

Modification history

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0.

AHCBAC5XX	Develop production plans for crops and pastures
Application	<p>This unit of competency describes the skills and knowledge required to select and establish species, variety, yield potential and quality specification of crop and pasture, prepare crop and pasture program and review crop and pasture production plan.</p> <p>The unit applies to individuals who apply specialised skills and knowledge to the development of crop and 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.</p> <p>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.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Broad acre cropping (BAC)

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 and pasture type, consistent with marketing and workplace objectives 1.2 Assess and select plant types and varieties for their market potential and gross margin returns for the farm environment 1.3 Select most profitable 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 and pastures
3. Prepare crop and pasture program	3.1 Assess proposed crop land areas for nutrient, pest and disease status, water reserves, tillage requirements, and other factors before selecting crop or pasture variety 3.2 Use records of chemical use for planning to reduce chemical resistance 3.3 Select crop and 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 cropping and pasture program

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. Review production plan	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 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 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 and pasture performance, and to meet other statutory requirements including records of chemical use 4.7 Review and amend crop and pasture production plan and document final plan

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Foundation Skills	
<i>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.</i>	
Skill	Description
Reading	<ul style="list-style-type: none"> Identify and interpret information regarding requirements for crop and pasture production plan
Writing	<ul style="list-style-type: none"> Develop a production plan, environment and biosecurity risk control procedures, crop and pasture yield and quality specifications, and chemical use records
Numeracy	<ul style="list-style-type: none"> Interpret statistical data 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
AHCBAC5XX Develop production plans for crops and pastures	AHCBAC507 Develop production plans for 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.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72
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TITLE	Assessment requirements for AHCBAC5XX Develop production plans for crops and pastures
Performance Evidence	
<p>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 production plans for crops on at least two occasions and has:</p> <ul style="list-style-type: none"> • prepared budgets and gross margins • sourced and interpreted relevant benchmark information from consultants or peers • assessed proposed land areas for nutrient status by sampling and testing soils and plants • analysed past production records • sourced and interpreted relevant benchmark information • selected crop and pasture species and variety and determine yield potential for crop and pasture • demonstrated correct use of technology to improve efficiency • prepared crop and pasture programs • reviewed, amended and documented the production plan • prepared budgets and gross margins • prepared individual paddock plans and a whole farm cropping and pasture plan • developed and implemented environmental and biosecurity risk control procedures • implemented relevant workplace health and safety procedures. 	
Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • determinants of crop and pasture yield • cultural practices related to crops and pastures • role of technology in improving efficiency • market prices, gross margins, cash flow budgets • benchmark performance indicators • disease and pest management for relevant crops and pastures • machinery and equipment requirements for cropping and pastures • record keeping systems • relevant workplace health and safety and environmental protection legislation, regulations, codes of practice and workplace procedures. 	
Assessment Conditions	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> • physical conditions: <ul style="list-style-type: none"> • a workplace setting or an environment that accurately represent workplace conditions • resources, equipment and materials: <ul style="list-style-type: none"> • benchmark yields, past production records and chemical use records • specifications: <ul style="list-style-type: none"> • workplace health and safety and environmental protection legislation, regulations, codes of practice and workplace procedures applicable to developing crop and pasture production plans • timeframes: <ul style="list-style-type: none"> • according to the job requirements. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
Links	<p>Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72</p>