

# SASKATOON BERRY - 2018

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.

Some products listed in this document may be of interest to organic growers or growers who wish to use a more environmentally friendly approach to fruit production. A "reduced-risk" (RR) designation indicates that the product has relatively low toxicity to mammals. Products listed by the Organic Materials Review Institute (OMRI) for use in organic production are noted. More information on each product is provided in the "Pesticide Use Restriction" at the end of this document.

<b>SILVER TIP - GREEN TIP</b>	
<b>Diseases</b>	<b>Suggested Chemicals (Rate/acre)</b>
Entomosporium spot            7, 12, 28, 70, 75 -----	<b>Fungicides (rate/acre)</b> 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)
<b>Insects</b>	<b>Suggested Chemicals (Rate/acre)</b>
Tarnished plant bug            44, 54, 55, 59, 60, 76 -----	<b>Insecticides (rate/acre)</b> 44. Danitol 2.4 EC (10.6-16 oz) RUP 54. Aza-Direct (1.0-3.5 pt) OMRI 55. Avaunt (3.5-6 oz) RR 59. Actara (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 76. Admire Pro (1-2.8 oz) RR

<b>FULL GREEN – TIGHT CLUSTER</b>	
<b>Diseases</b>	<b>Suggested Chemicals (Rate/acre)</b>
Entomosporium spot            7, 12, 28, 70, 75 -----	<b>Fungicides (rate/acre)</b> 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)

## FULL GREEN – TIGHT CLUSTER *(continued)*

<b>Insects</b>	<b>Suggested Chemicals (Rate/acre)</b>
Saskatoon bud moth                    2, 60, 85, 88	<b>Insecticides (rate/acre)</b> 2. Exirel (10-20.5 oz) 6. Grandevo (1-3 lb) 43. Dipel DF (0.5-2.0 lb) OMRI 44. Danitol 2.4 EC (10.6-16 oz) RUP 46. SpinTor 2 SC (4-6 oz) RR 50. Intrepid 2 F (4-16 oz) RR 52. Esteem 0.86 EC (16 oz) RR 54. Aza-Direct (1.0-3.5 pt) OMRI 55. Avaunt (3.5-6 oz) RR 59. Actara (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 64. Entrust SC (4-6 oz) RR OMRI 76. Admire Pro (1-2.8 oz) RR 85. Delegate WG (3-6 oz) RR 88. Altacor (3-4.5 oz) RR
Leafrollers                                2, 6, 43, 44, 46, 50, 52, 55, 64, 85, 88	
Tarnished plant bug                    44, 54, 55, 59, 60, 76	

## WHITE TIP

<b>Diseases</b>	<b>Suggested Chemicals (Rate/acre)</b>
Entomosporium spot                    7, 12, 28, 70, 75	<b>Fungicides (rate/acre)</b> 7. Tilt (6 oz) 12. Abound (6.0-15.5 oz) RR 28. Quilt Xcel (14-21 oz) 29. Serenade Opti (2-6 qt) OMRI 35. Quadris Top (12-14 oz) 65. Elevate 50 WDG (1.5 lb) 67. Switch 62.5 WG (11-14 oz) 70. Pristine (18.5-23 oz) 75. Quash (2.5 oz)
Saskatoon-juniper rust                7, 12, 28, 35, 70	
Brown rot                                    29, 65, 67	

<b>Insects</b>	<b>Suggested Chemicals (Rate/acre)</b>
Saskatoon bud moth                    2, 60, 85, 88	<b>Insecticides (rate/acre)</b> 2. Exirel (10-20.5 oz) 6. Grandevo (1-3 lb) 43. Dipel DF (0.5-2.0 lb) OMRI 44. Danitol 2.4 EC (10.6-16 oz) RUP 46. SpinTor 2 SC (4-6 oz) RR 50. Intrepid 2 F (4-16 oz) RR 52. Esteem 0.86 EC (16 oz) RR 54. Aza-Direct (1.0-3.5 pt) OMRI 55. Avaunt (3.5-6 oz) RR 59. Actara (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 64. Entrust SC (4-6 oz) RR OMRI 76. Admire Pro (1-2.8 oz) RR 85. Delegate WG (3-6 oz) RR 88. Altacor (3-4.5 oz) RR
Leafrollers                                2, 6, 43, 44, 46, 50, 52, 55, 64, 85, 88	
Tarnished plant bug                    44, 54, 55, 59, 60, 76	

