



Australian Government

AHCBAC316 Maintain agricultural crops

Release: 1

AHCBAC316 Maintain agricultural crops

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to monitor and assess broadacre crop health and condition and implement crop maintenance procedures.

The unit applies to individuals who work under broad direction and take responsibility for own work including limited responsibility for the work of others. They use discretion and judgement in the selection and use of available resources and complete routine activities.

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

Pre-requisite Unit

Nil

Unit Sector

Broad Acre Cropping (BAC)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor & assess agricultural crop condition, growth and requirements	1.1 Monitor crop health and record observations according to crop production plan 1.2 Report deviation from expected growth and vigour to supervisor 1.3 Identify, monitor and report weeds, pests and diseases 1.4 Measure soil moisture and determine soil water requirements according to workplace procedures 1.5 Report observations of crop ripening to supervisor to determine

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	the timing of harvest
2. Undertake crop health operations	2.1 Identify work health and safety procedures and hazards, assess risk and implement controls according to workplace policies 2.2 Select, check use and maintain personal protective equipment (PPE) 2.3 Select and use appropriate machinery, equipment or technology according to manufacturer specifications 2.4 Apply specialist treatments at each growth stage according to label instructions and advice 2.5 Conduct chipping or spot spraying of declared weed infestation where specified in crop management plan 2.6 Assess, record and report crop growth stages, crop harvest indicators and milestones according to workplace procedures 2.7 Assess soil moisture and implement procedures to mitigate water stress according to crop production plan
3. Complete cleaning and hygiene operations	3.1 Clean equipment according to hygiene and biosecurity procedures 3.2 Check and maintain machinery, equipment or technology performance according to workplace procedures and manufacturer specifications 3.3 Dispose of waste according to workplace procedures and environmental policies 3.4 Maintain records and documentation according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
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Skill	Description
Reading	Interpret plans and procedures for maintaining crops
Numeracy	- Calculate rates of application of seed, treatments and fertilisers, and calibrate equipment and machinery to deliver specified rates - Calculate soil moisture and crop water demand

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHC BAC316 Maintain agricultural crops	AHC BAC307 Maintain agricultural crops	Edited Application for clarity Changes to sequencing and editing of Performance Criteria for clarity Foundation Skills refined Performance Evidence and Knowledge Evidence clarified and terminology updated Amended structure of Assessment Conditions	Equivalent

Links

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

Assessment Requirements for AHCBC316 Maintain agricultural crops

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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 on at least one occasion maintained an agricultural crop from post seeding to pre harvest and has:

- detected differences and variations in crop growth and reported outcomes to supervisor
- observed and reported health of the crop, including:
 - monitored pests and diseases
 - assessed crop maturity
 - applied treatments and fertilizers according to crop production plan
- measured soil moisture and assessed crop water requirements
- maintained records and documentation
- checked and maintained machinery, equipment or technology
- followed workplace health and safety procedures, including use of personal protective equipment (PPE)
- followed biosecurity and environmental procedures and policies.

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:

- legislative requirements, manufacturer instructions and workplace procedures/instructions
- potential hazards associated with the operation of basic tools and equipment
- general machine maintenance procedures
- machinery operating principles and safe operating methods
- environmental impacts associated with the operation of machinery and equipment
- principles of precision agriculture and the role of technology in improving efficiencies, including:

- self-drive, auto steer, global navigation satellite systems (GNSS) and laser technologies
- digital and remote sensors
- remote piloted systems
- controlled traffic farming (CTF) principles and impacts
- variable rate technology (VRT)
- soil moisture testing, assessment and crop water requirements, including types and application of irrigation systems used in broadacre farming
- workplace recording and reporting procedures
- health and vigour of developing crop, including:
 - symptoms of crop lacking health and vigour
 - signs of pest and disease infestation
 - moisture stress
 - nutrient deficiencies
- hygiene and biosecurity requirements for agricultural crops and equipment
- types and uses of herbicides, insecticides and other pesticides and alternative pest control methods (non-chemical), including:
 - integrated pest and weed management techniques
 - pesticide policies and procedures
 - legislative requirements
- workplace health and safety, including:
 - broadacre farm hazards, risks and controls
 - power lines and elevated equipment safety
 - farm fire safety for dried crops, stubble and accumulation in equipment.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated on a broadacre farm or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - tools, machinery and equipment or technology
 - soil moisture testing probes
 - fertilisers, ameliorants and treatments
 - personal protective equipment (PPE)
- specifications:
 - workplace policies and procedures
 - manufacturer operating instructions for tools, equipment and machinery
 - workplace plans and specifications.

- relationships:
 - supervisor(s).

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

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