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 2013 for All Tree Fruit – Pomes: Apples & Pears Stones: Peaches, Plums, Nectarines, and Cherries.

**FUNGICIDES: [FRAC]** *RATE NOTES*

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| Captan® 80WG [M] | 3.5-5.0 lbs | General Protectant (Not Labeled for Pears; Reduce Rates for Cherries)
| Dormant Oil [NC] | 4.0 gal | Apply Temp 35-85°F
| Kocide® DF [M1] | 6.0 lbs | Other Fixed Coppers (Stones: Dormant Spray Only)
| Rally® 40W [3] | 4.0 ozs | Powdery Mildew (Stones Except Plums)
| Sulfur 95W [M2] | 3.0 lbs | General Protectant (Limited to 4 Sprays/Season)
| Gem® 500 SC [11] | 3.0 ozs | Brown Rot & Peach Scab (Stones Only) or
| Adamant® 50WG [3/11] | 6.0 ozs | Brown Rot, Peach Scab & (Stones Except Plums)
| Pristine® [7/11] or | 14.5 ozs | Brown Rot, Powdery (Limited to 4 Sprays/Season)
| Indar® 2F [3] | 6.0 ozs | Powdery Mildew & Rusts (With Only 2 Consecutively)
| Tospox-M® 70W [1] | 8.0 ozs | General Protectant (Captain Substitute for Pears)
| Ziram 76DF [M3] | 5.0 lbs | Dormant Peach Leaf Curl (General Protectant)
| Agrimin® 17 W | 24.0 ozs | Fireblight Control (Apples & Pears Only)

**INSECTICIDES: [Irac]** *RATE NOTES*

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| Imidan® 70W [1A] | 2.0 lbs | Curriculo, Scale & Fruit Moths (PHI: 3-Day PHI for All Fruit)
| Warrior® [3] | 4.0 ozs | Borer, Curriculo & (2-Day PHI for Pome)
| Tombstone® [3] | 2.0 ozs | Brown Rot, Curriculo & (3-Day PHI for All Fruit)
| Actara® [4A] | 4.5 ozs | Aphids & Curriculo (3-Day PHI for All Fruit)
| Lorsban® 4E [1B] | 1.5 qts | Dormant & Trunk Borer (3-Day PHI for All Fruit)
| Acramite® 50WS [25] | 1.0 lbs | Mites Only (3-Day PHI for All Fruit)
| Sevin® 50W [1A] | 4.0 lbs | Japanese Beetles, Hornts & Sap Beetles (3-Day PHI for All Fruit)

**HERBICIDES: [HRAC]** *RATE NOTES*

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| Gramoxone® [22] | 1.0 qts | Burndown, Directed Spray (3-Day PHI for All Fruit)
| Roundup® [9] | 1.0 qts | Burndown Shielded & Directed (Limited to 4 Sprays/Season)
| Devrinol® 50 DF [15] | 4.0 lbs | Spring/Summer 35-Day PHI (Limited to 4 Sprays/Season)
| Princep® 4L [5] | 1.0 qts | Spring Dormant, Avoid High pH Soils (Limited to 4 Sprays/Season)
| Slicam® [12] | 2.5 lbs | Spring/Fall Dormant, 1-yr Established (Limited to 4 Sprays/Season)
| Goal® [14] or Galigan® [14] | 2.0 pts | After Harvest to Spring Bud Swell (Limited to 4 Sprays/Season)
| Aim® [14] or Shark® [14] | 2.0 ozs | Directed Spray to Weeds, 3-Day PHI (Limited to 4 Sprays/Season)
| Matrix® [2] | 4.0 ozs | Late Spring, 1-yr Established (Limited to 4 Sprays/Season)
| Poast® [1] | 1.5 pts | Summer Grasses, Variabe PHI (Limited to 4 Sprays/Season)
| Karmex® [7] or Diuron® [7] | 1.6 qts | Spring/Fall Dormant, 3-yr Established (Limited to 4 Sprays/Season)

**CONVENTIONAL PRODUCT**

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| Captan® & Tospox-M® | 4.0 lbs | Cedar Apple Rust - Higher Rates for Wetted Conditions (Limited to 4 Sprays/Season)
| Rally® | 2F 6.0 ozs | Powdery Mildew & Rusts (Limited to 4 Sprays/Season)
| Actara® 4.5 ozs | Curriculo & Aphids; PHI: 35- Days (Limited to 4 Sprays/Season)
| Agrimin® 17 W 4.0 ozs | Fireblight Control (Limited to 4 Sprays/Season)

**ORGANIC APPROACH SUBSTITUTIONS:**

- Captan® & Tospox-M®: Surround® (7) or Sulfur or Lime Sulfur
- Rally®: Kaligreen (Powdery Mildew Eradicant)
- Listed Insecticides: Neem® Pyganic® or Entrust® (Stone Fruits Only)
- Agrimin® or Fixed Copper (Apples & Pears except during bloom)

**Important Note:** The calendar spray dates given are an average estimate for Anne Arundel and Prince George’s Counties 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*.

R. David Myers
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Reviewed by Alan R. Biggs, Professors, Extension Pathologist, WVU