

SWEDE MIDGE MANAGEMENT RECOMMENDATIONS

by Dr. Rebecca Hallett, University of Guelph and Brian Hall, Ontario Ministry of Agriculture and Food

Crucial Factors in Swede Midge Management

- Swede Midge must be monitored bi-weekly with traps to respond as needed (quickly) with treatment .
- It is extremely important to stay ahead of swede midge females laying eggs in buds and time applications properly as females only live for 1 to 5 days
- Adults emerge starting in mid to late May. Peak adult emergence is sometime around the first two weeks of June.
- Spray treatments must occur quickly after adult swede midge population threshold #s are reached as they mate and lay eggs soon after emergence and larvae hatch 3 days later.
- If you wait until you see larvae or damage to canola buds, it is too late. The damage is done and irreversible.

INSECTICIDE TREATMENT TIMING IS CRITICAL!

If the forecast is for warm, clammy conditions and you are relying on custom applicators, it may be advisable to book your applicator ahead of time. Swede midge populations can rise very quickly under these conditions.

Other Important Considerations

- Plant canola early. Early planted canola consistently suffers less damage than later planted canola. Swede midge numbers are also typically lower early in the season. Depending on your area, it may be best to plant canola first.
- Crop rotation is very important. Swede midge only feed and breed on cruciferous plants, so it is important to:
 - Rotate canola with non-cruciferous crops.
 - Use a minimum 4 year canola rotation plan.
 - Avoid planting canola adjacent (ideally not within 2 kms) to previous year canola .

Treatment Recommendations

1. **Time the 1st insecticide treatment based on a cumulate trap capture of 20 in 4 traps.**
 - From the 1st true leaf stage, count the number of midge on all 4 traps and add them up. **When you reach 20 in total**, it is time to put on the first insecticide application.
2. **Time subsequent insecticide treatments based on an average trap number of 5 midge per trap / per day.**
 - Count the total number of midges on each trap, add them together and divide by number of traps and number of days since you last counted.

When average captures per trap per day reach 5 midge/trap/day, it is advisable to apply an insecticide treatment.

Multiple treatments may be necessary.

- The most vulnerable stages of canola are during the vegetative (rosette) stage, when tiny flower buds are developing in the centre of the plant (before 'green bud' stage) and secondary leaf axils. These are the key stages to protect from swede midge infestation.
- Leave a minimum interval of 7 days between insecticide applications and rotate between products if possible.
- Both Coragen and Matador are registered for control. Do not use Coragen if you are using Lumiderm treated seed as they are both from the same chemistry family.
- Thorough spray coverage is critical. Use a medium droplet size. On larger plants (e.g. full rosette to bud stage) increase the water volume (20-25 gal/ ac) to ensure good coverage.
- As plants get larger if using Coragen increase the spray volume to move the treatment into the growing point where swede midge eggs and larvae hide. Use of appropriate surfactant with Coragen can improve spray coverage. Follow label recommendations for insecticide and surfactant compatibility, with different surfactants available in the market.
- Both Coragen and Matador provide contact and residual activity and are rainfast when dry. Coragen moves through the leaf to both surfaces (translaminar) but growth that emerges after treatment is not protected.