THE IMPORTANCE OF BEE POLLINATION FOR COMMERCIAL SOUR CHERRY PRODUCTION IN DENMARK

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Low fruit set, despite normally-developed flowers in Spring, is often a significant contributor to poor yield in the self-fertile sour cherry (*Prunus cerasus*) cultivar 'Stevnsbaer' in Denmark. This study set out to investigate the effect of insect, and particularly, bee pollination on the fruit set of this cultivar, to provide information for beekeepers and cherry growers concerning the potential benefits of placing bees in the orchards. Visits to the cherry flowers by honey bees (*Apis mellifera), Bombus* species and solitary bees, were recorded in five different Danish orchards.

The trials showed that there was a significantly higher fruit set on branches accessible to the bees, compared to the caged branches where bees and other pollinating insects were excluded. The same pattern of results was found over three different seasons (2007, 2009 and 2010), even when cold, humid weather before and during early flowering probably reduced fruit set, as in 2010.

Such a clear example of the benefits of bee pollination on fruit set has obvious implications for commercial yield of this particular cherry and we would recommend

A flowering sour cherry branch caged with wire mesh and tulle net, allowing wind through whilst keeping insects out

returning to the traditional practice of keeping honeybees in commercial orchards. Another valuable management strategy would be to improve foraging and nesting conditions to support both honey and wild bees in and around the orchards.