

# Quick Soiltest Supplementary Notes



*“a world of learning”*

Information about nutrient levels is essential when making decisions about the type and level of fertilizer that should be applied to garden and agricultural soil. The Hanna Quick Soiltest kit is a low cost, simple-to-use system for checking soil conditions – pH, nitrogen (N), phosphorus (P) and potassium (K).

The tests are very simple to carry out. First, take a representative soil sample according to the directions, and mix it with water to extract the test elements. Next, treat the extract with the pre-packaged reagents. Finally, compare the solutions with the enclosed reference cards to estimate the level of the elements being tested. The kit contains enough components and reagents for 10 tests of each of the four parameters, pH, N, P and K.



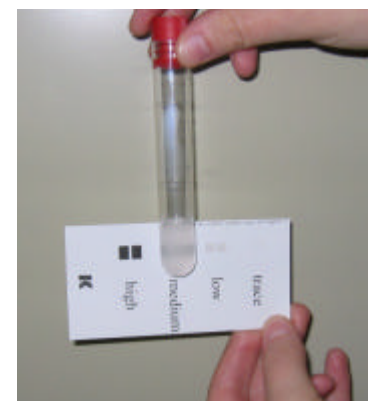
## Interpreting your results

The tests for pH, nitrogen and phosphorus use colorimetric determination methods. Due to the variable nature of soil, the water extract may contain some insoluble material and/or it may be slightly coloured due to the presence of, for example, tannin. To minimize the effect that these impurities can have on the colorimetric results, we suggest you allow the extract to stand as long as possible to encourage sediments to settle out before testing. If there is excessive background colour in the extract, you might have to consider sampling the soil from another position.

After the pH, nitrogen or phosphorus reagents have been added to the test solutions, some precipitate may form in the test tube. For best results, allow this material to settle before attempting to assess the colour.

The test for potassium uses a turbidimetric determination method. Hold the test tube in front of the card as shown in the picture when assessing the level of potassium. In some cases, the solution may become coloured as well as turbid, but the assessment method remains the same.

Many fertilizers include the nutrient elements in insoluble forms that slowly breakdown in the soil over time. For this reason, testing aqueous fertilizer extracts can give anomalous results. The Quick Soiltest will indicate the level of soluble (available) material at the time of the test. Monitor nutrient levels in soil over a period of time to correlate the way they change with the application of particular types and amounts of fertilizer.



Turbidimetric K assessment