

SASKATOON BERRIES

After each pest appears a column of numbers. These are provided to assist growers in choosing materials to use to control specific pests. The number refers to the pesticide in the column headed "Suggested Chemicals". Insecticide and fungicide efficacy trials have not been conducted for saskatoon berries in Michigan, so no product ratings are indicated.

Products designated with "RUP" require a restricted use permit. Products listed by the Organic Materials Review Institute (OMRI) for use in organic production will be marked with the following designation: **▲**. Products designated by the EPA as reduced-risk will be marked with: **RR**.

SILVER TIP - GREEN TIP

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	7, 12, 28, 70, 75	FUNGICIDES 7. Tilt (6 oz) ¹ 12. Abound (6.0-15.5 oz) RR ² 28. Quilt Xcel (14-21 oz) ³ 70. Pristine (18.5-23 oz) ⁴ 75. Quash (2.5 oz) ⁵
Comments: ¹ Do not apply more than 30 fl oz of Tilt per acre per season. The use of all propiconazole-containing products is limited to 0.84 lb a.i./acre/season. ² Do not apply more than 46 fl oz of Abound per acre per year. To limit the potential for resistance development, make no more than 2 sequential applications of Abound. The use of all azoxystrobin-containing products is limited to 0.75 lb a.i./acre/season. ³ Do not apply more than 82 fl oz of Quilt Xcel per acre per year. Do not apply more than two consecutive Quilt Xcel applications. Quilt Xcel contributes toward the maximum allowable 0.84 lb a.i./acre/season of propiconazole and 0.75 lb a.i./acre of azoxystrobin. ⁴ Do not make more than 4 applications of Pristine per year. No more than two consecutive applications should be made without switching to materials with different modes of action. Do not apply more than 92 fl oz of Pristine per acre per year. Pristine cannot be tank-mixed with any other products, only water. ⁵ Do not apply Quash more than 3 times per season. Do not exceed 7.5 oz of Quash per acre per year.		
INSECTS		INSECTICIDES
Tarnished plant bug	44, 54, 55, 59, 60	44. Danitol 2.4 EC (10.6-16 oz) RUP ¹ 54. Aza-Direct (1.0-3.5 pt) ▲ 55. Avaunt 30 WG (3.5-6 oz) RR ² 59. Actara 25 WG (3-4 oz) ³ 60. Assail 30 SG (2.5-5.3 oz) RR ⁴
Comments: ¹ Make no more than 2 applications of Danitol per year. Do not exceed 32 fl oz of Danitol per acre per year. ² Avaunt may be applied no more than 4 times per year. Do not exceed 24 fl oz of Avaunt per acre per year. ³ Apply no more than 12 oz of Actara per acre per year. Actara is highly toxic to bees. ⁴ Assail is limited to 5 applications per year. Do not exceed 26.7 fl oz of Assail 30SG per acre per year. ⁵ Admire Pro is limited to 5 applications per year. Do not exceed 14 fl oz of Admire Pro per acre per year.		

FULL GREEN – TIGHT CLUSTER

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	7, 12, 28, 70, 75	FUNGICIDES 7. Tilt (6 oz) 12. Abound (6.0-15.5 oz) RR 28. Quilt Xcel (14-21 oz) 70. Pristine (18.5-23 oz) 75. Quash (2.5 oz)

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SASKATOON BERRIES

FULL GREEN – TIGHT CLUSTER (continued)

INSECTS	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Saskatoon bud moth	2, 22, 60, 85, 88	INSECTICIDES
Leafrollers	2, 6, 22, 27, 35, 43, 44, 50, 55, 64, 85, 88	2. Exirel (10-20.5 oz) ¹
Tarnished plant bug	44, 54, 55, 59, 60	6. Grandevo (1-3 lb) ▲
Comments: ¹ Do not apply Exirel more than 3 times per year. ³ Do not apply more than 48 fl oz of Intrepid per acre per year. ⁴ Only 2 applications of Esteem are allowed per year. Do not apply more than 32 fl oz of Esteem per acre per year. ⁵ Do not apply more than 9 fl oz of Entrust per acre per year. ⁶ Delegate is limited to 6 applications per year. Do not apply more than 19.5 oz of Delegate per acre per year. ⁷ Do not apply more than 9 fl oz of Altacor per acre per year.		22. Verdepryn 100 SL (8.2 - 11 oz)
		27. Esteem 0.86 EC (16 oz) RR ⁴
		35. Spear-Lep (1-2 pt)
		44. Danitol 2.4 EC (10.6-16 oz) RUP
		50. Intrepid 2 F (4-16 oz) RR ³
		54. Aza-Direct (1.0-3.5 pt) ▲
		55. Avaunt 30 WG (3.5-6 oz) RR
		59. Actara 25 WG (3-4 oz)
		60. Assail 30 SG (2.5-5.3 oz) RR
		64. Entrust SC (4-6 oz) RR ▲ ⁵
		85. Delegate 25 WG (3-6 oz) RR ⁶
		88. Altacor 35 WDG (3-4.5 oz) RR ⁷
		88. Altacor eVo 70 WDG (1.5 - 2.2 oz) RR

