

# STATES ANALYTICAL LABORATORY

## ROUTINE SOIL ANALYSIS & PLANT PATHOLOGY SERVICES 2023

Analytical Laboratory Services	Parameters Tested
Basic soil or compost	pH, cf, Nitrate-N, P & K
Standard Soil / Compost Analysis	pH, cf, Nitrate-N, P ,K, Mg, Ca, Na
Standard Nutrient Solution or Irrigation Water Analysis	pH, cf, Nitrate-N, P ,K, Mg, Ca, Na
Standard Plant Sap Analysis	Nitrate-N, P ,K, Mg, Ca, Na
Full Nutrient, or Irrigation Water Analysis	pH, cf, Nitrate-N, P ,K, Mg, Ca, Na, Fe, Cu, Zn, Mn, B, Bicarb
Full Plant Sap Analysis	Nitrate-N, P ,K, Mg, Ca, Na, Fe, Cu, Zn, Mn, B,
Individual Nutrient Determinations	Nitrate-N, P ,K, Mg, Ca, Na, Fe, Cu, Zn, Mn, B or Bicarb
Individual cf or pH determination	pH or cf
<b>Pathology Laboratory Services</b>	
Soil test for Potato Cyst Nematode (PCN)	
Plant Virus testing	
Diagnostic examination of plants & general horticultural advice.	
<b>Other Services</b>	
On site visits	

### Advice on Sampling for Analysis

Soils, growing media or leaf samples for nutrient analysis should be representative of the area you wish to test. For example, use a zig-zag pattern across the area to be sampled taking 10-25 smaller sub-samples depending on the size of the sampled area.

**Soils:** sample to the depth of cultivation / rooting depth -approximately 6 inches (15cm) for most crops using an auger, if you have one, or a garden trowel.

NB: Soil samples should not be taken during the four months after fertilizer or lime has been applied application. This allows time for the lime or fertilizer to be incorporated and take full effect within the soil.

**Compost** sampling depends on the situation – bulk loads should be sampled across the load or from several bags. Where volumes are very small e.g., in propagation then samples from the whole container / plug should be taken. In pot grown crops sample from the middle section of the root ball, avoiding the top and bottom 2cm.

**Water / nutrient** solution samples should be allowed to run for several minutes before a sample is taken into a clean plastic bottle.

### Sample Sizes

**Soil / Compost:** Approximately 500g of soil or compost, mixed from the total sampled, and placed in a labelled & clean polythene bag or container.

**Water /nutrient solution:** A minimum of 500mls of liquid in a clean container & labelled.

**Sap Analysis:** 200g of green plant material (newly expanded leaves & petioles) in a clean plastic bag or container & labelled.

Sampling separately from both good and poor areas can also be helpful for diagnosis purposes.

### **Plant Pathology Samples**

Please bring in a representative sample, in a clean plastic bag, showing the full range of symptoms that you have seen. If you can't get them to us on the same day, place in a polythene bag in a fridge until you can.

If applicable bring in plant material that shows the boundary between healthy and diseased tissue and include healthy material for comparison.

If you suspect that the problem may relate to the roots or soil, also include roots and their surrounding soil in your sample.

Photographs of the location and scope of the problem can also be helpful.

Please contact the States Analytical Laboratory for further advice on sampling on **227612**.