

Updates to the 2015 Midwest Small Fruit and Grape Spray Guide

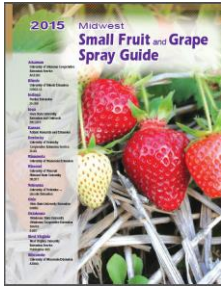
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Outline

- Introduction to the 2015 Spray Guide
- General comments
- Grapes
- Blueberries
- Brambles
- Strawberries
- Weeds

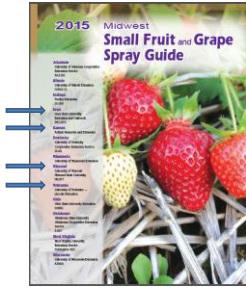


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Introduction

- Who compiles the Guide? Fruit extension and research specialists from 13 universities (Minnesota is new for 2015)
- The Guide is updated annually
- Locate the Guide at:
 - <https://ag.purdue.edu/hla/Hort/Documents/ID-169.pdf>
 - hard copy from local Extension office
- Check the online guide regularly – labels change and the online guide is updated accordingly

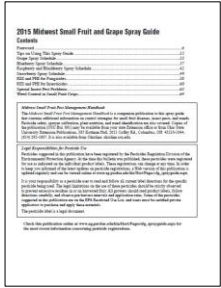


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Introduction

- Guide has sections...
 - Tips on using the guide
 - Grape spray schedule
 - Blueberry spray schedule
 - Raspberry and blackberry spray schedule
 - Strawberry spray schedule
 - REI and PHI for fungicides
 - REI and PHI for insecticides
 - Special insect control problems
 - Weed control in small fruit crops

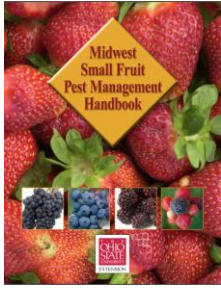


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Midwest Small Fruit Pest Management Handbook

- Companion to the Midwest Small Fruit and Grape Spray Guide
- Available as a free download at: <https://ag.purdue.edu/hla/Hort/Documents/Midwest%20Small%20Fruit%20861%201-24-11.pdf>



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Changes in 2015 – General Comments

- The MU plant diagnostic clinic reopened in 2014 (contrary to what the printed guide notes)
- Revised pesticide application equipment calibration section
- Increased emphasis on the importance of FRAC/IRAC code designations and resistance management

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Changes in 2015 – New Fungicide Labels

Trade Name	FRAC	Grape	Blueberry	Bramble	Strawberry
Luna Privilege	7	x			
Reason	11	x			
Zampro	44+40	x			
Tavano 5SC	19	x	x	x	x
Quilt Xcel	11+3	x	x	x	x
Omega 500F	29		x		
Fontelis	7		x		x

Strobilurin fungicides (Abound, Cabrio, Pristine, Flint, Sovran) – FRAC 11
Sterol Inhibiting fungicides (Elite, Rally, Procure, Vintage, etc) – FRAC 3
Benzimidazol fungicides (Topsin M) – FRAC 1

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Changes in 2015 – New Insecticide Labels

Trade Name	IRAC	Grape	Blueberry	Bramble	Strawberry
Exirel	28		x		

Note: same IRAC as Altacor, Belt, Coragen, Synapse

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Changes in 2015 – New Herbicide Labels

Trade Name	Grape	Blueberry	Bramble	Strawberry
Zeus Prime XC	x	x	x	
Zeus XC	x	x	x	

Note: preemergent control of a range of broadleaf, grass, and sedge weeds;
label does list some postemergent burndown on small weeds

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Blueberry

- General
 - Expanded discussion of spotted wing drosophila and brown marmorated stink bug; check with your own state pesticide regulators and extension specialists for up-to-date information on pesticide labels
 - New fungicide uses
 - Fontelis added for phomopsis, botrytis and other diseases
 - Quilt Xcel added for phomopsis
 - Omega 500F added for several diseases
 - Tavano 5SC added for several diseases
 - New insecticide uses
 - Exirel added for cherry fruitworm, blueberry maggot, and drosophila