## TUBE OR BALLOON

Diseases		Suggested Chemicals (Rate/acre)
Entomosporium spot	7, 12, 28, 70, 75	<b>Fungicides (rate/acre)</b> 7. Tilt (6 oz) 12. Abound (6.0-15.5 oz) RR 28. Quilt Xcel (14-21 oz) 29. Serenade Opti (2-6 qt) OMRI 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		Suggested Chemicals (Rate/acre)
Saskatoon bud moth	2, 60, 85, 88	<b>Insecticides (rate/acre)</b> 2. Exirel (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) OMRI 55. Avaunt (3.5-6 oz) RR 59. Actara (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 76. Admire Pro (1-2.8 oz) RR 85. Delegate WG (3-6 oz) RR 88. Altacor (3-4.5 oz) RR
Tarnished plant bug	44, 54, 55, 59, 60, 76	
Fruit-infesting weevils	2, 23, 44, 55, 59, 60, 76	
Sawflies	55, 60	

## EARLY BLOOM – FULL BLOOM

Diseases		Suggested Chemicals (Rate/acre)
Entomosporium spot	7, 12, 28, 70, 75	<b>Fungicides (rate/acre)</b> 7. Tilt (6 oz) 12. Abound (6.0-15.5 oz) RR 28. Quilt Xcel (14-21 oz) 29. Serenade Opti (2-6 qt) OMRI 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		Suggested Chemicals (Rate/acre)
No insecticides are recommended during bloom in order to protect pollinating insects		<b>Insecticides (rate/acre)</b>

## PETAL FALL

Diseases		Suggested Chemicals (Rate/acre)
Entomosporium spot	7, 12, 28, 70, 75	<b>Fungicides (rate/acre)</b> 7. Tilt (6 oz) 12. Abound (6.0-15.5 oz) RR 28. Quilt Xcel (14-21 oz) 29. Serenade Opti (2-6 qt) OMRI 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		Suggested Chemicals (Rate/acre)
Saskatoon bud moth	2, 60, 85, 88	<b>Insecticides (rate/acre)</b> 2. Exirel (10-20.5 oz) 6. Grandevo (1-3 lb) 15. Sivanto 200 SL (7-14 oz) 44. Danitol 2.4 EC (10.6-16 oz) RUP 52. Esteem 0.86 EC (16 oz) RR 55. Avaunt (3.5-6 oz) RR 59. Actara (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 76. Admire Pro (1-2.8 oz) RR 85. Delegate WG (3-6 oz) RR 88. Altacor (3-4.5 oz) RR
Foliar aphids	2, 6, 15, 52, 55, 59, 60, 76	
Fruit-infesting weevils	2, 44, 55, 59, 60, 76	
Sawflies	55, 60	

## EARLY GREEN FRUIT

Diseases		Suggested Chemicals (Rate/acre)
Entomosporium spot	7, 12, 28, 70, 75	<b>Fungicides (rate/acre)</b> 7. Tilt (6 oz) 30 day PHI 12. Abound (6.0-15.5 oz) RR 28. Quilt Xcel (14-21 oz) 30 day PHI 29. Serenade Opti (2-6 qt) OMRI 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	

