Protecting Saskatoon Yields from Leaf and Berry Spot Disease

A simple way to sum up Saskatoon Berry Disease Management is to remember the phrase... ***Protect the flowers from rain showers***.

Figure 1: White tip stage in Saskatoons

Application of a recommended fungicide to ensure the flowers are protected from disease-causing fungi is often necessary in Manitoba. The primary disease of saskatoon plants in the spring is Entomosporium Leaf and Berry Spot disease. If conditions are not favourable for disease development, i.e., dry and/or cool temperatures, then the number of control applications needed to protect the flowers may be reduced.

Plants that are left unprotected during a rainfall are at great risk of severe crop losses. If a disease outbreak caused crop losses the previous year in your orchards, favourable conditions this year will likely mean problems if no successful attempts at management are made. Once the flowers and fruit are infected, those fruit are unmarketable. Fortunately, dry conditions in 2021 resulted in low disease levels, so levels of leaf and berry spot spores available to infect plants will likely be lower.

Due to the influence of environmental factors on plant development, the time and duration of the bloom period will vary from year to year and from location to location. The bloom period, which extends from the green tip stage to petal fall, is the best time to manage a number of Saskatoon berry diseases particularly Leaf and Berry Spot Disease (Remember—***Protect the Flowers from Rain Showers***).

Previous Manitoba-based research has shown that if Entomosporium inoculums are present in an orchard at full bloom, then ideally, a fungicide application should be made within four days of a rain event (see full bloom definition below)**.** A second fungicide application should be applied if at least seven days have elapsed since the first application, especially if rain has fallen during that time period.

Timing for fungicide applications is based on an estimate of when a certain proportion of the flower buds are fully open. For purposes of pest management, the term "full bloom" refers to the point at which the majority of flowers in the orchard are fully open. By this time, some will be past full bloom, while others will be at earlier stages.

May 2022

Manitoba

The chart below lists the timings for fungicides registered for use on Saskatoon berry (*Amelanchier alnifolia*).

Saskatoon Berry Disease Management Chart

Disease	Product	Chem. Group	Pre-harvest interval day(s) (PHI)	Restricted Entry Interval (REI)	When to Apply
Entomosporium leaf and berry spot (*Entomosporium mespili*)	Funginex DC PCP#(27686)	3	60	12 hours	Apply once between flower bud break and white tip stage.
	Kumulus DF PCP#(18836)	M1	1	24 hours	Apply at first bud break and 10-14 day intervals.
	Propiconazole 250E PCP#(24029)	3	38	12 hours	Apply at white tip, petal fall and green fruit.
	Mission 418 EC PCP#(28016)	3	38	12 hours	Apply at white tip, petal fall and green fruit.
	Topas 250 EC PCP#30163	3	38	12 Hours	Apply at white tip, petal fall and green fruit.
	Pristine WG PCP# (27985)	7,11	0	If hand-harvesting 29 days, other activities can enter once residue is dry.	Can apply up to 4 times per season.

This table is a guide only. Always refer to the product label for application details and precautions. The information contained in this table is current to April 2022.

Contact Us

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