

# **AQUAMASTER 2005**

Economical solution for undertree and greenhouse and overhead irrigation



- For widely-spaced plantations such as walnut, almond, avocado and mango
- For overhead irrigation of vegetables and nurseries
- IrriStand systems (up to 6 x 6 m spacing )

## **STRUCTURE AND FEATURES**

- Extra-long range
- Simple, user-friendly structure
- Uniform coverage over a wide range of spacings, flow rates and pressures
- Insect-resistant nozzle
- Large droplets
- Innovative spike
- Inverted version available for tunnels and greenhouses







## **TECHNICAL DATA**

- Recommended working pressure: 1.5-3.0 bar
- Recommended working pressure (inverted version): 2.0-3.0 bar
- Flow rate: 30-365 l/h
- Wetted diameter: 5.5-12.5
- Filtration requirements: purple and brown nozzles -130 microns
  other nozzles -200 microns



#### INVERTED MODEL - FLOW RATES AND WETTED DIAMETERS AT PRESSURE 2.0 BAR

| Swivel<br>color   | Nozzle<br>color | Flow rate<br>(l/h) | D<br>(m) |  |
|-------------------|-----------------|--------------------|----------|--|
| Green<br>inverted | Violet          | 35                 | 6.5      |  |
|                   | Brown           | 50                 | 7.5      |  |
|                   | Grey            | 70                 | 9.0      |  |
|                   | Turquoise       | 90                 | 10.0     |  |
|                   | Green           | 105                | 10.0     |  |
|                   | Orange          | 120                | 10.5     |  |
|                   | Black           | 160                | 11.0     |  |
|                   | Blue            | 200                | 11.5     |  |

\*Tested under laboratory conditions at 1.8 m height

#### PERFORMANCE TABLE FOR INVERTED APPLICATION

| Precipitation rate (mm/h) Spacing (m) |                                      |      |     |     |     |  |  |  |
|---------------------------------------|--------------------------------------|------|-----|-----|-----|--|--|--|
| Nozzle<br>color                       | Flow<br>rate 3x3 4x4 4x6 5x<br>(l/h) |      |     |     |     |  |  |  |
| Grey                                  | 70                                   | 7.7  | 4.4 | 2.9 | 2.8 |  |  |  |
| Turquoise                             | 90                                   | 10   | 5.6 | 3.8 | 3.6 |  |  |  |
| Green                                 | 105                                  | 11.7 | 6.6 | 4.4 | 4.2 |  |  |  |
| Orange                                | 120                                  | 14.0 | 7.9 | 5.3 | 5.1 |  |  |  |
| Black                                 | 160                                  | 17.5 | 9.9 | 6.6 | 6.3 |  |  |  |

\*Tested under laboratory conditions at 1.8 m height and 2.0 bar  $\,$ 

| Color code<br>distribution uniformity CU>92% CU=89-92% CU=85-88% CU<85% |
|---|
|---|

#### HEAD LOSS (m) 1.0m Tube Length

|                 |                       | 3/8" tl<br>fer  | Quick thread connection |                  |                 |  |  |  |  |
|-----------------|-----------------------|-----------------|-------------------------|------------------|-----------------|--|--|--|--|
| Nozzle<br>color | Flow<br>rate<br>(l/h) | 4/7 PVC<br>tube | 5/8 PE<br>tube          | 7/10 PVC<br>tube | 4/7 PES<br>tube |  |  |  |  |
| Violet          | 35                    | 0.8             | 0                       |                  | 0.9             |  |  |  |  |
| Brown           | 50                    | 1.2             | 0.1                     |                  | 1.1             |  |  |  |  |
| Grey            | 70                    | 1.3             | 0.5                     |                  | 1.7             |  |  |  |  |
| Turquoise       | 90                    | 1.5             | 0.7                     |                  | 2.6             |  |  |  |  |
| Green           | 105                   | 1.7             | 0.9                     |                  | 3.7             |  |  |  |  |
| Orange          | 120                   | 2.6             | 1.4                     |                  | 4.5             |  |  |  |  |
| Black           | 160                   | 4.6             | 2.4                     |                  |                 |  |  |  |  |
| Blue            | 200                   |                 |                         | 1.2              |                 |  |  |  |  |
| Yellow          | 250                   |                 |                         | 1.3              |                 |  |  |  |  |
| Red             | 300                   | 1.6             |                         |                  |                 |  |  |  |  |

