



Australian Government

AHCBAC404 Plan and implement agricultural crop maintenance

Release: 1

AHCBA404 Plan and implement agricultural crop maintenance

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to plan and implement agricultural crop maintenance.

All work must be carried out to comply with workplace procedures, work health and safety and biosecurity legislation and codes, and sustainability practices.

This unit applies to individuals who take responsibility for own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Broad acre cropping (BAC)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Determine condition of agricultural crops	1.1 Measure and assess soil moisture and calculate soil water percentage 1.2 Calculate water requirements to soil analysis data, standing crop, and forecast weather conditions 1.3 Assess nutrient requirements and availability for crops and identify deficiencies 1.4 Identify factors affecting crop capacity

Element	Performance criteria
	1.5 Assess technology to ensure most efficient performance of operations 1.6 Identify work health and safety hazards in crop maintenance and assess risks
2. Determine pest control	2.1 Assess evidence of pests and disease and determine appropriate integrated control measures 2.2 Locate and identify areas of weed infestation for reduction or eradication 2.3 Select appropriate integrated control methods 2.4 Schedule suitable control methods appropriately 2.5 Maintain records on severity of infestations and treatments used
3. Manage crop health	3.1 Implement work health and safety controls 3.2 Monitor crop to maintain water and nutritional requirements for optimal production 3.3 Implement sustainable land management practices appropriately 3.4 Monitor weed and pest levels and modify the control program as required 3.5 Assess, document and analyse benefits from soil and plant inputs and treatments 3.6 Monitor and document cropping programs 3.7 Document and record relevant data for continual analysis and effective crop management

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCBA404A Plan and implement agricultural crop maintenance.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCBA404 Plan and implement agricultural crop maintenance

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Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- refer to records of, and assess, soil health and nutrient status
- dispatch soil samples to laboratories
- carry out a soil health appraisal
- identify likely threats to crop from pests, weeds and diseases
- recognise damage to crop caused by weeds, pests or diseases
- recognise poor growth and lack of vigour in crop caused by nutrient deficiency
- record monitoring results
- plan and implement integrated control strategies to address nutrient deficiencies, disease outbreaks, pest and weed infestations
- accurately measure soil moisture and estimate irrigation needs if required
- apply pesticides or fertility treatments as required
- apply correct use of technology to improve efficiency
- communicate with industry, suppliers and other personnel
- read and interpret Safety Data Sheets (SDSs), production plans and analysis results
- estimate and measure pest control treatments
- assess crop needs accurately
- carry out crop cultural practices and treatments
- monitor and assess crop maturity
- ascertain water requirements from survey advice and weather forecasts
- measure soil moisture and interpret data accurately
- determine time of harvest with specialist advice
- implement work health and safety policies in the context of the work team
- implement enterprise sustainability practices.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- crop growth stages and keys
- crop growth requirements compared to soil nutrient status
- fertiliser and soil ameliorant types and application times, methods and rates
- chemical use if applicable
- factors leading to development of chemical resistance
- role of technology in improving efficiency
- integrated pest management strategies
- life-cycles of pest, diseases and weeds
- work health and safety legislative requirements
- relevant codes of practice with regard to the use and control of agricultural chemicals
- legislation and codes of practice with regard to environmental protection.

Assessment Conditions

Competency is to be assessed in the workplace or simulated environment that accurately reflects performance in a real workplace setting.

Assessors must satisfy current standards for RTOs.

Links

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