## EARLY GREEN FRUIT *(continued)*

Insects		Suggested Chemicals (Rate/acre)
Saskatoon bud moth	2, 60, 85, 88	<b>Insecticides (rate/acre)</b> 2. Exirel (10-20.5 oz) 6. Grandevo (1-3 lb) 15. Sivanto 200 SL (7-14 oz) 44. Danitol 2.4 EC (10.6-16 oz) RUP 52. Esteem 0.86 EC (16 oz) RR 54. Aza-Direct (1.0-3.5 pt) OMRI 55. Avaunt (3.5-6 oz) RR 59. Actara (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 76. Admire Pro (1-2.8 oz) RR 85. Delegate WG (3-6 oz) RR 88. Altacor (3-4.5 oz) RR
Foliar aphids	2, 6, 15, 52, 55, 59, 60, 76	
Fruit-infesting weevils	2, 23, 44, 55, 59, 60, 76	
Rose chafer	2, 44, 54, 55, 59, 60, 76, 85	

## LATE GREEN FRUIT

Diseases		Suggested Chemicals (Rate/acre)
Entomosporium spot	12, 70, 75	<b>Fungicides (rate/acre)</b> 12. Abound (6.0-15.5 oz) RR 29. Serenade Opti (2-6 qt) OMRI 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	12, 35, 70	
Brown rot	29, 65, 67	
Powdery mildew	12, 35, 66, 82	

Insects		Suggested Chemicals (Rate/acre)
Foliar aphids	2, 6, 15, 52, 55, 59, 60, 76	<b>Insecticides (rate/acre)</b> 2. Exirel (10-20.5 oz) 6. Grandevo (1-3 lb) 15. Sivanto 200 SL (7-14 oz) 44. Danitol 2.4 EC (10.6-16 oz) RUP 52. Esteem 0.86 EC (16 oz) RR 54. Aza-Direct (1.0-3.5 pt) OMRI 55. Avaunt (3.5-6 oz) RR 59. Actara (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 76. Admire Pro (1-2.8 oz) RR 85. Delegate WG (3-6 oz) RR 88. Altacor (3-4.5 oz) RR
Fruit-infesting weevils	2, 23, 44, 55, 59, 60, 76	
Rose chafer	2, 44, 54, 55, 59, 60, 76, 85	

## RED FRUIT

Diseases		Suggested Chemicals (Rate/acre)
Entomosporium spot	12, 70, 75	<b>Fungicides (rate/acre)</b> 12. Abound (6.0-15.5 oz) RR 29. Serenade Opti (2-6 qt) OMRI 35. Quadris Top (12-14 oz) 7 day PHI 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) 7 day PHI 82. Regalia (1-4 qt)
Saskatoon-juniper rust	12, 35, 70	
Brown rot	29, 65, 67	
Powdery mildew	12, 35, 66, 82	
Insects		Suggested Chemicals (Rate/acre)
Foliar aphids	2, 6, 15, 52, 55, 59, 60, 76	<b>Insecticides (rate/acre)</b> 2. Exirel (10-20.5 oz) 6. Grandevo (1-3 lb) 15. Sivanto 200 SL (7-14 oz) 44. Danitol 2.4 EC (10.6-16 oz) RUP 52. Esteem 0.86 EC (16 oz) RR 7 day PHI 54. Aza-Direct (1.0-3.5 pt) OMRI 55. Avaunt (3.5-6 oz) RR 7 day PHI 59. Actara (3-4 oz) 60. Assail 30 SG (2.5-5.3 oz) RR 64. Entrust SC (4-6 oz) RR OMRI 76. Admire Pro (1-2.8 oz) RR 7 day PHI if soil applied 85. Delegate WG (3-6 oz) RR
Rose chafer	2, 44, 54, 55, 59, 60, 76, 85	

## MATURE FRUIT -- HARVEST

Diseases		Suggested Chemicals (Rate/acre)
Entomosporium spot	12, 70,	<b>Fungicides (rate/acre)</b> all are 0 day PHI 12. Abound (6.0-15.5 oz) RR 29. Serenade Opti (2-6 qt) OMRI 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	

