

Updates to the 2015 Midwest Small Fruit and Grape Spray Guide

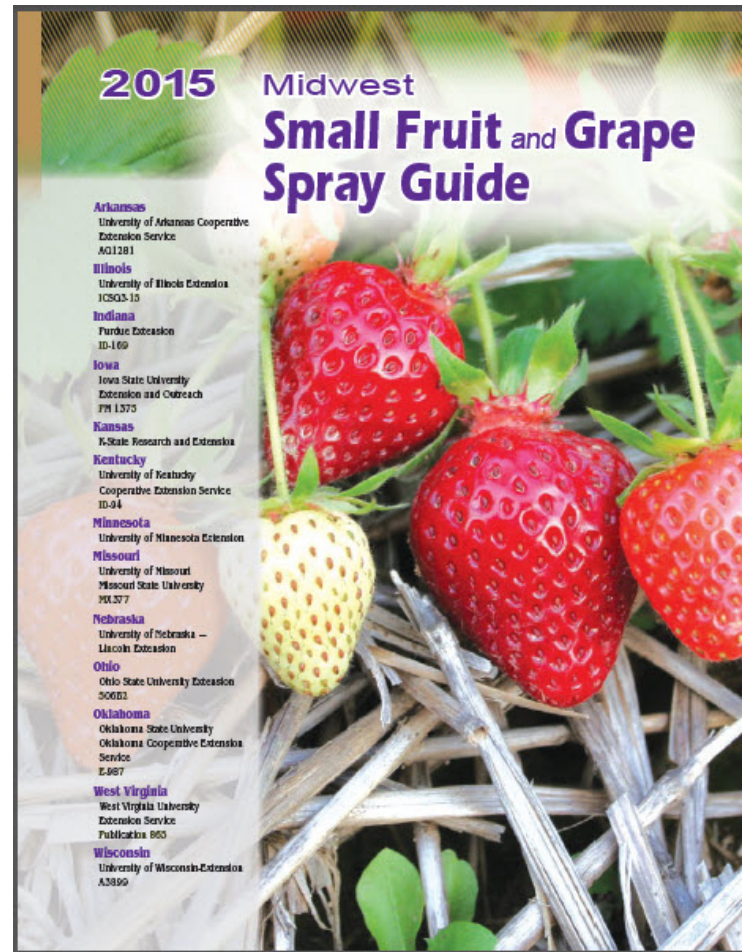
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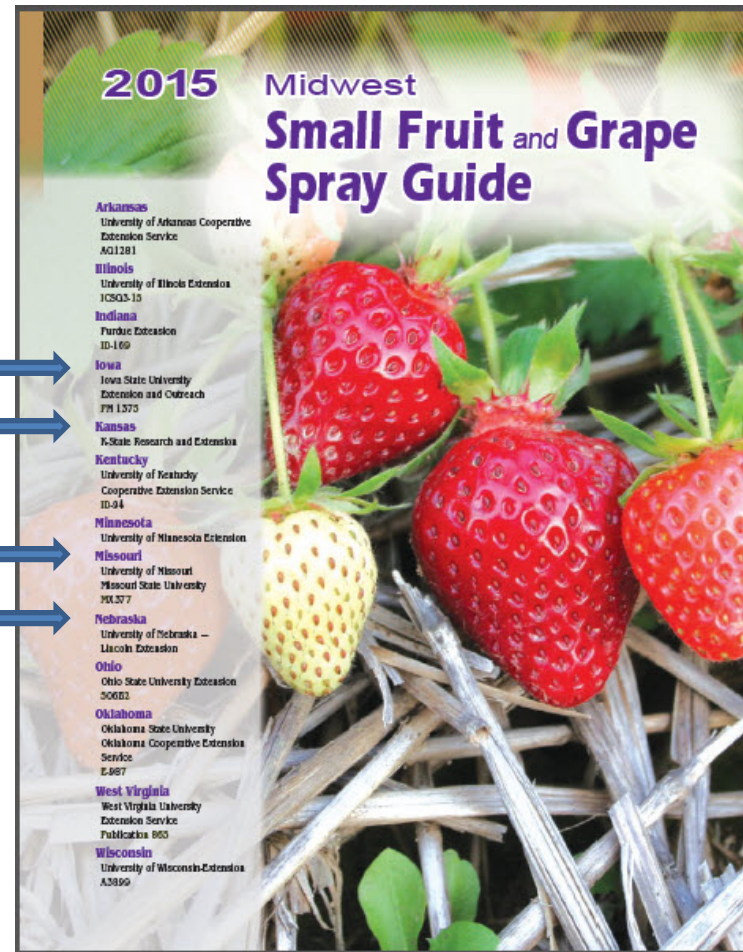
Outline

