

MONITORING AVOCADOS FLOWERING FOR SUITABLE CROSS-POLUNATION VARIETIES AT LOWER SOUTH-WEST REGION
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Avocados have a unique flowering behaviour. Each flower open twice over a two-day period, the first day as functionally female and the next day as functionally male. The timing of these stages determines the classification of varieties into either A or B type flowering.

The opening and closing of flowers over the two-day cycle is regulated and synchronised by air temperature. Under stable flowering temperatures (Min 10C, Max 20C), at any one time all open flowers on a tree are generally either functionally male or functionally female. However, in practice, periods of rapid changing temperature disrupt the synchrony and cause some overlap between male and female stages during the middle part of the day. This overlap enables close cross pollination. However, where temperatures are consistently cool, the flowers may open only once for an extended period as functionally male and no pollination occur.

The flower type classification of the main avocado varieties as follows;

Flower type A	Flower type B
Anaheim	Bacon
Gwen	Edranol
Hass	Ettinger
Hazzard	Fuerte
Lamb Hass	Llanos Hass
Pinkerton	Nabal
Reed	Ryan
Rincon	Sharwil
Wurtz	Shepard
	Zutano

The floral cycle of B type varieties is more sensitive to cool temperatures than A type varieties (which is mainly Hass variety in the south-west). This means increasingly longer periods of male-only flowering; with reduce opportunities for pollination and fruit set. When B type varieties are grown in areas where temperatures during flowering are consistently below 20 C day and 15 C nights, a mixed planting of A (Hass) and B type varieties (i.e. Edranol, Shepard, Sharwil) within the orchard block may be beneficial in improving pollination.

Based on above mentioned information we would like to monitor flowering B type varieties along with Hass flowering to be able to identify suitable cross-pollination in the **lower south-west region** for long-term industry benefit (**i.e.: reduce biennial bearing, and improve production consistency and yields**).

We need to monitor flowering twice in the morning and in the afternoon in September /October this year. Growers who have B type of varieties and would like to contribute their time for monitoring in their orchard. Please contact Cengiz or Alec so we can work together to monitor flowering of your B type varieties.

For more information contact Cengiz on (08) 97806233 or Alec Mc Carthy on (08) 9780 6273.