

CHECKING SOIL HEALTH – STEP BY STEP

There are an increasing number of approaches available to measure and check soil health on-farm. One example is the *Soil Health Scorecard*, developed as part of the NIAB-led, AHDB-BBRO-funded, Soil Biology and Soil Health Partnership. This is a simple set of field observations and laboratory tests that use a traffic-light system to describe and benchmark the physical, chemical and biological properties of the soil.

STEP 1

Establish why the soil health requires checking, e.g.

- Testing the results of an on-farm trial;
- Comparing low and high yielding areas of a field;
- Assessing soil management regime, e.g. establishing a farm baseline across a small number of sites each year, ideally sampled in the same place in the rotation.

Managing and monitoring soil health is a long-term business, so maintain data and photos to compare trends over years and even decades! Record where measurements are taken – soils often vary across the field, so for soil health monitoring try and go back to the same place.

STEP 2

Get a spade out

A Visual Assessment of Soil Structure (VESS) is a relatively quick and easy method to take a soil structure score. Before scoring a site take a benchmark on untrafficked soil, e.g. beside a hedge, to assess an undisturbed, biologically-structured soil of the same texture. Compare this with a damaged soil – try gateways and compacted headlands. Note earthworm numbers and the distribution of organic materials in the soil. Finding eight or more earthworms in a spade full of soil is a good target for arable soils.

STEP 3

Test soil chemistry

Collect a mixed topsoil sample and send it off for a nutrient analysis, e.g. extractable P, K and Mg. This does not replace soil testing for fertiliser decisions but can check that management is keeping levels optimum for the crop rotation and the environment. This is also a good opportunity to test soil organic matter levels and compare against target levels for your soil type.

<https://ahdb.org.uk/soil-health-scorecard>



 **Agronomy Membership**

This is just one example of the research information, tools and advice delivered alongside NIAB's extensive and exclusive member-funded field trials programme, supplying impartial cost-effective crop production strategies specifically for our members.