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Preventing pests and diseases in the greenhouse

Principles of daily irrigation periods

Appropriate irrigation is a critical part of maintaining plant health and crop productivity. The nutrient and water needs of a crop change over a 24 hour period. To improve management, generally four daily irrigation periods are used.

Period 1 starts with the first irrigation of the day and goes through to first run-off. The aim is to wet up the substrate with small, frequent irrigations.

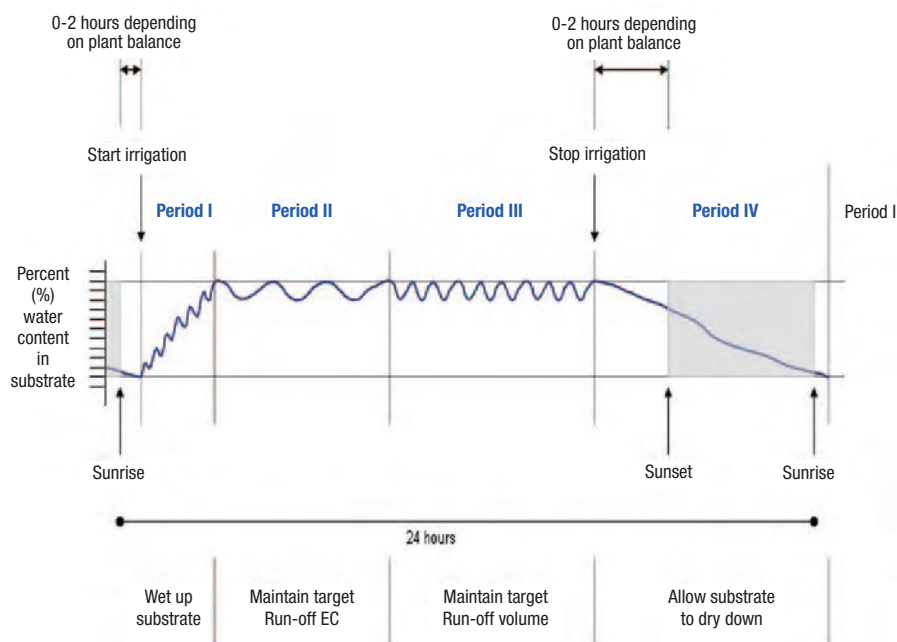
Period 2 extends for a few hours during the morning. The aim is to maintain the target run-off EC.

Period 3 is during the middle of the day and the aim is to maintain the target run-off volume.

Period 4 starts with the last irrigation of the day and goes through to the following morning. The substrate is allowed to dry down during this period.



Irrigation has to be adjusted during the day.



This **Preventing pests and diseases in the greenhouse** fact sheet is part of a series designed to show basic irrigation practices for substrate hydroponics. Correct irrigation can significantly reduce costs and losses from pests and diseases and improve crop production.

For more information on irrigation in substrate hydroponics contact your local independent advisor.

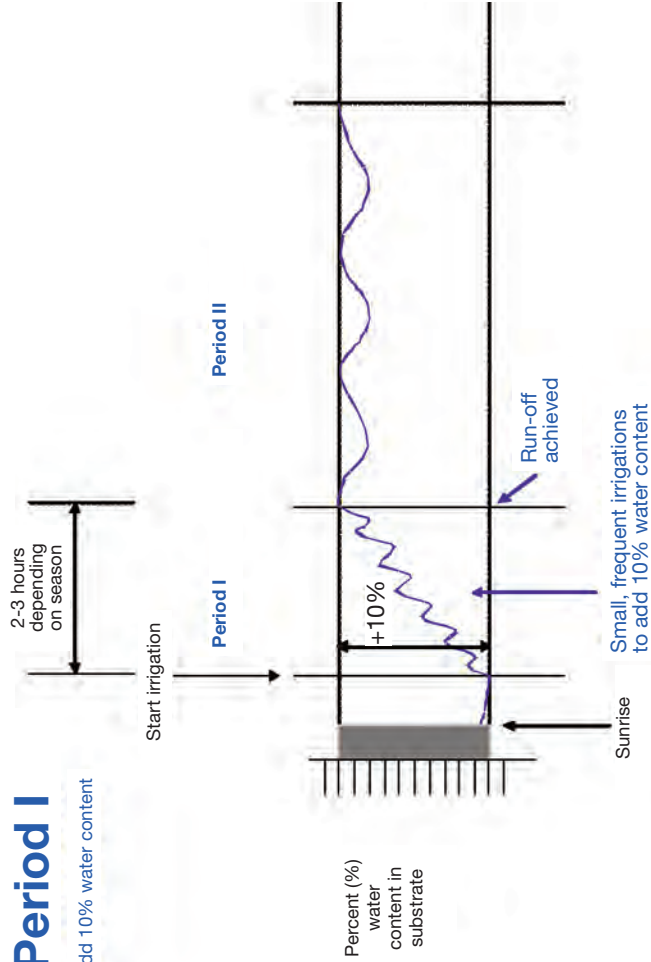
These materials were developed by NSW Department of Primary Industries with the assistance of Horticulture Australia Ltd, through the national vegetable levy.

