

Suggestions for Anthracnose Management in Strawberries, 2025

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These guidelines are developed as a result of anthracnose resistance to fungicides in Ontario, and the limited fungicide products available to growers.

In Ontario, strawberry anthracnose has been confirmed resistant to FRAC group 11 fungicides, also known as strobilurins or QoIs. A survey conducted in 2021/22 on 13 farms from across the province confirmed that all anthracnose samples were resistant to group 11s. We no longer recommend using the following products for anthracnose management - Cabrio (11), Evito (11), Pristine (11+7), Merivon (11+7), Quadris Top (11+3) and Luna Sensation (11+7).

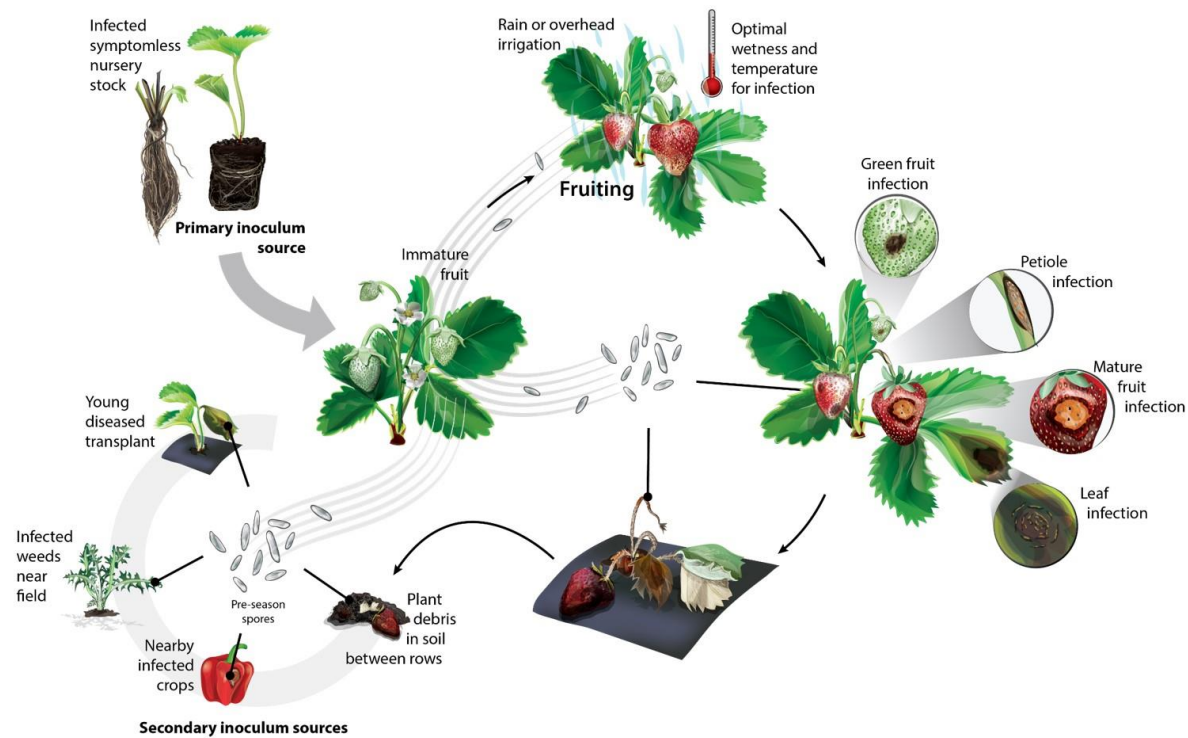
Integrated Management of Anthracnose Guidelines:

Anthracnose will be challenging to control in day-neutral strawberries with fungicides alone. Include other integrated anthracnose management practices such as:

- Some new cultivars (eg. Keepsake, Flavorfest) have tolerance or resistance to anthracnose
- Start new fields with clean plants from an accredited program. Plug plants from field-grown tips carry a higher risk of containing pathogens.
- Don't let the plant canopy get too thick. Nitrogen management is very important. Avoid over-application of nitrogen
 - The source of nitrogen can also have an effect; avoid ammonium forms of nitrogen
- Apply chlorothalonil or captan before bloom for Botrytis management
- As much as possible apply broad spectrum fungicides (group M) during bloom
- Use a [disease prediction model](#) for timing fungicide sprays
- During harvest your options are more limited because of the longer REI and PHI intervals. Options include:
 - Switch/Button (group 9+12), cyprodinil + fludioxonil
 - Miravis prime (group 7+12), pydiflumetofen + fludioxonil
 - Diplomat (group 19), polyoxin D zinc salt
 - Inspire Super (group 3+9), difenoconazole + cyprodinil (suppression only)

