Fixed or Adjustable Micro Watering Devices – that is the question for micro irrigation for today's Home Gardens

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Today's home gardens are as diverse and individual as Australia's landscape itself. Micro irrigation in the form of drip and low volume micro spray is seen as an effective irrigation method to maintain and grow these gardens.

Sometimes as irrigation professionals we focus on commercial outcomes for home gardeners which may not be an ideal solution. A point in question is the use of fixed volume drippers either standard or pressure compensating exclusively in a landscape garden. Plants in a home garden are varying by size, type and subsequently their water usage, whereas in a commercial horticultural application such as a vineyard or orchard the plant variation is less and uniform watering is the prime driver. It makes sense to provide precise and uniform amounts of water to these commercial enterprises. For the home gardener however flexibility in their watering system can be required and therefore adjustable watering devices are popular.

The general categories of micro irrigation devices available to the home gardener are:

Туре	General Operation	Uses
Fixed Flow Drip (Pinch™, CETA®, Asta®, Midi Drip™)	Provides a consistent point source flow rate e.g. 2,4 or 8 L/h are common.	Native plants with lower water usage requirements
Adjustable Flow Drip (Shrubbler®)	Provides flow and coverage adjustment by turning the top from 0 to 40 L/h. Covers an area with the streams of up to 0.6m diameter.	General garden use where plants water requirements may vary over time.
Adjustable Bubbler (Mini Bubbler)	Provides flow and coverage adjustment by turning the top from 0 to 120 L/h. Covers an area of up to 0.3m diameter.	Good where deep watering is required. Often used for citrus, stone fruits and larger trees.
Micro Sprays Adjustable (Vari-Jets™)	Provide a range of flows that vary with pressure from 0L/h to 100 L/h. A tap fitted to the base allows for adjustment.	Used for ground covers and flowering beds where watering down improves the aesthetics of the garden.
Adjustable Spray (Spectrum™)	Provides flow and coverage adjustment by turning top from 0 to 80 L/h. Covers an area of up to 3.6m diameter.	Used for ground covers and flowering beds where watering down improves the aesthetics of the garden.

Generally all types of micro irrigation, when correctly applied are efficient in watering. It should be noted that in the current water restrictions in California, micro irrigation sprays are exempt from restriction as well as drip. This is something that we should consider for our local water restrictions when they are next applied. Authorities generally restrict the watering windows to a reduced number of days per week. An adjustable micro irrigation system means the application rate can be tuned to enable efficient watering within the available time window.

As an irrigation professional when providing advice to home gardeners it is important to offer product that is fit for purpose for their gardens as well as recommending the appropriate ancillary equipment such as pressure regulators and filters at the start of the systems.

There are benefits in providing adjustable micro irrigation watering devices to home gardens:

- Water application can be "tuned" to individual plant or micro climate zone requirements.
- Varying application rates to suit soil conditions.
- The watering coverage of sprays improves the look and feel of the garden.
- The system can be varied over time to suit the changing needs of the garden.

An added advantage of adjustable micro irrigation devices is that the majority of them can be dismantled and cleaned if blockages occur.

Antelco Pty Ltd is proud to be an Australian manufacturer, supplier and exporter of quality micro irrigation equipment. For further information go to www.antelco.com

Reference: Calwater (California Water Service)

https://www.calwater.com/conservation/drought/watering-schedules/