple

- General

- New fungicide uses

- Rhyme added for control of scab, rust, powdery mildew,
    - Aprovia added for control of scab, fruit rots, powdery mildew, summer diseases
    - Topguard Specialty Crops added for control of diseases

- New insecticide uses

- Versys Inscalis 0.83SC added for control of rosy apple aphid and wooly apple aphid

- Removal of fungicide uses

- Removal of insecticide/miticide uses

- Removal of Entrust 80WP



# Apple

- Dormant to silver tip – no changes
- Green tip
  - Rhyme added for control of primary scab
- Half inch green – no changes
- Tight cluster
  - Rhyme added for control of scab, rust, powdery mildew
- Pink
  - Versys Inscalis 0.83SC added for control of rosy apple aphid
- Bloom – no change
- Petal fall
  - Versys Inscalis added for aphid control
  - Entrust 80WP removed for control of OFM and other insects



# Apple

- First and second cover
  - Aprovia added for control of scab, rust, powdery mildew, fruit rots, sooty blotch/flyspeck
  - Topguard Specialty Crops added for control of scab, rust, powdery mildew, fruit rots, sooty blotch/flyspeck
  - Entrust added for control of codling moth and OFM
- Third cover
  - Rhyme and Topguard Specialty Crops added for control of scab, fruit rots, sooty blotch/flyspeck
- Summer covers – no changes



# Peach

- General
  - New or expanded sections on management of bacterial spot, San Jose scale, and stink bugs
  - New fungicide uses
    - Copper fungicides for control of bacterial spot
    - A-Frame Plus for control of brown rot and other diseases
    - Rhyme for control of brown rot and other diseases
    - Rovral for control of brown rot and other diseases
    - Topguard Specialty Crop for control of brown rot and other diseases
    - FireLine for control of bacterial spot
  - New insecticide uses
    - Centaur 70 WDG for control of San Jose scale
    - Lorsban 4E for control of San Jose scale
    - Cidetrack OFM-L for OFM mating disruption
    - Belay 2.13 EC for control of insect pests (not OFM)
    - Avaunt 30 WDG for control of plum curculio
    - Apta 1.31EC for control of plum curculio
  - Removal of fungicides
    - Orbit for control of brown rot
    - Gem for control of powdery mildew
  - Removal of insecticides
    - Assail 30SG for control of San Jose scale
    - Entrust 80WP for insect control
    - Baythroid XL 1EC for control of SWD
    - Sevin XLR Plus for control of SWD



# Peach

- Dormant
  - New section on bacterial spot
  - New section on tarnished plant bug and stink bug
  - Centaur 70WDG and Lorsban Advanced 4E added for San Jose scale control
  - Assail removed for control of San Jose scale
- Pink
  - New section on bacterial spot
  - A-Frame Plus, Tilt/Bumper, and Rhyme added for brown rot control
  - Cidetrack OFM-L added for OFM mating disruption
  - Orbit removed for control of brown rot
- Full bloom
  - Rovral and Topguard Specialty Crop added for brown rot control
- Petal fall
  - Copper materials added for bacterial spot control
  - Belay, Avaunt and Apta added for oriental fruit moth and plum curculio control



# Peach

- Shuck split
  - A-Frame, Rhyme, and Topguard Specialty Crop added for brown rot and scab control
  - Gem removed for control of powdery mildew
- First cover
  - A-Frame, Indar, Rhyme, and Topguard Specialty Crop added for brown rot, powdery mildew and scab control
  - Gem removed for control of powdery mildew
- Second cover
  - New section on San Jose scale
  - FireLine added for bacterial spot control
- Additional covers – no changes
- Pre-harvest
  - A-Frame and Rhyme added for brown rot control
  - Dannitol and Warrior II added for control of Japanese beetle, green june beetle, oriental fruit moth
  - Delegate, Mustang Maxx added for control of SWD
  - Baythroid XL and Sevin XLR Plus removed for control of SWD

# Questions or Comments?

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