

A close-up photograph of several apple blossoms in full bloom. The flowers are white with delicate pink tints on the petals and prominent yellow stamens. They are clustered on a dark brown branch, with green leaves visible in the background. The lighting is soft, highlighting the texture of the petals.

Best Practice Pollination of Apples

A growers perspective

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Apple Pollination



- Background

Why is pollination so important ?

The majority of apple varieties are not self fertile

Successful pollination will contribute to the size and quality of the apple

Successful pollination is critical in achieving a saleable, profitable crop

Poor pollination results in reduced yield and misshapen apples

Too many flowers may not pollinate, you can not put more apples on the tree

One trial comparing yield and bee numbers gave results of;

33 foraging bees per 1000 flowers - 32% set and 57kg of apples

15 foraging bees per 1000 flowers – 15% set and 30kg of apples

Our Orchard

What do we do to enhance pollination ?

We grow close planted intensive trees - about 2800 trees/ha at 3.5m x 1m)

More trees more blossom per ha = more apples

Good spread of cross pollinator trees, Crab apples and Grannies

We plant pollinators that flower at the same time and have the same coloured flower

Pollinators are planted in the row



Granny Smith pollinator



Bees



We have been placing bee hives in our orchards for many years

Currently we use 2 to 3 hives per ha depending on tree age

Hives are placed in the orchard at about 10% flower

Hives are positioned in sunny areas with some wind protection

Hives are removed as soon as pollination has been completed

We ask for active, pre conditioned hives
i.e. not over worked bees in poor condition

We would prefer pollen gatherers rather than nectar gatherers

If hives are well fed then there are more pollen gathers



Spraying

Spraying our orchard with chemicals is a necessity in our opinion

We use fungicides over the flowering period

We rarely use insecticides (once in the last 5 years on small section of orchard)

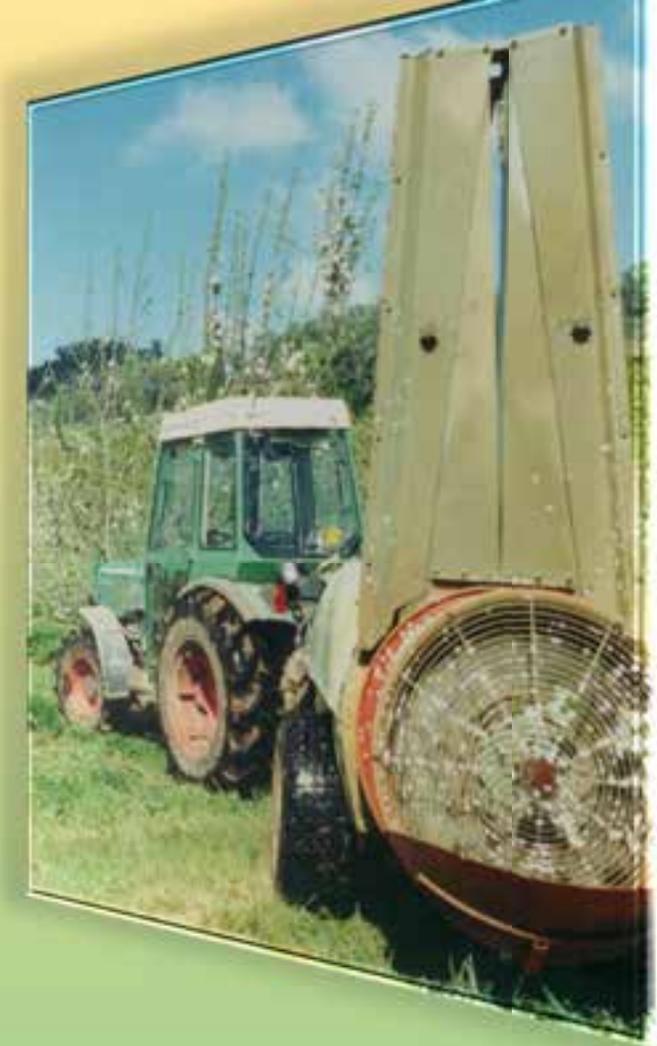
Use of fungicides is kept to a minimum and is dependent on weather conditions

Most of our insect pests are controlled naturally with predators or pheromones

We are very conscious of the bees in the orchard and spray very early in the morning or very late in the evening

We use equipment that ensures low drift, and spray when conditions are favorable

Our policy is to use the least amount of chemicals that will be effective in the orchard, and the chemicals with the least negative environmental effects







Thank You