

Floral Induction and Initiation **Mid-May–July**

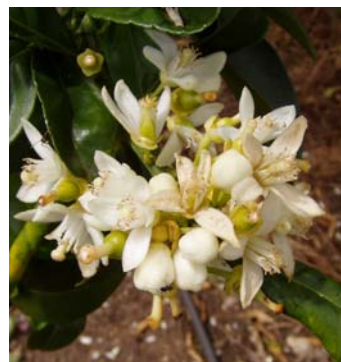


Low temperatures during winter induce citrus buds to flower. You can't see floral induction and initiation happening - this stage produces no physical signs that can be seen from the outside. It can happen while there is still fruit on the tree!



Apply foliar urea sprays to promote flowering in expected light flowering years.
Apply foliar micronutrient sprays with 0.5% low biuret urea after harvest.

Pre-bloom to Flowering **August–October**



This period starts at bud swell and finishes with flowering.
Images left to right: bud swell, bud break and full bloom



Apply 40-50% of annual nitrogen in split applications throughout this period.
Apply a 1% urea spray when soil temperatures are below 13°C in September.
Apply 50% (fertigation) or 100% (banding) of annual phosphorus before and during bloom.
Apply 30-40% of annual potassium throughout this period.

Apply zinc sulphate foliar sprays at 1/3 to 1/2 leaf expansion. Also apply foliar sprays of magnesium and manganese to spring flush or after fruit set. Always add 0.5% low biuret urea to nutrient foliar sprays.

Fruit Growth Stage 1 (Cell Division) November–December



~ 30 mm



Cell division begins after petal fall and finishes at 30 mm fruit size (like a 50c piece).



Apply 25% of annual nitrogen (calcium nitrate $[\text{CaNO}_3]$ is ideal) in November after fruit set and at the end of the vegetative growth flush. Apply foliar applications of CaNO_3 to reduce albedo breakdown. Apply the remaining phosphorus (50%) if fertigating at monthly intervals from October onwards. Apply 30-50% annual potassium after fruit reach 10 mm in size. Supplement potassium with foliar applications of potassium nitrate to promote cell division. Apply foliar micronutrient sprays of magnesium, manganese and zinc according to leaf analysis results.

Fruit Growth Stage 2 (Cell Expansion) January–April



Cell expansion begins at 36 mm fruit size and finishes at colour break (colour change from dark to light green).



Apply 25% of annual nitrogen throughout this period, adjusting to crop load. Apply 30% of annual potassium during January and February after final fruit drop. Supplement potassium with foliar applications of potassium nitrate in January-February. Maintain good nitrogen to potassium ratios (2:1).