

Watering

Plants like growing in soil that is well aerated, moist and contains a balanced range of nutrients in an accessible form. Many plants also prefer a dry atmosphere that limits the spread of fungal diseases (such as late blight on potatoes and tomatoes).

Good conditions are achieved by loosening the soil to aerate it, digging in compost (and green manures) to provide humus, applying a surface mulch to reduce evaporation, and watering the soil rather than the foliage.

WHERE TO WATER

For plants to benefit, the water must reach down to the roots.

With established plants, an easy way to get the water just where you want it is to bury a small plastic bottle (upside down, top removed, base cut off) beside the plant. Fill the bottle with pebbles (to stop it getting blocked up with soil) and water through the bottle. By leaving the surface dry, less water is lost through evaporation and fewer weeds will germinate. This is as useful for permanent plants such as fruit bushes as it is for some of the larger annual vegetables (brassicas, tomatoes, etc).

An alternative, particularly when you have a large number of plants to deal with and insufficient plastic bottles, is to plant into a shallow depression. Water will gather in the depression and soak down to the roots.

When you sow seeds directly into the soil they will, for several weeks, have very shallow roots and are easily washed out of the soil. The only sensible way to water is to soak the entire sown area using a can with a fine rose attached.

As seedlings develop into mature plants it becomes easier to direct water just where you want it. Try not

to water heavily immediately around the stem, as this frequently results in soil being washed away and the exposed roots may die.

Wherever possible, avoid watering foliage. Damp leaves are prone to fungal infections, and create a moist atmosphere where spores thrive. (This is why you are recommended to pick off the lower leaves of tomato plants; they restrict the free flow of air which dries out foliage, and few allotment plants are as susceptible to fungal disease as tomatoes.)

WHEN TO WATER

Seeds and young seedlings need frequent watering, at least for the first few weeks of life. They are very susceptible to drying out and you may find, in extreme cases, that they need watering lightly every day. Building up humus in the soil is useful, as it helps the soil hold water like a sponge, releasing it to the seedlings as necessary.

Some plants require fairly frequent watering even as they mature, otherwise they are prone to bolting. Lettuces are an example, and usually require weekly watering throughout summer. (Alternatively, you might cover the plants with a light fleece once they've grown to a reasonable size; this reduces harsh sunlight and prevents some evaporation.)

Hardy plants, once established, frequently only need watering fortnightly, even during hot, dry spells. If the soil is well prepared and mulched, it will remain moist in the root zone even when it appears bone dry on the surface. Even relatively fragile plants like tomatoes will be happy with fortnightly watering if they are planted deep into good soil.

Whatever you are watering, it is best done early in the morning or late in the evening, and certainly not in the heat of a bright, sunny day.

RAINWATER VS TAPWATER

People often comment on how rapidly their allotment grows following a heavy summer shower; the reason is the quality of the water. More particularly, it does not contain the chlorine that is added to tapwater. Chlorine is used to kill bacteria that might be present in the water supply, but it also kills beneficial bacteria in the soil, the very agents that convert organic nitrogen in the soil into a form that plants can absorb.

If you fill a tank with tapwater, the chlorine will evaporate over time - in as little as a couple of hours on a hot day - making it more palatable to your plants.



Chlorine quickly evaporates from tapwater when it is allowed to stand in the open, such as in this dip tank.

WHY NO HOSES?

Hoses are not allowed because of water safety legislation, but there are good reasons not to water with a hose anyway. There's a temptation to water too much and too often, damaging the soil structure and encouraging disease. Hoses tend to provide blanket coverage, encouraging weeds as well as crops. And there is no opportunity for the chlorine to evaporate from a hosepipe, leading to poorer availability of key plant nutrients.