

Citrus is sensitive to moisture stress at certain times during its growth cycle and stressing at the 'wrong' time can have a very severe impact on yields.

## Introduction

Timing of spring growth flush and flowering is mainly influenced by temperature. Crop load and the amount of vegetative growth during the previous year influences flowering intensity. The desired annual cycle for bearing citrus trees is shown in Figure 1.

## **Crop Growth Cycle**

The final crop yield is dependent on flowering intensity and the number of flower and fruitlet drop during stage 1 (cell division) of fruit growth. Citrus is extremely sensitive to moisture stress during this growth stage and any stress is likely to affect yields. The trees will drop more fruit causing an overall reduction in the number of fruit set. This period is also important for spring flush shoot development.

Water stress during stage 2 (cell enlargement) has the greatest impact on fruit growth (size), a loss that cannot be made up later. i.e. This stage is important in determining final fruit size at harvest. Hence irrigation timing and amounts are critical at this stage.

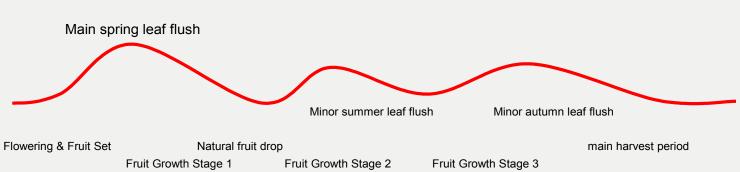
During stage 3 water stress will have a lesser affect on fruit size than stage 2.

Best practice information obtained from on-farm trials and Applethorpe Research Station is gratefully acknowledged.

For more details contact the Growcom members access line on 07 3620 3844.

## Figure 1. Annual cycle for bearing citrus trees

(timing and extent of leaf growth and crop stages vary with variety)



cell expansion

Disclaimer: This information is provided as a reference tool only. Seek professional advice for irrigation specifics.

cell division

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maturation



