

Sustainable watering



Watering methods

There are numerous ways of watering the garden including hand-held hose, furrows, sprinklers and in recent decades, micro irrigation systems. Given our climate, micro irrigation systems are far superior to all other methods. The components are relatively cheap to purchase and water is placed precisely, minimising evaporation and weed growth. The latest development is inline drip or dripline where the drippers or emitters are already in the tubing making installation on the ground, under the mulch layer, a simple exercise.

Using grey water

Grey water is water discharged from the bathroom, laundry and kitchen. It can be a valuable extra source of water particularly during summer. Most grey water can be readily used in the general garden but water from the laundry often contains harmful salts and is highly alkaline. So use the rinse water only. Information and guidelines on using grey water in the garden is available from your local water utility or state health agency.

Watering with limited supplies

When water supplies are limited because of water restrictions or lack of a mains supply, you can still have a kitchen garden. Here are some ways to achieve this:

- Harvest as much water as possible from land and roof spaces and use grey water in accordance with health guidelines.
- Micro irrigation is the most efficient method of watering.
- Water at critical periods – at establishment and in the last few weeks before harvest.
- Sow and plant during cooler, wetter periods and avoid the height of summer.
- Grow productive crops such as tomatoes, beans, carrots and cucumbers, and in the cooler, wetter time of year grow crops such as brassicas, peas and broad beans.

The importance of mulch

Mulching is so beneficial for plants, it is an essential part of good garden management. A good organic mulch conserves moisture, prevents weeds, improves water infiltration, protects the soil and adds organic matter as it decomposes.

Materials which decompose more rapidly (eg. hay, straw, immature compost, soft leaves, seaweed) are suitable for annual beds such as vegetables. Materials that decompose more slowly (eg. pine bark, wood chips, tough leaf and twig litter) are more suitable for perennial beds and under permanent plantings such as fruit trees. Synthetic materials such as 'weed mats' inhibit water infiltration and air circulation and are a barrier to the entry of organic materials and access to the surface by worms. They are therefore of no benefit to plants and are not recommended.

Mulch can be applied after sowing seed but it should barely cover the surface so as not to inhibit the emerging seedlings. With established annual and perennial plantings, shrubs and trees, apply a layer of mulch in spring before the hot weather arrives. Maintain this at 5-8 cm depth. Do not over mulch as this can inhibit the entry of water and air into the soil and trap moisture during cold weather. Maintain minimum or no mulch during the winter, particularly in frost prone locations.