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



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



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

2015 Midwest Small Fruit and Grape Spray Guide

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Midwest Small Fruit Pest Management Handbook

The *Midwest Small Fruit Pest Management Handbook* is a companion publication to this spray guide that contains additional information on control strategies for small fruit diseases, insect pests, and weeds. Pesticide safety, sprayer calibration, plant nutrition, and weed identification are also covered. Copies of the publication (OSU Bul. 861) may be available from your state Extension office or from Ohio State University Extension Publications, 385 Kortman Hall, 2021 Coffey Rd., Columbus, OH 43210-1044, (614) 292-1607. It is also available from ohiolines.osu.edu.

Legal Responsibilities for Pesticide Use

Pesticides suggested in this publication have been registered by the Pesticides Regulation Division of the Environmental Protection Agency. At the time this bulletin was published, these pesticides were registered for use as indicated on the individual product labels. These registrations can change at any time. In order to keep you informed of the latest updates on pesticide registrations, a Web version of this publication is updated regularly and can be viewed online at www.ag.purdue.edu/hla/Hort/Pages/sfg_sprayguide.aspx.

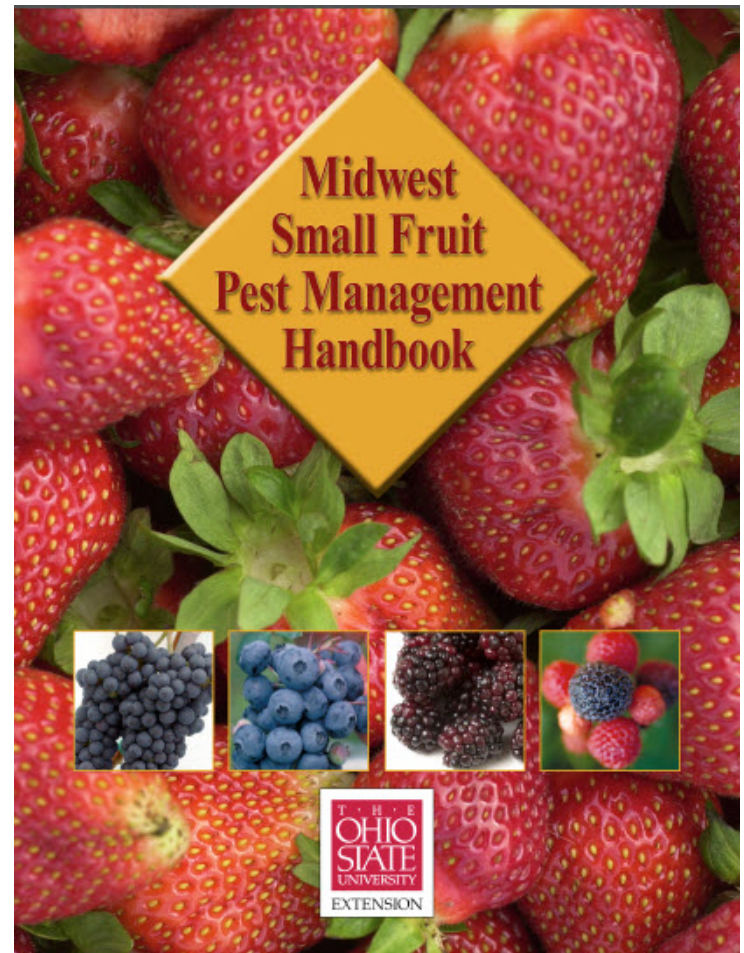
It is your responsibility as a pesticide user to read and follow all current label directions for the specific pesticide being used. The legal limitations on the use of these pesticides should be strictly observed to prevent excessive residues in or on harvested fruit. All growers should read product labels, follow directions carefully, and observe pre-harvest intervals and application rates. Some of the pesticides suggested in this publication are on the EPA Restricted Use List, and users must be certified private applicators to purchase and apply these materials.

