



Australian Government

AHCBAC512 Develop production plans for crops or pastures

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.

Application

This unit of competency describes the skills and knowledge required to select and establish species, variety, yield potential and quality specification of crop or pasture, prepare a crop or pasture program, and review crop or pasture production plans.

The unit applies to individuals who apply specialised skills and knowledge to the development of crop or pasture production plans, 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.

All work must be carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, and sustainability and biosecurity practices.

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. Select plant species and variety	1.1 Establish production targets for each crop or pasture type, consistent with marketing and workplace objectives 1.2 Assess and select plant types and varieties for their market

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	potential and gross margin returns for the farm environment 1.3 Select cost-effective cultural practices and rotations, consistent with disease and pest management strategies, available machinery resources and sustainable management of resources 1.4 Assess technology to ensure most efficient performance of operations 1.5 Identify production risks and determine strategies to minimise risk for each plant type selected 1.6 Identify and assess environmental and biosecurity risks, and develop risk controls and procedures
2. Establish yield potential and quality specification for crop	2.1 Source relevant benchmark yields to assist in setting target yields 2.2 Analyse past production records and determine the key determinants of yield 2.3 Use available models for calculating water use efficiency or other key determinants of yield to assist in setting target yields 2.4 Establish quality specifications and target yields for all crops or pastures
3. Prepare crop or pasture program	3.1 Assess proposed land areas for nutrients, pest and disease status, water reserves, tillage requirements and other factors that may affect crop or pasture production 3.2 Use records of chemical use for planning to reduce chemical resistance where required 3.3 Confirm crop or pasture varieties and plan paddock preparation, planting, fertilising and other treatments 3.4 Determine optimum timing of planting, applications and treatments, and prepare calendar of operations 3.5 Determine cash flow and budget for the crop or pasture program
4. Review production plans	4.1 Plan logistical arrangements related to harvesting, transportation, marketing and other key production cycle operations 4.2 Plan and check machinery and equipment requirements and availability for the production cycle 4.3 Assess workplace health and safety requirements of the production plan 4.4 Identify and plan labour requirements for the production cycle

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.5 Identify seed, fertiliser, pest and disease treatments and other input requirements 4.6 Establish record keeping system to provide data for the analysis of crop or pasture performance, and to meet other statutory requirements, including records of chemical use 4.7 Review and amend crop or pasture production plans, and document final plan

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
Reading	Identify and interpret information regarding requirements for crop or pasture production plans
Writing	Develop crop or pasture yield and quality specifications, and chemical use records
Numeracy	Calculate water use, target yields, cash flow and budget

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCBA512 Develop production plans for crops or pastures	AHCBA507 Develop production plans for crops	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	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 AHCBA512 Develop production plans for crops or pastures

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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 developed and reviewed production plans for crops or pastures on at least two occasions, and has:

- prepared budgets and gross margins
- assessed use of technology to improve efficiency
- assessed environmental and biosecurity risks, and developed controls and procedures
- sourced and interpreted relevant benchmark information
- analysed past production records
- selected crop or pasture species and variety, and determined yield potential for crop or pasture
- assessed proposed land areas for nutrient status
- assessed relevant workplace health and safety procedures.

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:

- market prices, gross margins, cash flow budgets
- cultural practices, characteristics and variability related to crops or pastures
- machinery and equipment requirements for selected crops or pastures
- role of technology in improving efficiency
- relevant workplace health and safety and environmental protection legislation, regulations, codes of practice and workplace procedures
- determinants of crop or pasture yield
- benchmark performance indicators
- models for calculating water efficiency
- disease and pest management selection for relevant crops or pastures

- crop or pasture performance record keeping systems.

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:
 - benchmark yields, past production records and chemical use records
- specifications:
 - workplace health and safety and environmental protection legislation, regulations, codes of practice and workplace procedures applicable to developing crop or pasture production plans
- 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.

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