## MATURE FRUIT – HARVEST *(continued)*

Insects		Suggested Chemicals (Rate/acre)
Foliar aphids	2, 6, 15, 55, 59, 60, 76	<b>Insecticides (rate/acre)</b> 2. Exirel (10-20.5 oz) 3 day PHI 6. Grandevo (1-3 lb) 0 day PHI 15. Sivanto 200 SL (7-14 oz) 3 day PHI 44. Danitol 2.4 EC (10.6-16 oz) RUP 3 day PHI 54. Aza-Direct (1.0-3.5 pt) OMRI 0 day PHI 59. Actara (3-4 oz) 3 day PHI 60. Assail 30 SG (2.5-5.3 oz) RR 1 day PHI 76. Admire Pro (1-2.8 oz) RR 3 day PHI foliar/7 day PHI soil 85. Delegate WG (3-6 oz) RR 3 day PHI
Rose chafer	2, 44, 54, 59, 60, 76, 85	
Woolly aphids	59, 76	

## POST-HARVEST

Diseases		Suggested Chemicals (Rate/acre)
Entomosporium spot	7, 12, 28, 70, 75	<b>Fungicides (rate/acre)</b> 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		Suggested Chemicals (Rate/acre)
Japanese beetle	2, 23, 44, 54, 55, 59, 60, 76, 85	<b>Insecticides (rate/acre)</b> 2. Exirel (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) OMRI 55. Avaunt (3.5-6 oz) RR 59. Actara (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 WG (3-6 oz) RR
Woolly aphids	59, 76, 77	

# FALL DORMANT

## Insects

Woolly aphids            76, 77

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### Insecticides (rate/acre)

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

## Special Problems

An infestation of Spotted Wing Drosophila (SWD), an invasive fly pest, was reported in a Michigan saskatoon production site in 2017. It is still uncertain if this pest will become a widespread problem for saskatoon growers in the state. Further information on the management of this pest will be released as the growing season progresses.

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.

# Pesticide Use Restrictions on Saskatoons - 2018

## FUNGICIDES

### Abound

**Azoxystrobin**      **Group 11**    **RR**            **REI 4 hours**            **PHI 0 days**  
*6-15.5 fl.oz./acre/application, max. 46 fl.oz./acre/year*

Abound is extremely phytotoxic to some apple varieties, especially McIntosh and its relatives, causing damage from either spray drift or residue left in the tank. Growers should not use the same equipment to spray Abound and apples and avoid drift to susceptible apple varieties. Because of their unique mode of action, strobilurins are excellent products to use in rotation with SI fungicides but are prone to resistance development. 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.

### Elevate

**Fenhexamid**            **Group 17**            **RR**            **REI 12 hours**            **PHI 0 days**  
*1.5 lb./acre/application, max. 6 lb /acre/year*

Avoid making more than 2 consecutive applications before switching to a fungicide with a different mode of action.

### Inspire Super

**difenoconazole and cyprodinil**    **Group 3 & 9**            **REI 12 hours**            **PHI 7 days**  
*16-20 fl.oz./acre/application, max. 80 fl.oz./acre/year; no more than 2 sequential applications*

### JMS Stylet Oil

**paraffinic oil**            **RR (one formulation is OMRI)**    **REI 4 hours**            **PHI 0 days**  
*3-6 qt./acre/application, per 100 gal. water*

### Omega

**fluazinam**            **Group 29**    **RR**            **REI 3days**            **PHI 30 days**  
*1.25 pt./acre/application, max. 7.5 pt. /acre/year*

### Pristine

**pyraclostrobin + boscalid, Group 7 + 11**    **REI 12 hours**            **PHI 0 days**  
*18.5-23 oz./acre/application, max. 4 app./year, max. 92 oz. /acre/year, 7 day min. int.*

*Pristine cannot be tank-mixed with any other products, only water.*

**Proline**

**Prothioconazole**                      **Group 3**                      **REI 12 hours**                      **PHI 7 days**  
*5.7 fl.oz./ace/application, limit of 2 applications/year and 11.4 fl.oz./acre/year*

**Quadris Top**

**Azoxystrobin + Difenconazole**   **Group 3 + 11**                      **REI 12 hours**                      **PHI 7 days**  
*12-14 fl.oz./acre/application, 7 day min. interval, max. of 56 fl.oz./acre/year*

The active ingredient azoxystrobin is extremely phytotoxic to some apple varieties, especially McIntosh and its relatives, causing damage from either spray drift or residue left in the tank. Growers should not use equipment used to spray Quadris Top in apples and avoid drift to susceptible apple varieties. No more than two sequential applications of Quadris Top are allowed before switching to a product with a different mode of action (non from group 3 or 11). 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.

