



Australian Government

AHCAGB522 Implement the introduction of biotechnology into the production system

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0.

Application

This unit of competency describes the skills and knowledge required to evaluate the implications of introducing biotechnology and genetically modified organisms into the current production system. This unit requires the ability of producers to identify potential risks and benefits, responsibly manage all aspects of risks to the neighbours, local community, and to the environment, relevant to the existing and new production system.

This unit applies to producers who manage, or provide advice to, land based production businesses. Work will likely require consultation with external experts, such as extension officers from state Agricultural Departments, agribusiness representatives, agronomists and regulators and insurance agencies.

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

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

Pre-requisite Unit

Nil

Unit Sector

Agribusiness (AGB)

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. Evaluate benefits and	1.1 Identify information on biotechnology relevant to enterprise by

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applications of introducing biotechnology in production system	researching and analysing potential benefits and ramifications to production system, environment and others in the district 1.2 Identify how biotechnology can be integrated into current production system, to improve business profitability and sustainability 1.3 Compare current and historical production data for production system with potential for increased production 1.4 Investigate potential risks involved in the introduction of biotechnology to current production system 1.5 Collate information in a clear and concise manner to inform decisions 1.6 Evaluate implications for the integration of biotechnology into current production plan
2. Develop an implementation plan for introduction of biotechnology into production system	2.1 Select application of biotechnology suitable to local environment, climate, seasonal conditions, business goals and marketing objectives 2.2 Identify required changes to current production systems and develop suitable strategies for application of a farm production management plan 2.3 Develop risk management strategies including quality assurance (QA) system principles consistent with production plan requirements and marketing boards 2.4 Identify all relevant legislation, regulatory and product supplier requirements and implement according to the production plan 2.5 Identify key roles and responsibilities of personnel including training requirements 2.6 Develop an implementation production management plan including risk management strategies and QA systems
3. Implement and manage biotechnology into production system	3.1 Implement production, infrastructure and land management plans 3.2 Implement risk management strategies for production plan and record information in QA system 3.3 Manage scheduling of production processes taking organisational factors and paddock usage into consideration 3.4 Manage integration of environmental values into production process 3.5 Monitor risk management strategies plan and identify problems and issues by conducting a risk management audit on property

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. Evaluate management strategies	4.1 Evaluate potential results of threats in terms of natural resources, business assets, infrastructure, environmental and community 4.2 Identify preventative and reactive action and develop further contingency plans to minimise threats and maximise opportunities 4.3 Review risk management strategies plan aimed at ensuring business stability, sustainability and profitability, while protecting and preserving natural resources and business assets 4.4 Evaluate production plan for the introduction of biotechnology into production system

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	Interpret, analyse and extract information from a range of sources such as professional literature, legal documents, policies and procedures
Oral communication	Interact effectively with industry contacts, colleagues and advisors

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCAGB522 Implement the introduction of biotechnology into the production system	AHCAGB510 Implement the introduction of biotechnology into the production system	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 AHCAGB522 Implement the introduction of biotechnology into the production system

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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 introduced biotechnology into a land based production system on at least one occasion, including:

- researched implications of introducing biotechnology into one business
- recognised potential opportunities of introducing biotechnology
- developed a plan to introduce biotechnology
- conducted an audit before and after the introduction of biotechnology products to identify if risk management strategies are appropriate
- completed and maintained appropriate quality assurance documentation
- implemented and evaluated biotechnology plan.

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:

- benefits and risks of introducing biotechnology into a production system, including those arising from climate change, pressure on global food supplies and the management of pests and diseases
- principles of sustainability
- state/territory legislation, regulations and codes of practice relevant to biotechnology and the development and use of genetically modified organisms in Australia
- methods of risk assessment for the production system
- implementing, monitoring and maintenance of a quality management system
- issues presented to other farmers and community when using biotechnology in a production system.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - access to information about biotechnology
 - land based production site
- specifications:
 - legislation, regulations and codes of practice relevant to use of biotechnology in land based businesses.

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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