WHITE TIP

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	7, 12, 28, 70, 75	FUNGICIDES
Saskatoon-juniper rust	7, 12, 28, 35, 70	7. Tilt (6 oz)
Brown rot	29, 65, 67	12. Abound (6.0-15.5 oz) RR
Comments: ¹ Do not apply more than 56 fl oz of Quadris Top per acre per year. No more than two sequential applications of Quadris Top are allowed before switching to a product with a different mode of action. Combined use of azoxystrobin-containing products must not exceed 0.75 lb. a.i./acre/year; combined use of difenoconazole-containing products must not exceed 0.46 lb. a.i./acre/year. ² Do not apply more than 6 lb of Elevate per acre per year. ³ Do not make more than two applications of Switch per year.		28. Quilt Xcel (14-21 oz)
		29. Serenade Opti (2-6 qt) ▲
		35. Quadris Top (12-14 oz) ¹
		65. Elevate 50 WDG (1.5 lb) ²
		67. Switch 62.5 WG (11-14 oz) ³
		70. Pristine (18.5-23 oz)
		75. Quash (2.5 oz)

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SASKATOON BERRIES

WHITE TIP (continued)

INSECTS	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Saskatoon bud moth	2, 22, 60, 85, 88	INSECTICIDES 2. Exirel 10 SE (10-20.5 oz) 6. Grandevo WDG (1-3 lb) ▲ 22. Verdepryn 100 SL (8.2-11 oz) 27. Esteem 0.86 EC (16 oz) RR 43. Dipel DF (0.5-2.0 lb) ▲ 44. Danitol 2.4 EC (10.6-16 oz) RUP 50. Intrepid 2 F (4-16 oz) RR 54. Aza-Direct (1.0-3.5 pt) ▲ 55. Avaunt 30 WG (3.5-6 oz) RR 59. Actara 25 WG (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 64. Entrust SC (4-6 oz) RR ▲ 85. Delegate 25 WG (3-6 oz) RR 88. Altacor 35 WDG (3-4.5 oz) RR 88. Altacor eVo 70 WDG (1.5 - 2.2 oz) RR
Leafrollers	2, 6, 22, 27, 43, 44, 50, 55, 64, 85, 88	
Tarnished plant bug	44, 54, 55, 59, 60	

TUBE OR BALLOON

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	7, 12, 28, 70, 75	FUNGICIDES 7. Tilt (6 oz) 12. Abound (6.0-15.5 oz) RR 28. Quilt Xcel (14-21 oz) 29. Serenade Opti (2-6 qt) ▲ 35. Quadris Top (12-14 oz) 65. Elevate 50 WDG (1.5 lb) 66. JMS Stylet Oil (3-6 qt) 67. Switch 62.5 WG (11-14 oz) 70. Pristine (18.5-23 oz) 75. Quash (2.5 oz) 82. Regalia (1-4 qt)
Saskatoon-juniper rust	7, 12, 28, 35, 70	
Brown rot	29, 65, 67	
Powdery mildew	7, 12, 35, 66, 82	

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SASKATOON BERRIES

TUBE OR BALLOON (continued)

INSECTS	Chemical Efficacy	Suggested Chemicals (Rate/acre)
		INSECTICIDES
Saskatoon bud moth	2, 60, 85, 88	2. Exirel 10 SE (10-20.5 oz)
Tarnished plant bug	22, 44, 54, 55, 59, 60	23. Sevin 4 F (1-2 qt) ¹
Fruit-infesting weevils	2, 23, 44, 55, 59, 60	22. Verdepryn 100 SL (8.2 - 11 oz)
Sawflies	55, 60	44. Danitol 2.4 EC (10.6-16 oz) RUP
Comments: ¹ Do not apply Sevin more than 5 times per year. Do not exceed 10 qts of Sevin per acre per year. Sevin is a strong fruit-thinning agent if used on saskatoons within thirty days after full bloom.		54. Aza-Direct (1.0-3.5 pt) ▲ 55. Avaunt 30WG (3.5-6 oz) RR 59. Actara 25 WG (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 85. Delegate WG (3-6 oz) RR 88. Altacor 35 WDG (3-4.5 oz) RR 88. Altacor eVo 70 WDG (1.5 - 2.2 oz) RR