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Blueberry

- Dormant – no change
- Green tip
 - Fontelis added for phomopsis canker control
 - Quilt Xcel added for phomopsis canker control
 - Fontelis added for mummy berry control
- Pink bud/25% bloom
 - Fontelis added for several diseases
 - Omega 500F added for several diseases
 - Tavano 5SC added for several diseases
- Full bloom/Petal fall
 - Omega 500F added for several diseases
 - Tavano 5SC added for several diseases
 - Fontelis added for botrytis blight

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Blueberry

- Petal fall
 - Exirel 0.83SE added for cherry fruitworm control
 - Rimon removed for cherry fruitworm control
- First/second cover
 - Rimon 0.83EC added for cranberry fruitworm
 - Exirel 0.83SE added for plum curculio
 - Malathion 5EC removed for plum curculio
- Third and additional covers
 - Exirel 0.83SE added for blueberry maggot control
 - Actara 25WG removed for Japanese beetle control
 - Exirel 0.83SE added for drosophila control
- Postharvest – no change

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Blueberry Weed Control

- Preemergent weed control
 - Zeus Prime XC and Zeus XC added for annual and perennial grasses and broadleaf control

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Midwest Blueberry Production Guide

- Available as a free download at: <http://www2.ca.uky.edu/agc/pubs/ID/ID210/ID210.pdf>
- Purchase a hard copy: <http://southcenters.osu.edu/about-us/news/midwest-blueberry-production-guide> This bulletin sells for \$20 a copy.

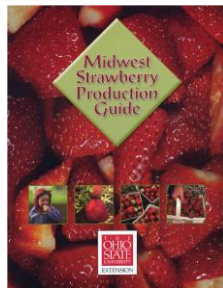


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Midwest Strawberry Production Guide

- Available as a free download at: <http://www.oardc.ohio-state.edu/fruitpathology/Bulletins/Strawberry%20book%20v2%20S.pdf>

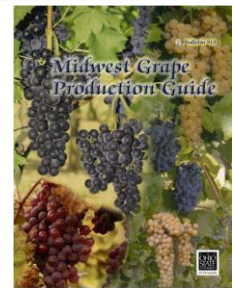


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Midwest Grape Production Guide

- Available as a free download at: http://www.oardc.ohio-state.edu/fruitpathology/Bulletins/mw_grape_12aug05%20S.pdf

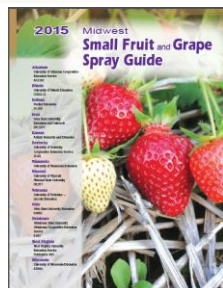


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Questions or Comments?

- Contact information:
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Grape

- General
 - New fungicide uses
 - Luna Privilege fungicide added for several diseases
 - Reason fungicide added for DM
 - Zampro fungicide added for DM
 - Tavano 5SC fungicide added for botrytis
 - New insecticide uses
 - Imidan 70WP for Japanese beetle and drosophila
 - Removal of insecticide/miticide uses
 - Dicofol miticide removed for European red mite
 - Scorpion insecticide removed for stink bug
 - Venom insecticide removed for stink bug
 - Tables 1 and 3 adjusted to reflect label changes
 - Table 4 (disease susceptibility/chemical sensitivity) lists several new cultivars, and includes sensitivity to 2,4-D and dicamba

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Grape

- Dormant – no changes
- Bud swell – no changes
- Bud break to bloom
 - Luna Privilege added for a variety of diseases
 - Reason added for downy mildew
 - Zampro added for downy mildew
- 10 inch shoots
 - Dicofol 4E removed for European red spider mite
- Prebloom – no changes

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Grape

- Bloom
 - Tavano added for botrytis bunch rot
- Shatter
 - Imidan 70WP added for Japanese beetle
 - Dicofol 4E removed for European red mite
- First cover to veraison – no changes
- Veraison to harvest
 - Scorpion 35SL removed for stink bug
 - Venom 70SG removed for stink bug
 - Imidan 70WP added for drosophila
- Postharvest – no changes

