

## In-Line Drip Irrigation Systems

### *Some tips for first-time users*

**A few pointers:** The soil or mulch will not be saturated on the surface. The old micro-sprayers were very good at soaking the mulch but not penetrating the soil to the root zone where it is required. Drip irrigation lines are placed **on the soil** and **under the mulch**.

I recommend DripEze *pressure-compensating* pipe manufactured by Toro, one of Australia's best known irrigation supply companies. This delivers two litres per hour at an even rate from each emitter on a line 50-80m long.

Emitters are placed at 30cm intervals, so a 50-metre line will have 166 emitters. Each emitter delivers two litres per hour, so that's 332 litres per hour for a 50m line. This means that depending on the total length of the drip line you know exactly how much water is used.

Using the DripEze in-line drip system you will see little if any moisture on top of the mulch. It spreads out *below* the mulch putting water directly to the plant's root system. This is known as a **water bank**, and it spreads the moisture approximately 40cm wide, thereby allowing an overlap between emitters at the effective root zone.

At start-up the soil may be very dry. To build up the water bank or sufficient moisture to the root zone the drip system may need to be left on for several hours. I suggest using cycles of half an hour **on** and half an hour **off**, known as *pulse irrigation*.

The most effective way to test the moisture penetration is dig a hole near the system and check the moisture level. Once the moisture has reached the root zone the frequency of watering can be reduced. For day temperatures up to 25° to 29°C an hour, once a week is usually sufficient to top up the water bank, preferably half an hour in the morning and half an hour in the evening. If the day temperatures exceed 30°C I recommend two hours once a week.

No plants are drought-tolerant until the roots are well established. This may take from six to twelve months depending on soil preparation, watering and feeding. Monitor the plants. It may be necessary from time to time to spot hand water to supplement the drip system.

To ensure the system is operating correctly, place a two-litre ice-cream container under one section of the drip line. As each emitter delivers two litres an hour, the container should be full in the hour. If you are not sure, dig a hole near the plants or drip line to test for moisture levels.

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