



# Currants & Gooseberries

*Ribes* spp.



## Mating & Breeding System

This genus contains many species that are collected in the wild, as well as cultivated on farms. Most species are monoecious, with perfect flowers. For black currant (*Ribes nigrum*), almost all cultivars require insect pollination. The flowers are somewhat self-compatible, but the style and anthers are physically separated in individual flowers. All cultivars require insect cross-pollination to set a satisfactory crop. Gooseberry (*Ribes uva-crispi*, also American hairystem gooseberry *Ribes hirtellum*) also show some evidence of self-incompatibility in experiments where pollinators are excluded, although the effect in most cultivars is considerably less than the effect in black currant. As in black currant, the structure of the flower is such that spontaneous self pollination appears to be discouraged. The mating system of red currant (*Ribes rubrum*) has been considerably less studied, but red currant shows a similar inability to self-pollinate and benefits of cross-pollination are the same as in black currant and gooseberry.

## Pollination, Quality & Yield

Pollination has a big impact on yield in these crops, and plants will shed berries with no or few fertilized ovules early in the season. Even fertilized ovules will sometimes abort before completing development. This phenomenon is known as *fruit drop* or *running off*. It appears to be the result of selective abortion of self-pollinated fruits, probably so plants can concentrate their limited resources on cross-pollinated fruits.

## Pollination Recommendations

Both honey bees and wild bees are effective pollinators of black currant. Using honey bees for *Ribes* pollination in Ontario must take weather conditions into account. This is particularly true for gooseberry, which flowers early and in cold and damp weather conditions that may deter honey bees. Available recommendations for honey bees are 4 hives per hectare for red currant, and 2.5-5 colonies per hectare for black currant.



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## References

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