**Spray Program for Multi-Tree Fruit Orchards**

Many local orchards are composed of multi-fruit combinations producing for fresh market apples, peaches, pears, plums, nectarines, and cherries. Aggressive fruit tree spray programs are required to achieve high quality fruit. These multi-fruit orchards create many spray management challenges for the achievement of good pest control in accordance to label guidelines. Therefore, the following multi-fruit orchard spray program for the control of major tree fruit pests and diseases may offer some assistance: Labeled as noted in 2018 for All Tree Fruit – Pomes: Apples & Pears; Stone Fruits: Plums, Nectarines, and Cherries.

**FUNGICIDES: (FRAC) • RATE • NOTES**

**Captain® 80WDF [M4]**
3-5.0 lbs General Protectant
(Not Labeled for Pears; Reduce Rates for Cherries)

**Dormant Oil [NC]**
40 gal Apply Temper 35-85°F

**Kocide® DF [M1]**
6.0 lbs Other Fixed Copers

(Stones: Dormant Spray Only)

**Rally® 40W [3]**
4.0 ozs Powdery Mildew

**Sulfur 95W [M2]**
3.0 lbs General Protectant

**Gem® 500 SC [11]**
3.0 ozs Brown Rot & Peach Scab
(Stones Only)

**Adamant® 50WG [3/11]**
6.0 ozs Brown Rot, Peach Scab & Powdery Mildew
(Stones Except Plums)

**Pristine® [7/11]**
14.5 ozs Brown Rot, Powdery Mildew

(Limited to 4 Sprays/Season With Only 2 Consecutive

**Indar® 2F [3]**
6.0 ozs Powdery Mildew & Rusts

**Topsin-M® 70W [11]**
8.0 ozs General Protectant

**Ziram 76DF [M3]**
5.0 lbs Dormant Peach Leaf Curl

(Complete Substitute for Pears)

**Agrimycin® 17 W**
24.0 ozs Fireblight Control
(Apples & Pears Only)

**INSECTICIDES: (HRAC) • RATE • NOTES**

**Imidan® 70W [1A]**
2.0 lbs Curculio, SWD, Scale & Fruit Moths

**Warior® [3]**
4.0 ozs Borers, Curculio, SWD, BSMB

**Actara® [4A]**
4.5 ozs Aphids & Curculio

**Lorsban® 4E [1B]**
1.5 ozs Dormant & Trunk Borer

**Acarite® 80WS [25]**
1.0 ozs Mites Only

**Sevin® 50W [1A]**
4.0 ozs SWD, Japanese Beetles,
Hornets & Sap Beets

(Apple Thinning Agent)

*Rate for 50-100 Gal Acre Concentrate Spray

**Be sure to follow all labels closely for PHI and REI!**

**Multi-Fruit Spray Calendar**

**March 15 - Dormant Spray**
Dormant Oil 4.0 gal (Scales & Mites)
Kocide® DF 6.0 lbs
Lorsban® 4E 1.5 ozs (Mites)

**April 5 - Peach Bloom**
Apple Tight Cluster Captain® 80WDF 3.0 lbs

**April 15 - Peach Petal Fall**
Apple Bloom Captain® 50W 3.0 lbs
Indar® 2F 6.0 ozs
Agrimycin® 17 W 24.0 ozs (Fireblight Control Add for Apples & Pears Only)

**April 25 - Peach Shoot Shuck**
Apple Petal Fall

**May 1 - 1st Cover Spray**
Captain® 80WDF 4.0 lbs (Cedar Apple Rust - Higher Rates for Wetter Conditions)
Indar® 2F 6.0 ozs (Powdery Mildew & Rusts)
Actara® 14.5 ozs (Curculio & Aphids; PHI: 5-14 Days; Pomes, 14-28 Days)

**May 15 - 2nd Cover Spray**
Captain® 80WDF 3-4.0 lbs
Rally® 40W 4.0 ozs (Peach Rusty Spot Only)
Warrior® 4.0 ozs (Curculio; PHI: 21-28 Days; Pomes, 14-28 Days)

**June 1 - 3rd Cover Spray**
Captain® 80WDF 3-4.0 lbs
Topsin-M® 70W 8.0 ozs (Apple Scab Resistance Likely)
Imidan® 70W 2.0 lbs (Curculio, Scale & Fruit Moths; PHI: 7-14 Days; Pomes, 14-28 Days)
Acarite® 80WS 1.0 lbs (For Mites if Required; PHI: 7-14 Days Pomes, 3-14 Days Stones)

