

## Overview

This standard covers the role of plant nutrients in crop production and their application, all with due regard for protection of the environment.

## Performance criteria

### *You must be able to:*

P1 appreciate the principles of supplying nutrients or lime to a soil to supplement soil supply and/or replace crop removals

P2 be able to produce a manure management plan

P3 advise on appropriate forms for given situations

P4 calculate unit costs and undertake cost comparison of different products

## Knowledge and understanding

### *You need to know and understand:*

- K1 how to take soil samples and interpret the resulting analysis
- K2 the need for and use of lime, including optimum pHs for different crops and soil types
- K3 how to prepare fertiliser plans for single crops and rotations
- K4 the need to avoid fertiliser application to non-crop areas, especially field margins
- K5 the storage requirements for different forms of fertiliser
- K6 range of products and formulations
- K7 the agronomic implications of the different forms of fertilisers
- K8 fertiliser legislation and correct labelling
- K9 agronomic implications of fertiliser declaration and correct labelling
- K10 the consequences and effects of plant nutrition options on soil, water and the environment
- K11 how nutrients are lost from plants and the soil
- K12 the economic and environmental consequences of inaccurate fertiliser spreading and poor storage
- K13 the influence of local climate and geographic factors on fertiliser quantity and timing for a given crop
- K14 how the influences of placement methods and fertiliser formulation can affect the quantity and timing of fertiliser for a given crop
- K15 the mechanisms by which nutrients are lost to the environment
- K16 the various chemical and physical properties of fertiliser types
- K17 the measurement units of nutrient declarations and ratios

Plant nutrients and fertiliser planning

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**Originating Organisation** Lantra

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**Relevant Occupations** Agronomist, Skilled Agricultural and Horticultural Trades

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**Suite** Agricultural Management

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