



Australian Government

AHCBAC509 Plan and manage long-term weed, pest and disease control in crops

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 4.0.

Application

This unit of competency describes the skills and knowledge required to source information for weed, pest and disease control planning, determine long-term control strategies, provide input to other planning processes, determine scheduling and key responsibilities, monitor, adjust and evaluate control strategies and record results.

The unit applies to individuals who apply specialised skills and knowledge to the planning and management of long-term weed, pest and disease control in crops, and take personal responsibility and exercise autonomy in undertaking complex work. They analyse and synthesise information and analyse, design and communicate solutions to sometimes complex problems.

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.Source information for input to weed, pest and disease control planning	1.1 Identify and access historical data, including recent data from organisational records for input to weed, pest and disease control planning

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Research and collate information from other workplaces within the district 1.3 Use information regarding the characteristics of the crop planned for, or under production 1.4 Research and collate information regarding the local geography, soil and climatic conditions 1.5 Consider and document the environmental and biosecurity implications of pesticide or herbicide use, alternative methods and non-chemical preventative methods 1.6 Assess technology to ensure most efficient performance of operations 1.7 Assess information including agrochemical resistance strategies and determine potential key information for input to planning decisions 1.8 Assess crop end use and agrochemical maximum residue limits (MRL) for domestic and export, primary and secondary product outcomes 1.9 Select agrochemical based on crop end use MRL, seasonal restrictions and buyer specifications
2.Determine long-term weed, pest and disease control strategies	2.1 Analyse information gathered for suitable methods 2.2 Consider methods of control, including their impacts and off target risks 2.3 Evaluate weeds, pests and diseases, and beneficial flora and fauna as indicators of farming system health 2.4 Determine strategies for weed, pest and disease control to integrate the most suitable control methods with the proposed crops and the existing geography 2.5 Identify environmental controls and include in the plan 2.6 Identify workplace health and safety hazards, assess risks and incorporate suitable controls into the plan
3.Provide input to other planning processes	3.1 Incorporate selected weed, pest and disease control strategies into other organisational planning processes 3.2 Collect and use information regarding other planning processes in the weed, pest or disease control plan 3.3 Communicate information appropriately about the range of

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	planning processes
4.Determine scheduling and key responsibilities	4.1 Determine appropriate scheduling for weed, pest and disease control 4.2 Determine legal and key responsibilities for specific implementation processes 4.3 Determine record keeping requirements and implement appropriate procedures 4.4 Document the plan, including scheduling, legal and key responsibilities ensuring it includes the type, format, frequency and detail of any reporting required by both managers and operators
5.Monitor and adjust weed, pest or disease control strategies	5.1 Evaluate the effectiveness of the weed, pest and disease control strategies at key points, and implement any necessary adjustments 5.2 Identify, monitor and assess environmental impacts and workplace health and safety hazards relating to weed, pest and disease control throughout the implementation process 5.3 Identify and implement necessary modifications to the strategy 5.4 Implement workplace biosecurity policies
6.Evaluate weed, pest and disease control strategies and record result	6.1 Analyse data, observations, and documentation from the implementation against the plan appropriately 6.2 Prepare recommendations for future strategies 6.3 Prepare a report that documents the implementation of the strategies including any difficulties or issues faced

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
Oral communication	Initiate discussions with staff, contractors and suppliers, using clear language to communicate weed, pest and disease plan
Numeracy	Access and analyse data for input to weed, pest and disease control planning

Skill	Description
	Document costs of implemented strategy
Navigate the world of work	- Identify and describe own workplace requirements associated with own role and area of responsibility - Monitor self and others adherence to workplace requirements including safety requirements
Interact with others	Use appropriate language and communication skills to disseminate information within work team

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCBA509 Plan and manage long-term weed, pest and disease control in crops	AHCBA505 Plan and manage long-term weed, pest or disease control in crops	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

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 AHCBA509 Plan and manage long-term weed, pest and disease control in 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 planned and managed two long-term weed, pest and disease control in crops operations on at least two occasions and has:

- monitored information on pest and weed numbers, density and control
- analysed and extracted information from a range of sources and discussions
- planned and managed long-term weed, pest and disease control including developing a plan and amending the plan during the operations
- established processes or strategies, procedures and controls for long-term weed, pest and disease control
- considered the impacts and risks associated with long-term weed, pest and disease control methods
- demonstrated use of technology to improve efficiency
- assessed crop end use and agrochemical maximum residue limits (MRL) and selected appropriate agrochemical
- explained, and delivered instructions about the plans and scheduling of the weed, pest and disease control operations to both staff and contractors, as well as suppliers and customers
- recognised poor growth and lack of vigour caused by weeds, pests and disease rather than nutrient deficiency, with consideration to biosecurity
- evaluate and adjust appropriately to environmental implications and workplace health and safety hazards
- interpreted information on pest and weed numbers, density and control
- used records and observations to evaluate and report on weed, pest and disease control strategies
- planned land use incorporating long term weed, pest and disease control strategies
- followed workplace health and safety and biosecurity 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:

- pest and weed species, including their life cycles and reproduction or multiplication capability
- pest, weed and disease control strategies including integrated pest management
- effects on crops of weeds, pests or diseases including:
 - competitive effects on crop yield
 - threshold levels
 - effects of alternative methods of control
- role of technology in improving efficiency
- agrochemical MRL for domestic and export, primary and secondary product outcomes
- relevant legislation and regulations relating to:
 - workplace health and safety
 - environment and biosecurity
 - contractor engagement
 - chemical use and application
 - vehicle and plant use
- environmental controls and codes of practice applicable to the workplace, and to the weed, pest and disease control operations
- sound management practices and processes to minimise noise, odours, and debris from weed, pest and disease control operations
- workplace biosecurity policies.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represent workplace conditions
- resources, equipment and materials:
 - historical data and organisational records
 - information regarding the characteristics of the crop planned for, or under production
 - information regarding the local geography, soil and climatic conditions
 - information regarding pesticide or herbicide use, alternative methods and non-chemical preventative methods
- specifications:
 - pesticide or herbicide application machinery and equipment operation and maintenance manuals and manufacturer specifications
 - agrochemical MRL for domestic and export, primary and secondary product outcomes
 - legislative and regulatory requirements applicable to pesticide or herbicide application

- industry and workplace biosecurity procedures applicable to pesticide or herbicide application
- relationships:
 - managers, operators and contractors
- 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

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