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Raspberry and Blackberry

- General
 - SWD has led to changes in several insecticide labels; check with your own state pesticide regulators and extension specialists for up-to-date information
 - New fungicide uses
 - Quilt Xcel added for several diseases
 - Tavano 5SC added for botrytis
 - New insecticide uses
 - Brigade WSB added for raspberry crown borer

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Raspberry and Blackberry

- Delayed dormant
 - Brigade WSB (19WP) added for raspberry crown borer control
- Prebloom
 - Quilt Xcel added for several diseases (not spur blight)
- First bloom through petal fall
 - Quilt Xcel added for several diseases (not spur blight)
 - Tavano 5SC added for botrytis control
- Post bloom through harvest
 - Quilt Xcel added for rust diseases and powdery mildew control
 - Admire Pro removed for thrips
- Postharvest
 - Quilt Xcel added for several diseases

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Strawberry

- General
 - SWD has led to changes in several insecticide labels; check with your own state pesticide regulators and extension specialists for up-to-date information
 - New fungicide uses
 - Quilt Xcel added for several diseases, including anthracnose
 - Luna Privilege added for several diseases
 - Tavano 5SC added for several diseases, including anthracnose
 - Fontelis added for botrytis, exclusion for 'Clancy', 'Jewel', 'L'Amour' cultivars
 - Table 5 (cultivars and disease resistance) includes new cultivars

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Strawberry

- Pre bloom
 - Quilt Xcel added for several diseases
 - Actara 25WG added for strawberry clipper control
 - Dicofol 4E removed for spider mite control
- Early bloom through bloom
 - Quilt Xcel added for several diseases
 - Luna Privilege added for several diseases
 - Tavano 5SC added for several diseases
 - Quilt Xcel added for anthracnose
 - Tavano added for anthracnose

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Strawberry

- Post bloom to harvest
 - Quilt Xcel added for leaf diseases, PM control
 - Luna Privilege added for leaf diseases, PM control
 - Tavano 5SC added for leaf diseases, PM control
 - Assail 30SG removed for leaf roller control
 - Malathion 8F removed for drosophila control
- Harvest
 - Tavano added for botrytis fruit rot control
 - Fontelis added for botrytis fruit rot control
- Postharvest – no changes

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SWD Control - Elderberry

- Pest management – Spotted Wing Drosophila

Class	Trade Name	Active Ingredient	PHI (days)	Days Residual
Pyrethroid (3)	Mustang Max (RU)	zeta-cypermethrin	1	7
	Danitol (RU)	fenpropathrin	3	7
	Brigade (RU)	bifenthrin	3	7
Spinosyn (5)	Delegate (Zee)	spinetoram	1	7
	Entrust (organic)	spinosad	1	3-5
Pyrethrum (3)	Pyganic (organic)	pyrethrum	0	2
Anthranilic diamide (28)	Exirel	cyantraniliprole	3	?

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Grape Weed Control

- Preemergent weed control
 - Gallery 75DF removed for broadleaf control
 - Trellis (aka Gallery) added for annual and perennial broadleaf control
 - Zeus Prime XC and Zeus XC added for annual and perennial grasses and broadleaf control

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Bramble Weed Control

- Preemergent weed control
 - Zeus Prime XC and Zeus XC added for annual and perennial grasses and broadleaf control
 - Sandea 75 added for annual broadleaf weeds and nutsedge control

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Strawberry Weed Control

- Preemergent weed control
 - Spartan 4F added for annual broadleaf weeds, grasses, and nutsedge control

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Please Take the Survey!

- Your help is needed – participate in a brief survey to measure the use and effectiveness of the Midwest spray guides. Use either of the links below to participate:
 - www.MidwestFruitGuide.com
 - https://uky.az1.qualtrics.com/SE/?SID=SV_b7Nenj3QQE4aqZ7

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