EARLY BLOOM – FULL BLOOM

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
		FUNGICIDES
Entomosporium leaf spot	7, 12, 28, 70, 75	7. Tilt (6 oz)
Saskatoon-juniper rust	7, 12, 28, 35, 70	12. Abound (6.0-15.5 oz) RR
Brown rot	29, 65, 67	28. Quilt Xcel (14-21 oz)
Powdery mildew	7, 12, 35, 66, 82	29. Serenade Opti (2-6 qt) ▲ 35. Quadris Top (12-14 oz) 65. Elevate 50 WDG (1.5 lb) 66. JMS Stylet Oil (3-6 qt) 67. Switch 62.5 WG (11-14 oz) 70. Pristine (18.5-23 oz) 75. Quash (2.5 oz) 82. Regalia (1-4 qt)
INSECTS	Chemical Efficacy	Suggested Chemicals (Rate/acre)
No insecticides are recommended during bloom in order to protect pollinating insects		INSECTICIDES

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SASKATOON BERRIES

PETAL FALL

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	7, 12, 28, 70, 75	FUNGICIDES 7. Tilt (6 oz) 12. Abound (6.0-15.5 oz) <i>RR</i> 28. Quilt Xcel (14-21 oz) 29. Serenade Opti (2-6 qt) ▲ 35. Quadris Top (12-14 oz) 65. Elevate 50 WDG (1.5 lb) 66. JMS Stylet Oil (3-6 qt) 67. Switch 62.5 WG (11-14 oz) 70. Pristine (18.5-23 oz) 75. Quash (2.5 oz) 82. Regalia (1-4 qt)
Saskatoon-juniper rust	7, 12, 28, 35, 70	
Brown rot	29, 65, 67	
Powdery mildew	7, 12, 35, 66, 82	
INSECTS		INSECTICIDES 2. Exirel 10 SE (10-20.5 oz) 6. Grandevo WDG (1-3 lb) ▲ 15. Sivanto Prime 200 SL (7-14 oz) 22. Verdepryn 100 SL (8.2-11 oz) 26. Cormoran DC (20 fl oz) 27. Esteem 0.86 EC (16 oz) <i>RR</i> 36. Spear T (2-3 gal) 44. Danitol 2.4 EC (10.6-16 oz) RUP ¹ 55. Avaunt 30 WG (3.5-6 oz) <i>RR</i> 59. Actara 25 WG (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) <i>RR</i> 85. Delegate WG (3-6 oz) <i>RR</i> 88. Altacor 35 WDG (3-4.5 oz) <i>RR</i> 88. Altacor eVo 70 WDG (1.5 - 2.2 oz) <i>RR</i>
Saskatoon bud moth	2, 60, 85, 88	
Foliar aphids	2, 6, 15, 22, 26, 27, 36, 55, 59, 60	
Fruit-infesting weevils	2, 26, 44, 55, 59, 60, 76	
Sawflies	55, 60	
Comments: ¹ Do not apply more than 28 fl oz of Sivanto per acre per year.		

EARLY GREEN FRUIT

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	7, 12, 28, 70, 75	FUNGICIDES 7. Tilt (6 oz) ¹ 12. Abound (6.0-15.5 oz) <i>RR</i> 28. Quilt Xcel (14-21 oz) ¹ 29. Serenade Opti (2-6 qt) ▲ 35. Quadris Top (12-14 oz) 65. Elevate 50 WDG (1.5 lb) 66. JMS Stylet Oil (3-6 qt) 67. Switch 62.5 WG (11-14 oz) 70. Pristine (18.5-23 oz) 75. Quash (2.5 oz) 82. Regalia (1-4 qt)
Saskatoon-juniper rust	7, 12, 28, 35, 70	
Brown rot	29, 65, 67	
Powdery mildew	7, 12, 35, 66, 82	
Comments: ¹ Tilt and Quilt Xcel have a 30 day PHI.		

