Who is visiting our crops?

Recent research undertaken by a team of experts across the country has shown that many different native bees and other insects play an important role in crop pollination. Whilst managed pollination is important, it’s just as crucial to understand how these wild pollinators help our crops. This guide provides some insight into how your crop is pollinated and by which insects.

**Apple**
Honey bees were the most common visitors to apple orchards studied, but native bees, like reed bees and furrow bees are also relatively common.

**Blueberry**
Honey bees were the most common visitors to blueberry farms studied in New South Wales, Victoria and Tasmania, but native and other wild bees were also common.

**Pear**
Honey bees were the most common visitor but a total of 16 species of insect visitor have been identified in pear orchards in Australia.

**Lucerne**
Honey bees were the most common visitors to lucerne flowers studied. In total, lucerne was visited by 20 species, including blue-banded bees, furrow bees, resin and leafcutter bees.

**Raspberry**
In raspberry crops in the Yarra Valley, native bees could make up more than half of all visitors. Honey bees were most common in Coffs Harbour.

**KEY**

**Hermaphrodite**
Each plant has individual flowers that are both male (produce pollen) and female (produce ovaries). These flowers often require insects to move pollen from the male parts of the flower to the female parts to produce fruit.

**Monocious**
Each plant has individual flowers that are either male or female. These flowers often require insects to move pollen from the male flowers that are separate to the female flowers to set fruit.

**Dioecious**
Each plant has individual flowers that are exclusively either male or female. In order to produce fruit, these flowers require insects to move pollen from the male plants to the female plants.

**Self compatible**
Pollen found on self-compatible crops can successfully develop fruit and seeds when the flowers are fertilised with pollen from the same flower, plant or cultivar as the mother plant, or other compatible cultivars.

**Cultivar dependent**
Different cultivars of the same crop vary in the degree of pollen self-compatibility.

**Self incompatible**
Pollen found on self-incompatible crops only develop fruit and seeds when the flowers are fertilised with pollen from a different cultivar to the mother plant.

**Nectar production**
The quantity and quality of nectar a flower produces can influence how attractive the flower is to insect pollinators, as nectar is a major source of energy for many pollinators.
**Avocado**

Avocado visitors varied by region, in Bundaberg wild, native stingless bees and honey bees were most common, whereas in Sunraysia flies were dominant.

**Canola**

Native bees are important visitors for canola, but they struggle to reproduce in large fields with no surrounding flowering plants.

**Cherry**

In cherry farms surveyed in South Australia and Victoria, honey bees were the most common crop visitor but reed bees and furrow bees were also common.

**Mango**

Many insects are responsible for mango pollination including wild stingless bees, furrow bees and flies.

**Blackberry**

Honey bees were the most common visitor at sites surveyed but native bees like reed bees and slender furrow bees could make up more than half of all visitors at certain farms.

**Macadamia**

Macadamia in Bundaberg was primarily visited by honey bees, accounting for 80-90% of visits. A range of flies, beetles and moths were also observed.

**Watermelon**

Honey bees were the most common visitor to watermelon flowers studied in New South Wales and the Northern Territory, though a range of native bees were also found.

**Want to know more?**


To conduct a simulation to identify how vegetation management can improve your pollination head to this interactive tool (South Australia only): https://pollin8.org.au/

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