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To effectively irrigate a crop growing in a hydroponic substrate system, monitor and manage the drain EC and volume as well as the growing conditions. Adjust irrigation based on this information.

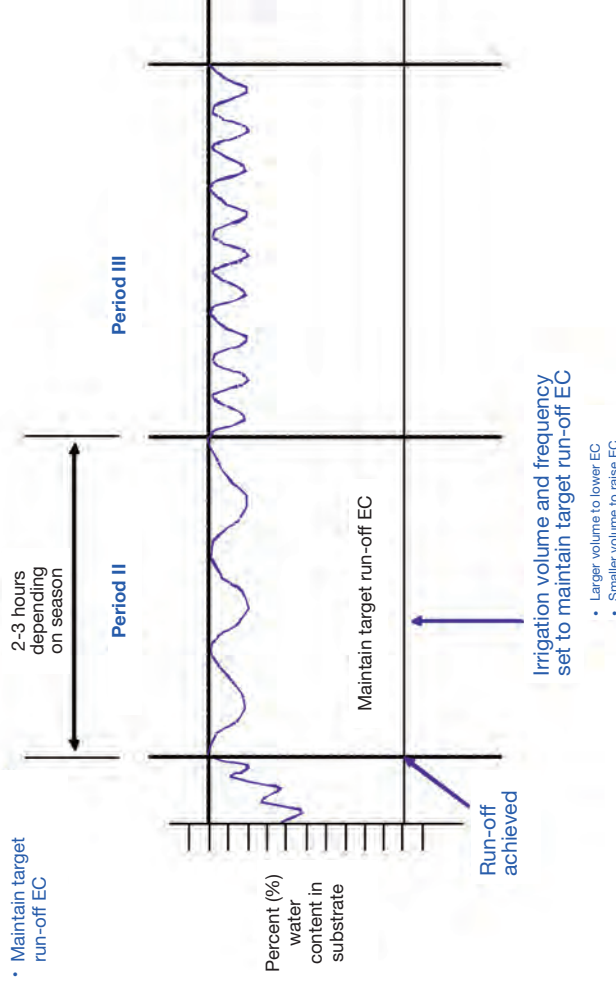
Period I

- Add 10% water content



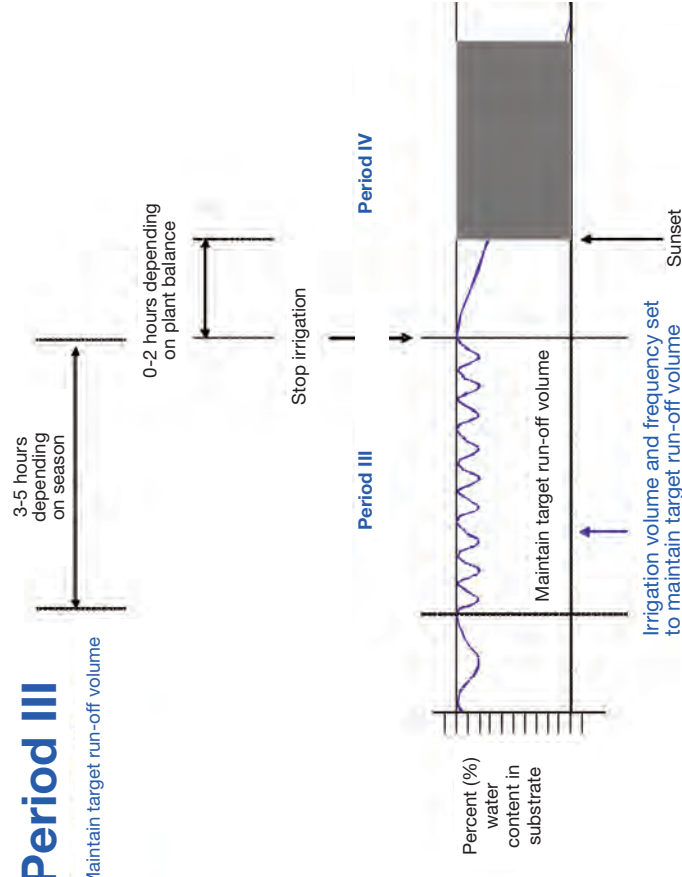
Period II

- Maintain target run-off EC



Period III

- Maintain target run-off volume



Period IV

- Lose 10% water content