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SASKATOON BERRIES

EARLY GREEN FRUIT *(continued)*

INSECTS

Saskatoon bud moth	2, 60, 85, 88
Foliar aphids	2, 6, 15, 22, 27, 36, 55, 59, 60, 76
Fruit-infesting weevils	2, 23, 44, 55, 59, 60, 76
Sawflies	55, 60
Rose chafer	2, 44, 54, 55, 59, 60, 76, 85

INSECTICIDES

- 2.** Exirel (10-20.5 oz)
- 6.** Grandevo (1-3 lb) ▲
- 15.** Sivanto Prime 200 SL (7-14 oz)
- 22.** Verdepryn 100 SL (8.2 - 11 oz)
- 27.** Esteem 0.86 EC (16 oz) **RR**
- 36.** Spear T (2-3 gal)
- 44.** Danitol 2.4 EC (10.6-16 oz) RUP
- 54.** Aza-Direct (1.0-3.5 pt) ▲
- 55.** Avaunt 30 WG (3.5-6 oz) **RR**
- 59.** Actara 25 WG (3-4 oz)
- 60.** Assail 30 SG (2.5-5.3 oz) **RR**
- 76.** Admire Pro (1-2.8 oz) **RR**
- 85.** Delegate 25 WG (3-6 oz) **RR**
- 88.** Altacor 35 WDG (3-4.5 oz) **RR**

LATE GREEN FRUIT

DISEASES

Chemical Efficacy

Entomosporium leaf spot	12, 70, 75
Saskatoon-juniper rust	12, 35, 70
Brown rot	29, 65, 67
Powdery mildew	12, 35, 66, 82

Suggested Chemicals (Rate/acre)

FUNGICIDES

- 12.** Abound (6.0-15.5 oz) **RR**
- 29.** Serenade Opti (2-6 qt) ▲
- 35.** Quadris Top (12-14 oz)
- 65.** Elevate 50 WDG (1.5 lb)
- 66.** JMS Stylet Oil (3-6 qt)
- 67.** Switch 62.5 WG (11-14 oz)
- 70.** Pristine (18.5-23 oz)
- 75.** Quash (2.5 oz)
- 82.** Regalia (1-4 qt)

INSECTS

Foliar aphids	2, 6, 15, 27, 55, 59, 60, 76
Fruit-infesting weevils	2, 23, 44, 55, 59, 60, 76
Rose chafer	2, 44, 54, 55, 59, 60, 76, 85

INSECTICIDES

- 2.** Exirel 10 SE (10-20.5 oz)
- 6.** Grandevo WDG (1-3 lb) ▲
- 15.** Sivanto Prime 200 SL (7-14 oz)
- 27.** Esteem 0.86 EC (16 oz) **RR**
- 44.** Danitol 2.4 EC (10.6-16 oz) RUP
- 54.** Aza-Direct (1.0-3.5 pt) ▲
- 55.** Avaunt 30 WG (3.5-6 oz) **RR**
- 59.** Actara 25 WG (3-4 oz)
- 60.** Assail 30 SG (2.5-5.3 oz) **RR**
- 76.** Admire Pro (1-2.8 oz) **RR**
- 85.** Delegate 25 WG (3-6 oz) **RR**

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SASKATOON BERRIES

RED FRUIT

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	12, 70, 75	FUNGICIDES 12. Abound (6.0-15.5 oz) <i>RR</i> 29. Serenade Opti (2-6 qt) ▲ 35. Quadris Top (12-14 oz) ¹ 65. Elevate 50 WDG (1.5 lb) 66. JMS Stylet Oil (3-6 qt) 67. Switch 62.5 WG (11-14 oz) 70. Pristine (18.5-23 oz) 75. Quash (2.5 oz) ¹ 82. Regalia (1-4 qt)
Saskatoon-juniper rust	12, 35, 70	
Brown rot	29, 65, 67	
Powdery mildew	12, 35, 66, 82	
Comments: ¹ Quadris Top and Quash have a 7 day PHI.		
INSECTS		INSECTICIDES
Foliar aphids	2, 6, 22, 26, 15, 27, 55, 59, 60, 76	2. Exirel 10 SE (10-20.5 oz) 6. Grandevo (1-3 lb) ▲ 15. Sivanto Prime 200 SL (7-14 oz) 22. Verdepryn 100 SL (8.2-11 oz) 26. Cormoran DC (20 fl oz) 27. Esteem 0.86 EC (16 oz) <i>RR</i> ¹ 44. Danitol 2.4 EC (10.6-16 oz) RUP 54. Aza-Direct (1.0-3.5 pt) ▲ 55. Avaunt 30 WDG (3.5-6 oz) <i>RR</i> ¹ 59. Actara 25 WG (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) <i>RR</i> 76. Admire Pro (1-2.8 oz) <i>RR</i> ² 85. Delegate 25 WG (3-6 oz) <i>RR</i>
Rose chafer	2, 22, 26, 44, 54, 55, 59, 60, 76, 85	
Comments: ¹ 1 Esteem and Avaunt have a 7 day PHI. ² Admire Pro has a 3 day PHI for foliar applications and a 7 day PHI for soil applications.		

