

Irrigation Calibration Quick Test

Worksheet for Drip Micro Irrigation

Download from: www.claw.net.nz/resources/irrigation

PAGEBLOOMER

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: m2 [$a \times b$]								
d	Outlet Density: #/ha [$10,000 \div c$]								
e	Run Time: hr								
f	Target Depth: mm								
g	Actual Applied: mm [$u \times d \times e \div 10,000$]								
h	Target/ Actual [$f \div g$]								
i	Adjusted Runtime: hr [$e \times h \div t$]								
j	Wetted strip width: m								
k	Soil App'd Depth: mm [$g \div (i \div b)$]								
l	Block Area: ha								
m	Meter Flow: m3/hr [$u \times d \times j \div 10,000$]								

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								
Lat 4 Outlet 2: mL									
Lat 4 Outlet 3: mL									
p	Sum All 12: mL <i>[Add 12 values above]</i>								
	Avg All 12: mL <i>[p ÷ 12]</i>								
r	Low Catch 1: mL								
	Low Catch 2: mL								
	Low Catch 3: mL								
	Sum Low 3: mL <i>[Add 3 values above]</i>								
	Avg Low 3: mL <i>[r ÷ 3]</i>								
t	EU Block <i>[s ÷ q]</i>								
	Avg Flow: L/hr <i>[n x q x 0.06]</i>								