**Quash**

**metconazole**                              **Group 3**                              **REI 12 hours**                              **PHI 7 days**  
*2.5 oz./acre/application, max. 3 app./year, max. 7.5 oz. /acre/year*

No more than two sequential applications. Do not apply with an adjuvant.

**Quilt Xcel**

**azoxystrobin + propiconazole, Group 3 + 11**                      **REI 12 hours**                      **PHI 30 days**  
*14-21 fl.oz./acre/application, max. 3 app./year, max. 82 fl.oz./acre/year*

Do not apply more than two consecutive Quilt sprays (or other products containing group 11 fungicides); use no more than 3 applications of group 11 products per year. In addition to these restrictions, the use of 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. Quilt Xcel is extremely phytotoxic to certain apple varieties (due to the azoxystrobin component) and may be phytotoxic to other crops when tank-mixed with products formulated as ECs or with silicone adjuvants.

**Regalia**

**extract of *Reynoutria sachalinensis***   **OMRI**                      **REI 4 hours**                      **PHI 0 days**  
*1-4 qts./acre/application (0.5-1.0 qt./acre if aerially applied)*

Applications have to be repeated every 7 to 14 days to protect new growth. Avoid sprays during the pre-bloom and bloom period.

**Ridomil Gold SL**

**mefenoxam**                      **Group 4**                              **REI 48 hours**                      **PHI**  
*Max. 3.6 lb a.i./acre/year*

### **Serenade Opti**

**QST 713 *Bacillus subtilis***      **Group 44**      **OMRI**      **REI 4 hours PHI 0 days**  
*2-6 qt./acre/application*

### **Switch**

**cyprodinil + fludioxonil**      **Group 9 + 12**      **REI 12 hours**      **PHI 0 days**  
*11-14 oz./acre/application, max. 2 app./year, max. 56 oz./acre/year*

To avoid resistance development, make no more than 2 sequential applications before using a fungicide with a different mode of action. Do not use an adjuvant with Switch.

### **Tilt**

**propiconazole**      **Group 3**      **REI 12 hours**      **PHI 30 days**  
*6 fl.oz/acre/application, max. 30 fl.oz. /acre/year*

The use of all propiconazole-containing products is limited to 0.84 lb a.i./acre/season.

## **Insecticides**

### **Actara**

**thiamethoxam**      **Group 4A**      **REI 12 hours**      **PHI 3 days**  
*3-4 oz./acre/application, max 12 oz./acre/year, 7 day min. interval*

Actara is highly toxic to bees exposed to direct treatment or residues on blooming crops. The application of all thiamethoxam-containing products is limited to 0.188 lb a.i./acre/year.

### **Admire Pro**

**imidacloprid**      **Group 4A**      **RR**      **REI 12 hours**      **PHI 3 days**  
*1-2.8 fl.oz./acre/application, max. 5 app./year, max. 14 fl.oz./acre/year, 7 day min. int.*

When Admire Pro is soil-applied the soil should be moist and irrigated in with 0.5 to 1 inch of irrigation within 24 hours of treatment, or by chemigation to the root zone.

### **Altacor**

**chlorantraniliprole**      **Group 28**      **RR**      **REI 4 hours**      **PHI 1 day**  
*3-4.5 fl.oz./acre/application, max. 9 fl.oz./acre/year, 7 day min. interval*

### **Assail 30SG**

**acetamiprid**      **Group 4A**      **RR**      **REI 12 hours**      **PHI 1 day**  
*2.5-5.3 fl.oz/acre/application, max. 5 app./year, max. 26.7 fl.oz./acre/year, 7 day min. int.*

