



ANOVAMAT™





**AQUAMAT™** 

Y=130%\* WO/O\*\* =19/2

TopUp<sup>TM</sup> is an irrigation management system that delivers water to a potted plant both from above and from below. Anovamat<sup>TM</sup> and Aquamat<sup>TM</sup> utilise similar principles.

Water is applied by conventional overhead irrigation (and, or direct to the mat). The water that falls between pots (as much as 80%) does not run-off but is absorbed by the mat (capacity of 5 L/sqm) on which the pot sits. As water in the pot is used it is replaced by this absorbed water. As a consequence almost all the water applied is used by the plant. Much less water needs to be applied since there is little or no run-off (containing nutrients). Overhead irrigation prevents salt accumulation in the top layer of the pot. Plants grow faster because of less water stress.

The ANOVApot<sup>TM</sup> is the preferred pot for this system because it has been designed to greatly reduce root escape - a plant response promoted by continuous bottom irrigation. ANOVApot<sup>TM</sup> is also designed to aid the easy and rapid removal of any roots that do emerge.

Y=100%\*

WO/0\*\*

=91/65



**OVERHEAD** 

\*\*Comparison of Yield (Y) and water on/off\*\* (WO/O, L/sqm/wk) from irrigation systems in EPA/NGIQ experiment, Redlands Research Station Nov 2004-Feb 2005



Y=123%\*

WO/0\*\*

=33/19

DRIP

# TEST ↓ TopUp™↑ FOR YOURSELF

#### Operation

- \* Layout mat in an existing irrigation bay, weedmat uppermost.
- ➤ Plant up the ANOVApot<sup>TM</sup>s during the normal potting operation
- \* Calculate how many pots at your selected density should fit on the mat
- **▼** Place half this number of ANOVApot™s randomly (not in a block) on the mat
- **▼** Place the remaining AVOVApot™s around but outside the mat among your normal pots
- Fill up the remaining spaces on the mat with your normal pots

### What you should notice

- **★** Surface of the TopUp<sup>TM</sup> pots stay wetter
- ➤ Mat is always wet, but not the cover sheet (weed mat)
- **★** Growth of TopUP<sup>TM</sup> plants is faster
- **★** The TopUp<sup>TM</sup> system will promote root escape from most pots but this is much less evident in ANOVApot<sup>TM</sup> (and they are easily removed)

## Conclusion

The TopUp<sup>TM</sup> system should allow you to apply much less water with little or no run-off but still achieve equivalent or better growth.



# Why Greenlife Retail Centres need TopUP™ irrigation mats



### Perceived problems with mats and their solutions

- \*Algal growth reduced- new mats are impregnated with immobile but plant activated copper
- ➤ Plumbing complexity and cost minimised- mats are watered by hand with very little run-off
- **★** Mat maintenance reduced- much less with the use of ANOVApot™
- **★**Dripping pots on the way to check out virtually eliminated with the ANOVApot<sup>TM</sup>
- **★**Induced root escape and attachment- greatly reduced and more easily managed with the use of ANOVApot™



# Why Greenlife Retail Centres need TopUP™ irrigation mats



- ★Overhead watering is very wasteful (~80% of water misses pot)
- ★Without mats hand watering can be very hit and miss
- Less than one quarter of the overhead water (without mats) is needed to keep mats wet with little loss of leachates
- \*Keeping mats wet, keeps all plants well watered
- ★This water saving converts directly into saving labour
- \*No need to relocate display plants for watering
- ★In heat wave conditions, wet mat plants have much better access to water throughout the day
- \*Fewer discards and much increased shelf life
- **★**Sub-irrigation actually promotes better growth and reduces leaf diseases
- ★Very little excess water to promote algal growth on concrete (OH&S issue)