

Technical Note

Deep Nitrogen Soil Analysis

Nitrate nitrogen is the measure of readily available nitrogen in the soil and is used with percentage of organic matter to make a nitrogen fertilizer recommendation. Because nitrate-N is highly soluble, it is subject to leaching in all soils, especially in coarse to medium textured soils.

A fertilizer recommendation for nitrogen is more accurate if the subsoil is sampled at a depth of around 45cms (18 inches) to 90 cms (36 inches) deep and tested for both nitrate-nitrogen and ammonium-nitrogen forms. Split applications of nitrogen fertilizer help reduce the potential for leaching. This practice is particularly important for sandy soils.

As a general guide the following classifications are applied for most crop applications. For more specific guides depending upon your crop, please consult your local agronomist **or Phosyn Analytical**.

Nitrate N mg/kg (ppm w/w)	General classification
Less than 2.5	Very low
5 - 7.5	Low
7.5 - 15	Slightly low
15 - 35	Moderate
Greater than 35	High

Always carry out nitrogen tests to the estimated rooting depth of the crop in question.

Soil nitrogen levels can be determined using a Phosyn Analytical soil test (ask for test 'Soil Nitrogen – Code S0').