### **Avaunt**

**indoxacarb**      **Group 22A**      **RR**      **REI 12 hours**      **PHI 7 days**  
*3.5-6 oz./application, max. 4 app./year, max. 24 fl.oz./acre/year, 7 day min. interval*

**Aza-Direct**

**azadirachtin (neem oil)**      **OMRI**      **REI 4 hours**      **PHI**  
*1.0-3.5 pints/acre/application*

**Danitol**

**fenpropathrin**      **Group 3**      **RUP**      **REI 24 hours**      **PHI 3 days**  
*10.6-16 fl.oz./acre/application, max. 2 app./year, max. 32 fl.oz./acre/year, 14 day min. int.*

**Delegate**

**spinetoram**      **Group 5**      **RR**      **REI 4 hours**      **PHI 3 days**  
*3-6 oz./acre/application, max. 6 app./year, max. 19.5 oz./acre/year, 6 day min. interval*

No more than 2 consecutive group 5 insecticides should be applied.

**DiPel DF**

***Bacillus thuringiensis* subspecies *kurstaki***      **OMRI**      **REI 4 hours**      **PHI 0 days**  
*0.5-2.0 lb/acre/application*

**Entrust SC**

**spinosad**      **Group 5**      **RR, OMRI**      **REI 4 hours**      **PHI 3 days**  
*4-6 fl.oz./acre/application, max. 9 fl.oz./acre/year*

**Esteem**

**pyriproxifen**      **Group 7C**      **RR**      **REI 12 hours**      **PHI 7 days**  
*16 fl.oz./acre/application, max. 2 app./year, max. 32 fl.oz./acre/year, 14 day min. interval*

To optimize insecticide resistance management practices, use of Esteem is restricted to 2 applications per season and no more than 0.218 lb a.i./acre/season.

**Exirel**

**cyantraniliprole**      **Group 28**      **REI 12 hours**      **PHI 3 days**  
*10 – 20.5 fl.ox./acre/application, 3 applications/year, 5 day minimum interval*

**Grandevo**

**Chromobacterium subtsugae**      **OMRI**      **REI 4 hours**      **PHI 0 days**  
*1-3 lb./acre/application*

**GF120 NF Fruit Fly Bait**

**spinosad**      **Group 5**      **RR, OMRI**      **REI 4 hours**      **PHI 0 days**  
*10-20 fl.oz./acre/application*

**Intrepid**

**methoxyfenozide**      **Group 18**      **RR**      **REI 4 hours**      **PHI 7 days**  
*4-16 fl.oz./acre/application, max. 48 fl.oz./acre/year, 7 day min. interval*

**Platinum 75 SG**

**thiamethoxam      Group 4A      REI 12 hours      PHI 75 days**  
*1.66-4.01 oz./acre/application, max. 1 app/year, max. 4.01oz./acre/year*

This product should be applied to moist soil in the root zone, then followed with 0.5 to 1 inch of water to be properly translocated into the plant. Platinum 2 SC is restricted to 1 application per season, and all thiamethoxam-containing product use is limited to 0.188 lb a.i./acre/year.

**PyGanic**

**pyrethrins      Group 3A      OMRI      REI 12 hours      PHI**  
*16-64 fl.oz./acre/application*

**Sevin 4F**

**carbaryl      Group 1A      REI 12 hours      PHI 7 days**  
*1-2 qts./acre/application, max. 5 app./year, max. 10 qts./acre/year, 7 day min. interval*

Carbaryl is a strong fruit-thinning agent if used on saskatoons within 30 days after full bloom.

**Sivanto**

**Flupyradifurone      Group 4D      REI 4 hours      PHI 3 days**  
*7.0 – 14 fl.oz/acre/application, 28 fl.oz./acre/year limit, 7 day minimum intervals*

**SpinTor**

**spinosad      Group 5      RR      REI 4 hours      PHI 3 days**  
*4-6 fl.oz./acre/application, max. 6 app./year, max. 29 fl.oz./acre/year, 6 day min. interval*

SpinTor should be applied no more than 4 times per season. SpinTor applications should not be made with less than a 1- to 2-hour rain-free period.

For more information, contact:

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