**June 15 - 4th Cover Spray**
Captain® 80WDF 3-4.0 lbs
Sulfur 95W 3.0 lbs (0-Day PHI; Stones Only)
Tombstone® 2.0 ozs (Borers, Curculio & Fruit Moths – 1-7 Day PHI)

**July 1 - 5th Cover Spray**
Early Peach Harvest
Captain® 80WDF 3-4.0 lbs (0-Day PHI; 1-7 Day PHI)
Indar® 2F 6.0 ozs (Early Pomes 0-Day PHI; Limited to 4 Sprays/Season With Only 2 Consecutive)
Tombstone® 2.0 ozs (Borers, Curculio & Fruit Moths – 1-7 Day PHI)

**July 15 - 6th Cover Spray**
Peach Harvests
Captain® 80WDF 3-4.0 lbs (0-Day PHI; 1-7 Day PHI)
Indar® 2F 6.0 ozs (Early Pomes 0-Day PHI)
Sevin® 50W 4.0 lbs (Japanese Beetles & Hornets – 3-14 Days PHI for All Fruit)

**August 1 - 7th Cover Spray**
Peach Harvests
Captain® 80WDF 4.0 lbs (0-Day PHI; 1-7 Day PHI)
Indar® 2F 6.0 ozs (Early Pomes 0-Day PHI)
Sevin® 50W 4.0 lbs (Japanese Beetles & Hornets – 3-14 Days PHI for All Fruit)

**August 15 - 8th Cover Spray**
Early Apple Harvests
Late Peach Harvest
Captain® 80WDF 4.0 lbs (0-Day PHI; 1-7 Day PHI)
Indar® 2F 6.0 ozs (Early Pomes 0-Day PHI)
Sevin® 50W 4.0 lbs (Japanese Beetles & Hornets – 3-14 Days PHI for All Fruit)

**September 1 - 9th Cover Spray**
Apples and Pears Only
Captain® 80WDF 4.0 lbs (0-Day PHI; 1-7 Day PHI)
Indar® 2F 6.0 ozs (Early Pomes 0-Day PHI)
Sevin® 50W 4.0 lbs (Japanese Beetles & Hornets – 3-14 Days PHI for All Fruit)

**September 15 - Trunk Bore Spray**
Lorsban® 4E 1.5 ozs (Post Harvest for Borers)

**HERBICIDES: (HRAC) • RATE • NOTES**

Gramoxone® [22]
1.0 ozs Burndown, Directed Spray

Roundup® [9]
1.0 ozs Burndown, Shielded & Directed Spray

Devrinol® 50 DF [15]
4.0 lbs Spring/Summer 35-280 PHI

Princep® 4L [5]
1.0 ozs Spring Dormant, Avoid High pH Soils

Solicam® [12]
2.5 lbs Spring/Dormant, 1-yr Established

Goal® or Galigan® [14]
2.0 ozs After Harvest to Spring Bud Swell

Chateau® [14]
1.2 ozs After Harvest to Spring Bud Swell

Aim®, Shark® or Venue [14]
2.0 ozs Directed Spray, 0-3 Day PHI

Matrix® [2]
4.0 ozs Late Spring, 1-yr Established

2.0 ozs Spring/Summer, Prowl 60 Day PHI

Post® [1]
1.5 ozs Summer Grasses, Variable PHI

1.6 ozs Spring/Fall Dormant, 3-yr Established

*Lowest Use Rate Recommended Initially*

**Organic Approach Substitutions:**

<table>
<thead>
<tr>
<th>Conventional Product</th>
<th>Organic Certificated Product (OMRI)</th>
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<tr>
<td>Captain® &amp; Topsin-M®</td>
<td>Surround® or Sulfur or Lime Sulfur</td>
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<tr>
<td>Rally®</td>
<td>Kaligreen (Powdery Mildew Eradicant)</td>
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**Listed Insecticides**

- Neon® or Pygacide® or Entrust® (Stone Fruits Only)
- Agrimycin®
- Agrimycin® or Fixed Copper (Apples & Pears Except During bloom)

**Gramoxone® or Roundup®**

- Avenger®, Burnout® or Scythe® (no OMRI label)

*Important Note: The calendar spray dates given are an average estimate for Anne Arundel and Prince George's County Orchards, and may vary by location in Southern Maryland. Be sure to adjust your spray schedule application dates accordingly. The above recommendations very closely reflect the current spray program utilized at the University of Maryland Research and Education Center, Upper Marlboro Facility for its research orchards. Remember to always "Read the Label."*

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