



Isle of Man
Government

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ISLE OF MAN GOVERNMENT

Why Test your Soil?

Does my soil have problems?

Do my crops need fertiliser?

What Fertiliser should I use?

Can I reduce my fertiliser bill?

A soil analysis can help farmers answer the above questions. A **Basic soil analysis** provides information on two important soil characteristics:

Soil pH: is a measurement on a scale from acid (low pH) to alkaline (high pH). A soil test will indicate pH problems and provide recommendations for correcting them.

Available Nutrient levels in the soil determine how good crop growth will be. Testing for phosphorous (p) and potassium (K) will help determine the need for soil amendments and determine the right fertiliser formulations for the crop to be grown.

Micronutrient levels may also be tested for when crop symptoms suggest problems.

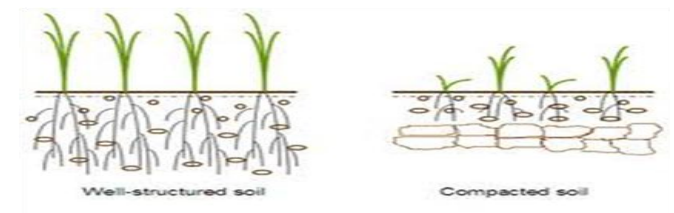
Analysis

Guideline Result

pH	6.0
Phosphorus (Index)	2
Potassium (index)	2
Magnesium (index)	2
Calcium (ppm)	2000
Sulphur (ppm)	10
Manganese (ppm)	5.0
Copper (ppm)	8.0
Boron (ppm)	0.5
Zinc (ppm)	7.0
Molybdenum (ppm)	<0.50
Iron (ppm)	50
Sodium (ppm)	90
C.E.C (meq/100g)	15 to 40*
K:Na ratio	5:1 to 9:1*
Ca:Mg ratio	7:1*

*will vary depending on soil type and clay content.

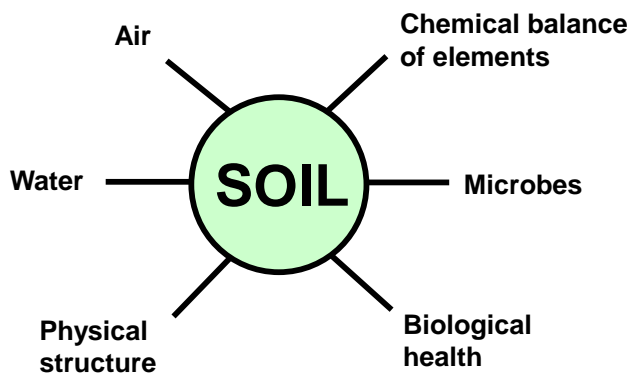
Compaction can easily be gauged by looking at the rooting depth of the growing plants. Compacted soils will display signs of discolouration and may smell almost sulphurous (rotten eggs).



Guide to:

Soil Sampling

Balance is the Key



How to test your soil

Equipment needed:

- Spade, trowel or soil auger
- Bucket and/or bags to collect soil in. Ned to hold approximately 500g
- Maker pen or labels

Collecting the Sample:

- Ideally divide the filed into 5 to 10 acre parcels.
- Take separate samples from areas that differ in soil type, previous cropping history, slope, drainage or persistent poor yields.
- Avoid any unusual spots such as old fences, ditches, drinking troughs, dung or urine patches or where dung or lime has been heaped in the past.
- Do not sample a field for P & K until 3-6 months after the last P& K application. Where lime has been applied allow a period of 2 years from application before sampling.
- Follow a "W" soil sampling pattern to ensure the sample is representative of the entire field.

- Ensure that all samples are taken to the full 100mm depth for grassland and 150mm for arable land.
- Ensure that the sample is free from contaminants. including grass and stones etc.
- Place the 20-25 samples together an mix well.
- Identify the field sampled on the bag.
- Include as much field history as possible with the sample to aid interpretation and future recommendations.
- Recommended sampling pattern



Fertiliser planning and taking account of past rotations and any organic manure applied will allow for accurate management of nutrients ensuring optimum crop growth and improved value for money.

Do's and Don't's

- DO** clean tools and equipment before sampling a new area
- DO** label each sample clearly
- DO** provide the maximum amount of information of the background of problem fields

DO NOT sample immediately after applying lime or fertilisers. The best time is after the harvest of the previous crop.

DO NOT allow soil contamination of leaves and shoots when sampling.

Where can I send samples?

IoM Government lab	01624 642335
Isle of Man Farmers	01624 626600

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