

Minimize Spotted Wing Drosophila (SWD) by Storing Fruit in the **COLD!**

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Drosophila suzukii—a vinegar fly



For most current information, see central website:
spottedwing.com

Some Research Results:

- When fruits (with SWD inside) are placed in cold storage, the **LONGER** the fruit is placed in cold **and** the **COLDER** the temperature while maintaining fruit quality, the higher the mortality of SWD.
- Results from storing SWD-infested fruit in cold-storage suggest that more mature larvae/pupae are **less** susceptible to cold-storage.
- Preliminary findings showed that complete mortality of all SWD developmental stages was achieved after 8 days at temperatures at 33°-34F.
- If fruit takes longer than 24 hours to cool to 30 - 34°F, the risk of larval development and subsequent survival may increase.
- Kanzawa (1939) reported that after four days at 31 - 32°F all eggs and 1st instar SWD larvae in cherries died and fruit quality was maintained.
- SWD eggs laid in blueberries were most susceptible to cold compared to mature larvae, with numbers reduced by 97% when exposed for four days of cold (33F); and 2-3 day old eggs reduced by 100% after 7 days.
- Another set of results revealed only 43% reduction in SWD mature larvae in blueberries after four days at 34 -35°F. Reduction of eggs (63 to 100%) and young larvae (31 to 97%) was observed in blueberries when exposed to cold (34-35°F) for 1 to 7 days.