## FLOW RATE (l/h) VS. PRESSURE (bar)

| Nozzle Color | Nozzle Ø    | Pressure (bar) |     |     |  |  |  |
|--------------|-------------|----------------|-----|-----|--|--|--|
|              | mm          | 1.5            | 2.0 | 2.5 |  |  |  |
| Violet       | 0.80        | 30             | 35  | 39  |  |  |  |
| Brown        | 0.94        | 43             | 50  | 56  |  |  |  |
| Grey         | ey 1.14     |                | 70  | 78  |  |  |  |
| Turquoise    | 1.34        | 78             | 90  | 101 |  |  |  |
| Green        | 1.40        | 91             | 105 | 117 |  |  |  |
| Orange       | 1.50        | 104            | 120 | 134 |  |  |  |
| Black        | 1.74        | 139            | 160 | 179 |  |  |  |
| Blue I.94    |             | 173            | 200 | 224 |  |  |  |
| Yellow       | Yellow 2.16 |                | 250 | 305 |  |  |  |
| Red          | 2.36        | 260            | 300 | 335 |  |  |  |

#### FLOW RATES AND WETTED DIAMETER (m) AT 2.0 BAR

| Swivels - Wetted diameter (m) |      |       |               |                        |               |                        |               |                        |               |
|-------------------------------|------|-------|---------------|------------------------|---------------|------------------------|---------------|------------------------|---------------|
| Nozzle<br>color (l/h)         | Flow | Black |               | Blue                   |               | Grey                   |               | Green                  |               |
|                               |      | rate  | l st<br>stage | Regular<br>(2nd stage) | l st<br>stage | Regular<br>(2nd stage) | l st<br>stage | Regular<br>(2nd stage) | l st<br>stage |
| Violet                        | 35   | 2.0   | 5.5           |                        |               |                        |               |                        |               |
| Brown                         | 50   | 2.0   | 6.5           |                        |               |                        |               |                        |               |
| Grey                          | 70   |       |               | 2.5                    | 7.0           |                        |               |                        |               |
| Turquoise                     | 90   |       |               | 2.5                    | 9.0           |                        |               |                        |               |
| Green                         | 105  |       |               | 3.0                    | 9.0           |                        |               |                        |               |
| Orange                        | 120  |       |               |                        |               | 2.0                    | 5.5           |                        | 9.5           |
| Black                         | 160  |       |               |                        |               | 2.5                    | 6.0           | 2.5-3.5                | 10.0          |
| Blue                          | 200  |       |               |                        |               | 2.5                    | 6.0           | 1                      | 10.5          |
| Yellow                        | 250  |       |               |                        |               | 3.0                    | 6.0           |                        | 11.5          |
| Red                           | 300  |       |               |                        |               | 3.0                    | 7.0           |                        | 12.5          |

\* Tested under laboratory conditions at 0.25m height.

\* 2 stages Green swivel only for 120-200 lph.

### PERFORMANCE TABLE FOR IRRISTAND APPLICATION

| Precipitation rate (mm/h) Spacing (m) |                 |                       |          |      |      |      |     |  |  |
|---------------------------------------|-----------------|-----------------------|----------|------|------|------|-----|--|--|
| Swivel Color                          | Nozzle<br>Color | Flow<br>Rate<br>(l/h) | D<br>(m) | 3x3  | 4x4  | 5x5  | 6x6 |  |  |
| Blue                                  | Grey            | 70                    | 7.0      | 7.8  | 4.4  |      |     |  |  |
|                                       | Turquoise       | 90                    | 9.0      | 10   | 5.6  |      |     |  |  |
|                                       | Green           | 105                   | 9.0      | 11.6 | 6.5  |      |     |  |  |
| Green                                 | Orange          | 120                   | 9.5      | 13.3 | 7.5  | 4.8  | 3.3 |  |  |
|                                       | Black           | 160                   | 10.0     | 17.8 | 10   | 6.4  | 4.5 |  |  |
|                                       | Blue            | 200                   | 10.5     | 22.3 | 12.6 | 8    | 5.6 |  |  |
|                                       | Yellow          | 250                   | 11.5     | 27.8 | 15.7 | 10   | 7   |  |  |
|                                       | Red             | 300                   | 12.5     | 32.9 | 18.5 | 11.8 | 8.2 |  |  |

\*Tested under laboratory conditions at 0.6 m height and 2.0 bar