

## Our Little Watering Study

How has your garden fared in the hot weather? Despite our intentions to get 'everything' done in the late spring, there are sections which we didn't get around to feeding and mulching this year. Two areas don't yet have their drip watering systems in. Unintentionally, we provided ourselves with the chance to see how different parts have coped with the heat and to assess the impact of feeding, mulching and ground level watering.

I am talking about our home garden, which is on a slope and was a paddock four years ago. It had dreadful soil, lots of clay, compacted areas and hydrophobic areas which didn't absorb water. There are lots of variables, and this is not a very scientific study, but our observations are interesting, none the less.

We knew that drip watering systems are excellent because plants receive water at the root area where it is needed, can be watered in the cooler parts of the day including at night, and require little effort from us. What is interesting is that our little study proved to us that other gardening practices can enhance a drip system and save you lots of time, water and money. Here are our findings:

1. Organic materials as food or mulch rot down and improve the water holding capacity and texture of the soil. Older beds with three years of annual manuring and mulching held water better than new beds.
2. Mulching prevents evaporation, keeps roots cool, shades the soil and prevents a hydrophobic crust forming.
3. Watering at the root level is best achieved by a dripper system under the mulch. This is easiest to install before planting but can be put in later, since roots spread out from the base of the plants.
4. A winter crop of lupins with deep roots helped to improve the soil and its water holding capacity to a notable extent in our small vegetable garden. As the roots rotted, tunnels were created for water to penetrate to a deep level. That garden does not have a drip system but has had two years of lupins. We hand water there only once every couple of weeks or so, except for new plantings or periods of extreme heat.
5. Planting a bed or drip line all at the one time means you can lessen the amount of watering over the whole bed as plants become established at the same time. Planting 'same water requirement' plants in each bed means that all the plants on a drip line have the same needs.
6. A few plants died. Position mattered. A plant in a partially shaded level spot could do well, while the same species died in a poorly mulched garden on a very sunny slope. Temporary shade with cloches or covers was helpful.
7. We picked our strawberries before watering them, because when we watered them by hand, they lost taste and texture from absorbing water.
8. Hand watering is affected by wind and is not always easy to direct at the root zone. It is slow and tedious, but does allow the gardener to note what is happening and to cater for young plants which need more water than others nearby.

### Conclusions:

The time we are spending hand watering the new gardens would be better spent putting in a drip system, feeding and mulching, even though it is summer. To do that, we would have to soak the soil first so that the water from the drips will move through it readily. We would water on the manure and then water on the mulch. Damp soil will encourage worms and other beneficial creatures to break down the organic matter and improve the water holding capacity. Hand watering is only useful for new seedlings, young plants and seeds. We are always learning.

Happy gardening,

Christine Windle,

Garden Gate of Inverleigh Nursery, 0403 267 286, Cnr Inverleigh – Winchelsea Rd & McCallum Rd, Inverleigh, [www.gardengatenursery.com.au](http://www.gardengatenursery.com.au)