

HORTICULTURE

Water efficiency is important to the sustainable growth of the horticulture industry so we can continue to enjoy a year round supply of fresh fruit and vegetables.



Water use in horticulture

Horticulture production is intensive in terms of the resources used, including labour, fertilisers and water. The continued development of the horticulture industry relies on growers and managers implementing sustainable practices that minimise environmental impacts and promote the efficient use of resources, including water.

The importance of water use efficiency is highlighted by the emergence of a number of water-related issues, such as rising water tables, salinisation, surface and ground water contamination, reduced river flows, and water supply security.

Improving water efficiency

There are a number of things growers and managers can do to improve water use efficiency:

- Use irrigation methods that are appropriate to the crop.
- Monitor and maintain irrigation system performance.
- Manage water application to suit the of needs of the site and local weather conditions.
- Engage a certified irrigation designer (visit irrigationaustralia.com.au for more information).



Benefits

The benefits of saving water in horticulture include:

- increased savings through reduced water and pumping costs
- reduced leaching of nutrients, and therefore reduced fertiliser application
- reduced drainage water and surface runoff
- additional water for expansion or trading
- fewer impacts on the environment.

Irrigating greenhouse crops

Greenhouse crops need even irrigation so every plant receives just the right amount of water.

The irrigation methods available for greenhouses include overhead sprinklers, travelling sprinkler boom, drip irrigation and subsurface irrigation techniques, such as ebb and flow, and capillary.

Subsurface irrigation methods provide the best opportunity for high water use efficiency. Though the initial instalment cost is slightly higher than other systems, the water savings and increased productivity make it a worthwhile investment.

Irrigating orchards

The most efficient way to irrigate orchards is to precisely control the delivery of water to individual tree root zones. Micro irrigation (drip) systems apply water to the tree root zone at frequent intervals so optimum soil moisture levels are maintained.

Micro irrigation systems can save water in orchards by:

- watering only the plant root zone
- reducing loss to deep drainage or percolation
- reducing water consumption by weeds
- minimising evaporation from the soil surface.

Micro irrigation systems known as fertigation systems can deliver water-soluble fertilisers to orchard crops to meet their ongoing nutrient needs.



Saving water in business

Visit hunterwater.com.au/savewater for more water saving tips for your business



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