



Sour Cherry

Prunus cerasus



Mating & Breeding System

All flowers in the genus *Prunus* are similar to those of apple and pear, except that they only possess one style and one ovary containing a pair of ovules. Most cultivars of sour cherry are self-compatible, although insects can still play an important role in moving pollen to the stigma.

Pollination, Quality & Yield

Sour cherry is self-fertile and does not require pollenizers in the orchard. However, the presence of honey bees can increase yield by 2-4 times if the orchard is large, or if the wild pollinator community is lacking. Growers should note that it is possible for "over-pollination" to occur in self-compatible stone fruit crops. If this happens, the trees attempt to mature too many fruits for the available resources. The result is a high yield by weight, but with a large proportion of the fruit undersized. If over-pollination is a problem in a particular orchard, growers should reduce or eliminate their use of supplementary pollination services.

Pollination Recommendations

The use of honey bees is considered "optional" with sour cherry, particularly when wild pollinator populations are healthy. If adding pollinators, the recommended rate is 2.5-5 strong colonies per hectare, to be placed in the orchard by the time of first bloom. Because cherries bloom early and honey bees will not forage below 15°C or in windy or damp conditions, fruit set and yield may suffer. Hives should face to the south, to facilitate warming in the morning and encourage bee activity. Both bumble bees and blue orchard bees have demonstrated potential for pollinating early-blooming tree fruit crops, although research is necessary into their effectiveness for this particular crop in Ontario. Wild bees and possibly even flies may also be valuable, particularly in small orchards adjacent to suitable wild habitat, although management tactics to increase their populations would be required in most situations.



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References

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