MATURE FRUIT -- HARVEST

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	12, 70	FUNGICIDES 12. Abound (6.0-15.5 oz) <i>RR</i> 29. Serenade Opti (2-6 qt) ▲ 65. Elevate 50 WDG (1.5 lb) 66. JMS Stylet Oil (3-6 qt) 67. Switch 62.5 WG (11-14 oz) 70. Pristine (18.5-23 oz) 82. Regalia (1-4 qt)
Brown rot	29, 65, 67	
Powdery mildew	12, 66, 82	
INSECTS		INSECTICIDES
Foliar aphids	2, 6, 15, 22, 26, 36, 55, 59, 60, 76	2. Exirel 10 SE (10-20.5 oz) ² 6. Grandevo WDG (1-3 lb) ▲ 15. Sivanto Prime 200 SL (7-14 oz) 22. Verdepryn 100 SL (8.2-11 oz) 26. Cormoran DC (20 fl oz) 36. Spear T (2-3 gal) 44. Danitol 2.4 EC (10.6-16 oz) RUP ² 54. Aza-Direct (1.0-3.5 pt) ▲ 59. Actara 25 WG (3-4 oz) ² 60. Assail 30 SG (2.5-5.3 oz) <i>RR</i> 76. Admire Pro (1-2.8 oz) <i>RR</i> 85. Delegate 25 WG (3-6 oz) <i>RR</i>
Rose chafer	2, 44, 54, 59, 60, 76, 85	
Spotted wing drosophila ¹	2, 6, 22, 26, 36, 44, 64, 85	
Comments: ¹ Although saskatoon berries are an acceptable host for spotted wing drosophila, the early ripening season of this fruit makes it unlikely for this pest to be a significant problem in this crop. See “Invasive and Emerging Pests” section for more information on spotted wing drosophila. ² Exirel, Danitol and Actara have a 3 day PHI.		

SASKATOON BERRIES

POST-HARVEST

DISEASES	Chemical Efficacy	Suggested Chemicals (Rate/acre)
Entomosporium leaf spot	7, 12, 28, 70, 75	FUNGICIDES 7. Tilt (6 oz) 12. Abound (6.0-15.5 oz) RR 28. Quilt Xcel (14-21 oz) 35. Quadris Top (12-14 oz) 66. JMS Stylet Oil (3-6 qt) 70. Pristine (18.5-23 oz) 75. Quash (2.5 oz) 82. Regalia (1-4 qt)
Powdery mildew	7, 12, 35, 66, 82	
INSECTS		INSECTICIDES 2. Exirel 10 SE (10-20.5 oz) 23. Sevin 4 F (1-2 qt) 44. Danitol 2.4 EC (10.6-16 oz) RUP 54. Aza-Direct (1.0-3.5 pt) ▲ 55. Avaunt 30 WG (3.5-6 oz) RR 59. Actara 25 WG (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 76. Admire Pro (1-2.8 oz) RR 77. Platinum 75 SG (1.66-4.0 oz) 85. Delegate 25 WG (3-6 oz) RR
Japanese beetle	2, 23, 44, 54, 55, 59, 60, 76, 85	
Woolly aphids	59, 76, 77	

FALL DORMANT

INSECTS	INSECTICIDES
Woolly aphids	76. Admire Pro (1-2.8 oz) RR 77. Platinum 75 SG (1.66-4.0 oz)

Special Problems

A few saskatoon production sites in Michigan have been diagnosed with root diseases. The pathogenic organisms were diagnosed by MSU specialists as *Rhizoctonia* and *Phytophthora*. Both are very difficult to control, involving soil moisture management and soil-applied fungicides. There are no research data on the efficacy of fungicides against these diseases on saskatoons. Based on other crops and label information, Abound or Cannonball WP are suggested for *Rhizoctonia*, and Ridomil is suggested for *Phytophthora*. Be sure to follow label instructions carefully when using these products for root zone pathogens.

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