- Do not rely on group 11 products
- Remove diseased fruit from plants and if possible, remove from field
- Work in older fields, and/or diseased fields last
- Sanitize between fields (eg. equipment, tools, boots, hands)
- After crop removal, incorporate residue into the soil to allow for breakdown of residue

Anthracnose on Strawberry *(Colletotrichum acutatum)*



Illustrated by Madeline Dowling
phytographics.com

Examples of fungicide programs are below:

June Bearing Strawberries

Pre-bloom: 2 applications of chlorothalonil (M) for Botrytis control.

Bloom: Captan (M), Switch/Button (9+12) **or** Miravis Prime (7+12), Captan (M).

Harvest: Spraying for anthracnose after bloom or during harvest is only needed if warm, wet weather conditions continue, particularly on susceptible cultivars (Mira, Annapolis, Orleans, St. Laurent). Rotate between captan and Switch/Button or Miravis Prime.

Diplomat is registered for anthracnose control however under high disease pressure, Diplomat alone did not provide acceptable control. Inspire Super is registered for anthracnose suppression. Tank mix Diplomat and Inspire Super with compatible fungicides for additional anthracnose control where permitted. Group 3 fungicides may provide suppression of anthracnose during lower disease pressure but have not shown to be effective alone when tested under high disease pressure. Always refer to label.

Day-Neutral Strawberries

A disease prediction model can be used to potentially reduce the number of sprays when disease conditions are not favourable for anthracnose development. To accurately predict anthracnose infections, an on-farm weather station with a leaf wetness sensor is advised. If you are interested in setting up a model with your own data, contact Erica.

[A Strawberry Disease Decision Support System for the 2025 season is available on the ONfruit.ca blog](#) to help growers assess the risk of anthracnose and Botrytis infections from bloom to harvest.

In situations where pressure is high and a lot of anthracnose damage is present workers should strip off any diseased blooms or berries (see pictures below), spray captan, and begin harvest again in 6-8 days (follow label restrictions).

Overwintered day-neutrals often have the highest disease pressure, compared to spring-planted, because the disease from the previous season overwinters in the plants.

Pre-bloom: 2 applications of chlorothalonil (M) for Botrytis control.

Bloom – 6-8 days pre-harvest: Captan (M) alone. Use up to 4 applications at this timing and save 2 applications for the gap before the summer crop if continuing to harvest. Maximum of 6 applications of captan per year.

Harvest: Switch/Button (9+12) and Miravis Prime (7+12) are the most effective products. Use Switch/Button or Miravis Prime during periods when conditions are highly favourable for anthracnose infection (optimal temperature for infection is ~26°C with at least 6 hours of leaf wetness). Resistance Management Statement: After 2 applications, alternate with another fungicide with different modes of action (i.e. FRAC groups).

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Apply captan during a gap in production.

Crop Tolerance & Residue Notes:

Do not make more than **four applications** of fludioxonil-containing products (eg Switch/Button, Miravis Prime, Scholar) on strawberries per year. Note the maximum applications for each individual product: Switch/Button- 3, Miravis Prime- 2, Scholar- 2.

Do not make more than **four applications** of cyprodinil-containing products (Switch/Button, Inspire Super) on strawberries per year. Note the maximum applications for each individual product: Switch/Button- 3, Inspire Super- 3.

Do not tank-mix Agri-mek with chlorothalonil (Bravo or Echo), or captan. If applying Agri-mek make sure to wait 5 days before applying chlorothalonil or captan.

Do not apply captan within 14 days of an oil application. Do not apply chlorothalonil (Bravo or Echo) within 10 days of an oil application.

Additional resources:

www.ontario.ca/cropprotection

Ontario Crop IPM - Strawberries

<https://onfruit.ca/2022/03/31/anthracnose-fruit-rot-management-research-update/>

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