The pesticide label is a legal document.

Check this publication online at www.ag.purdue.edu/hla/Hort/Pages/sfg_sprayguide.aspx for the most recent information concerning pesticide registrations.

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>





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



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

Benzimidizoll fungicides (Topsin M) – FRAC 1



Changes in 2015 – New Insecticide Labels

Trade Name	IRAC	Grape	Blueberry	Bramble	Strawberry
Exirel	28		x		

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



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



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



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



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



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



Blueberry

- Dormant – no change
- Green tip
 - Fontellis 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



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



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



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



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



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



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



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 (2ee)	spinetoram	1	7
	Entrust (organic)	spinosad	1	3-5
Pyrethrum (3)	Pyganic (organic)	pyrethrum	0	2
Anthranilic diamide (28)	Exirel	cyantraniliprole	3	?



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



Blueberry Weed Control

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



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

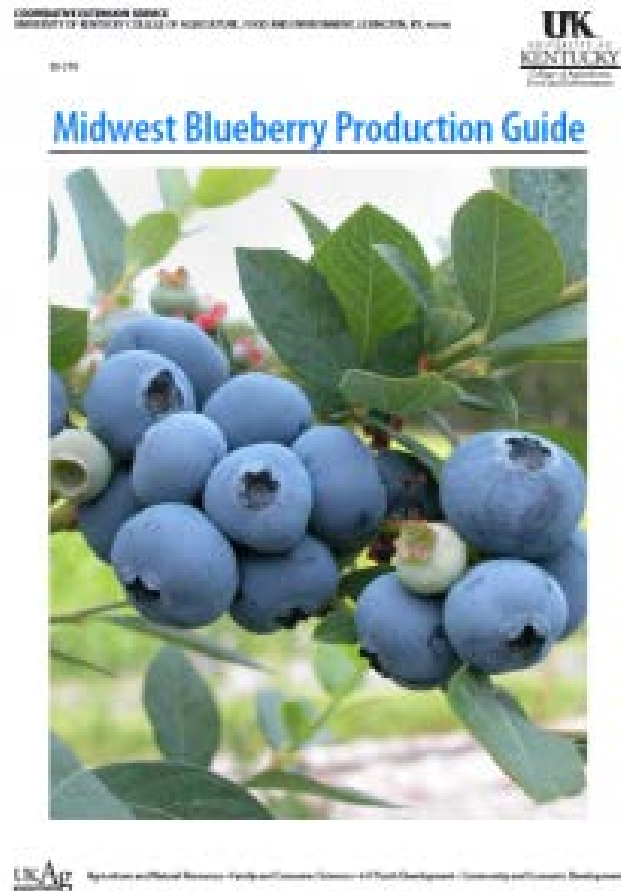


Strawberry Weed Control

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

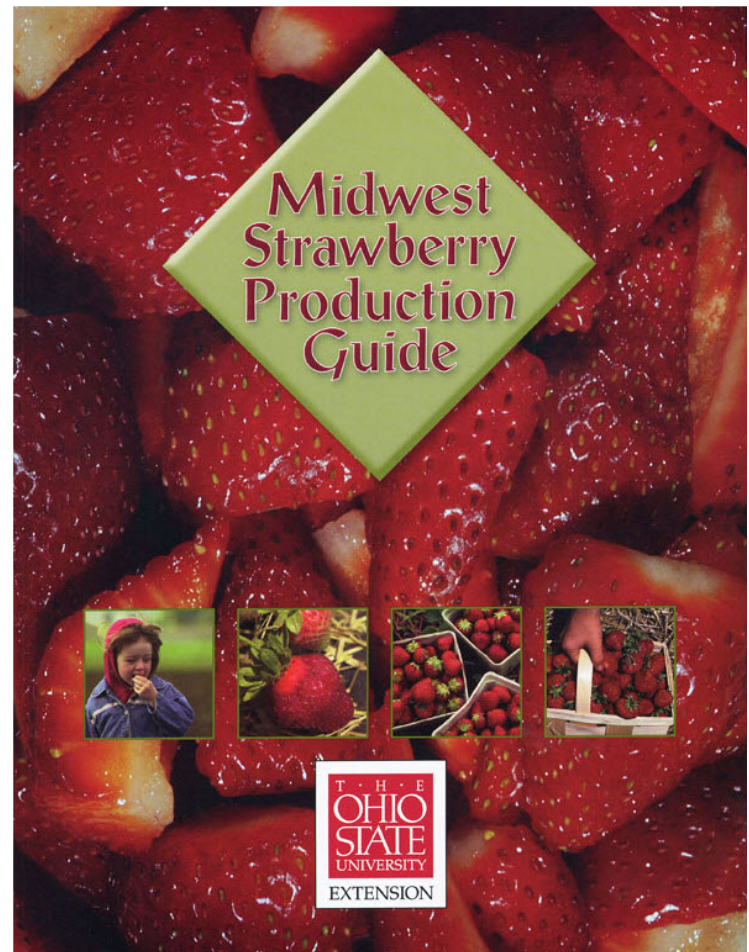
Midwest Blueberry Production Guide

- 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.



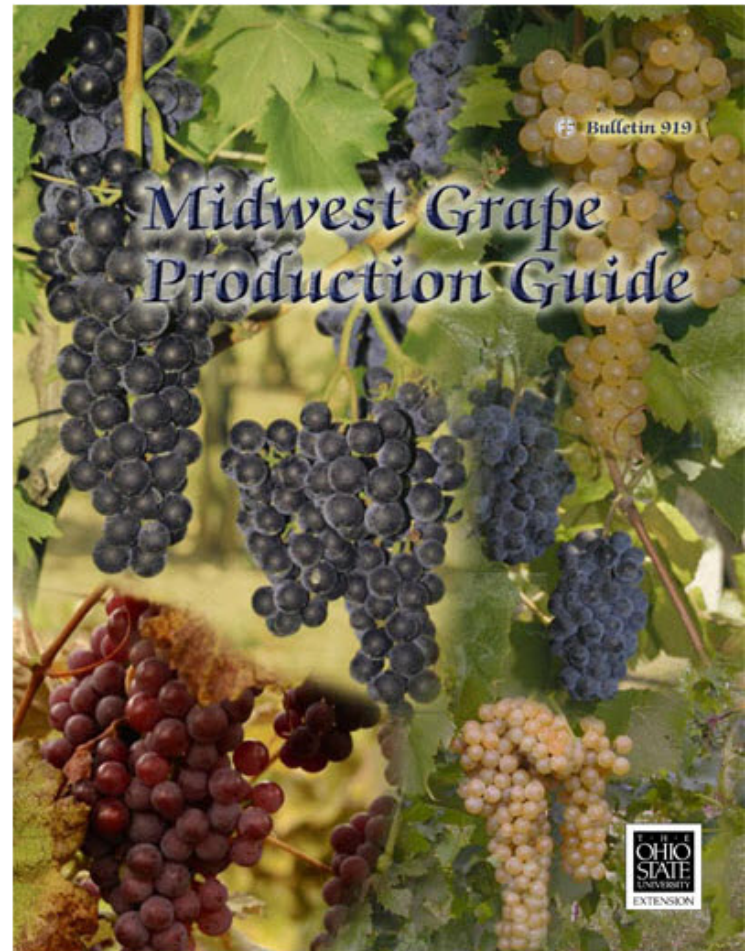
Midwest Strawberry Production Guide

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



Midwest Grape Production Guide

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





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

Questions or Comments?

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