

Irrigation Calibration Quick Test

Worksheet for Drip Micro Irrigation

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Measurement Procedure

Equipment you will need

- The guide and this worksheet
- Containers to collect water from outlets
- 1 Measuring cylinder
- 1 50 m tape measure
- 1 Stop watch
- 1 Pen or pencil

Field measurements

Repeat the following field measurements and calculations in each block. Use multiple copies of the worksheet to record more Blocks.

Emitter/sprinkler measurements

- 1 Measure the average distance between outlets along a lateral.
- 2 Measure distance between adjacent laterals
- 3 Estimate average width of wetted strip along the rows
- 4 Determine the area of each Block

Application test

- 1 Collect the output from one emitter at the beginning, middle and end of four laterals [L1 – L4 in Guide sheet Diagram 1]
- 2 Measure the volume of water caught in each container and record on the worksheet

BOX A: BLOCK DETAILS

Date: _____ Tester: _____

	Block Name								
a	Outlet Spacing: m								
b	Lateral Spacing: m								
c	Area/outlet: m ² [a x b]								
d	Outlet Density: #/ha [10,000 ÷ c]								
e	Run Time: hr								
f	Target Depth: mm								
g	Actual Applied: mm [u x d x e ÷ 10,000]								
h	Target/ Actual [f ÷ g]								
i	Adjusted Runtime: hr [e x h ÷ t]								
j	Wetted strip width: m								
k	Soil App'd Depth: mm [g ÷ (j ÷ b)]								
l	Block Area: ha								
m	Meter Flow: m ³ /hr [u x d x l ÷ 1000]								

Worksheet for IRRIG8Quick Drip Micro Irrigation Calibration Test

Enter outlet spacings, run times and block areas in Box A overleaf
 Enter collection times and volume measurements in Box B below
 Complete the Calculations as directed
 Enter information using the measurement units (e.g. millimetres or metres) specified
 to ensure calculated answers have the correct units.

BOX B: Emitter or Sprinkler (Outlet) Flow Rates

n	Block Name								
	Collection Time (min)								
	Lat 1 Outlet 1: mL								
	Lat 1 Outlet 2: mL								
	Lat 1 Outlet 3: mL								
	Lat 2 Outlet 1: mL								
	Lat 2 Outlet 2: mL								
	Lat 2 Outlet 3: mL								
	Lat 3 Outlet 1: mL								
	Lat 3 Outlet 2: mL								
	Lat 3 Outlet 3: mL								
	Lat 4 Outlet 1: mL								
p	Lat 4 Outlet 2: mL								
	Lat 4 Outlet 3: mL								
	Sum All 12: mL [Add 12 values above]								
q	Avg All 12: mL [$p \div 12$]								

r	Low Catch 1: mL								
	Low Catch 2: mL								
	Low Catch 3: mL								
	Sum Low 3: mL [Add 3 values above]								
	Avg Low 3: mL [$r \div 3$]								

t	EU Block [$s \div q$]								
	Avg Flow: L/hr [$q / n \times 0.06$]								