

# AQUA-SURE®

## What is it?

AQUA-SURE® measures several water quality indicators, which affect the growth and health of plants.

## Why do you need to be sure about water quality?

Water quality influences the availability and uptake of nutrients, as well as the plant's ability to absorb water and the efficacy of pesticides.

## AQUA-SURE® can provide the following answers

### Hydroponic solution

- Is your nutrient mix balanced, supplying each element in the correct amount?
- Are pH, hardness and electrical conductivity (EC) correct?
- How is recycling the run-off water affecting the nutrient balance and EC?
- Is feed strategy matching the growing media?
- Are drip and drain strategies being optimised with nutrient uptake?
- All within 24 hours of sample receipt.
- Preferred supplier to PCA and HFF since 2012.

### Irrigation water

- Is your water suitable for irrigation?
- What effect is it having on your soil nutrients and their availability?
- Is it locking up or leaching essential nutrients?
- Is it affecting soil salinity or sodicity (EC, Cl, Na), soil structure or pH?
- Do you need to consider water nutrient levels in your crop nutrient budget?

### Spray water

- Is the water too alkaline to provide good efficacy and stability for most products (check product label for optimum pH).
- Does the water contain ions that may affect product efficacy or the functionality of the spray unit (corrosion, blockages).

For more information on AQUA-SURE®:

#### AgVita Analytical

PO Box 188, Devonport TAS 7310

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info@agvita.com.au

www.agvita.com.au

The logo for AgVita Analytical features the company name in a bold, sans-serif font. 'AGVITA' is in a larger size and weight than 'ANALYTICAL'. A stylized green leaf or water droplet graphic is positioned behind the 'V' in 'AGVITA'.

**AGVITA**  
ANALYTICAL



## Sampling Instructions

### General sampling guidelines

In order to achieve a representative water sample, a composite sample made up of 5-10 sub samples needs to be taken. The sampling method will depend on the source of water to be analysed, local guidelines may apply. Specific water sampling standards and guidelines are available from Standards Australia [www.standards.org.au](http://www.standards.org.au)

**Bore water** should not be collected until after the bore has pumped for a period of one to two hours or until the water has cleared up, with sub samples taken at 5 minute intervals. Sample size: 500ml.

Sample **Dam water** from different positions at the side and to a depth where the water is being drawn from. It may be necessary to collect several composite samples during the season to correlate results to evaporation and dilution and observe seasonal changes in water quality. Sample size: 500ml.

Water drawn from **Streams** needs to be sampled from different locations in the main stream body. If it is used for irrigation, sample near the suction area. Sample size: 500ml.

For **spray water**, follow guidelines explained above. Sample size: 500ml.

Depending on the **Hydroponic** system, any or all of the supply water, supply nutrient solution and recycled water may be sampled. It is recommended to take a composite sample over a period of 6-12 hours, e.g. every 2 hours, while the system is operating. Sample size: 250ml.

## Sampling procedure

**Sampling bottles are available from AgVita Analytical.**

When using bottles other than those supplied by AgVita Analytical, clean 500ml plastic water drink bottles are suitable. Ensure that they have a watertight lid and are durable to avoid damage in transit. Triple rinsing with the water source to be analysed will ensure it is clean before sampling. Dispose of the rinse water away from the sampling site.

To fill the bottle, sub sample with a clean beaker, filling the bottle to the top. Samples should be kept cool (not frozen),

and away from direct light. Samples should reach the laboratory in the same condition they were in at sampling and should not be stored for extended periods.

Bottles need to be identified with a completed sample label available from AgVita Analytical. Wrap the bottles in bubble wrap or other padding to protect them during postage.

Send all samples as soon as possible using **Express Post** to:

**AgVita Analytical,  
PO Box 188, Devonport, TAS 7310**

## Analyses conducted

We analyse inorganic components and quality indicators, not biological properties or pesticides.

Water type	Analyses
Irrigation	NO <sub>3</sub> , NH <sub>4</sub> , P, K, Ca, Mg, Zn, B, S, Cu, Mn, Fe, Na, Mo, Al, Si, Cl, pH, E.C., SAR, RSC, HCO <sub>3</sub> , CO <sub>3</sub> <sup>-2</sup> , TDS, TDI
Hydroponics	NO <sub>3</sub> , NH <sub>4</sub> , P, K, Ca, Mg, Zn, B, S, Cu, Mn, Fe, Na, Mo, Cl, pH, E.C., hardness, TDS, HCO <sub>3</sub>
Spray water	NO <sub>3</sub> , Ca, Na, SO <sub>4</sub> , Mn, Cu, Zn, Fe Cl, pH, E.C., hardness, TDS



Member of ASPAC,  
Australasian Soil and  
Plant Analysis Council

