



Australian Government

Assessment Requirements for AHCBAC514 Design and manage a crop or pasture nutrition program

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has designed and managed a crop or pasture nutrition program on at least one occasion, and has:

- reviewed and analysed workplace crop or pasture production plan, findings on plant structure, biology and nutritional requirements, nutrients available from fertilisers, soils and soil amendments
- documented a nutrition program and nutrient management plan, including remedial actions
- calculated fertiliser and soil amendment application rates
- identified nutrition program resource requirements, and calculated cost and estimated returns
- identified and complied with legislation and regulations requirements applicable to designing and managing a crop or pasture nutrition program
- applied relevant workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures
- developed and documented relevant workplace health and safety and environmental and biosecurity controls to minimise risks, impacts and poor nutrient management practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- principals of workplace crop or pasture production plan
- site evaluation techniques, including methods of sampling and analysing soils and other growth media
- characteristics and variability of soil and uses of soil amendments and additives to enhance available nutrition for specific crops

- characteristics of plants at various growth stages, including nutritional requirements and demands
- plant nutritional requirements of selected crop species
- organic matter, pests and disease, and nutrient interactions in soil and nutrient cycle
- soil amendments commonly required to treat soil problems experienced by workplace
- nutrients and water required by plants grown within workplace, and effects of nutrient deficiency and toxicity on individual plant species and varieties, including visual symptoms
- processes and techniques for preparing, costing and documenting a plant nutrition program
- common and compound fertiliser products and soil ameliorants available to workplaces, including analysis, solubility, salt index, application rates, method, timing and costs
- methods of nutrient uptake by plants and favourable conditions for effective uptake to occur
- legislation and regulations requirements relevant to designing and managing a crop or pasture nutrition program
- workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures relevant to designing and managing a crop or pasture nutrition program.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - climate, environmental and current site data
 - species published data and historical records
 - soil, plant and water samples and testing equipment
 - plant identification keys and booklets
 - test results
 - soil amendment product specifications and performance data
 - fertiliser labels, product cards and material safety data sheets (MSDS)
- specifications:
 - workplace crop or pasture production plan
 - workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures relevant to designing and managing a crop or pasture nutrition program
 - legislation and regulations requirements relevant to designing and managing a crop or pasture nutrition program
- relationships:

- staff, managers, suppliers, contractors, consultants, appropriate personnel and customers
- timeframes:
 - according to the job requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>