# PROTECT CROP

UNIT CODE: AGR/OS/EXT/CR/05/6/A

## **UNIT DESCRIPTION**

This unit specifies the competencies required to carry out crop protection. It involves Carrying out disease and pest surveillance, identifying method of pest and disease control, procuring, transport and storing farm pesticides, controlling crop/pests' diseases, disposing expired chemical and empty containers and preparing crop protection report

## **ELEMENTS AND PERFORMANCE CRITERIA**

ELEMENT	PERFORMANCE CRITERIA
These describe the <b>key</b>	These are <b>assessable</b> statements which specify the required level of
outcomes which make up	performance for each of the elements.
workplace function.	Bold and italicized terms are elaborated in the range.
Carry out disease and pest surveillance      Identify method of pest and disease control	<ul> <li>1.1 Pest scouting is done as per crop scouting manual</li> <li>1.2 Disease control area / plot is identified according to Farm plan</li> <li>2.1 Pests and diseases to be controlled are identified as per Crop Scouting Manual</li> <li>2.2 Affected areas/plots are mapped in accordance with type of pest/ disease</li> <li>2.3 Pest/disease control method is determined based on type of pest/disease identified</li> </ul>
3. Manage farm	<ul><li>2.4 Material supplies, tools and equipment are identified, verified and calibrated as per method</li><li>3.1 Farm pesticides are procured based on type of pest/disease</li></ul>
pesticides	<ul> <li>identified, mapped out areas and farm procurement procedures</li> <li>3.2 Pesticide is transported in accordance with types of pesticides best practices</li> <li>3.3 Farm pesticides are stored in accordance with OSH standards, manufacturer's manual and work place policy</li> <li>3.4 Farm pests are recorded as per SOPs</li> </ul>
4. Control crop/pest diseases	<ul> <li>4.1 PPEs requirements are adhered to as per OSH Standards</li> <li>4.2 Materials, Tools and equipment to be used are identified as per the chosen methods.</li> <li>4.3 Material tools and equipment are used as per the instructions manual.</li> <li>4.4 Pest/diseases is controlled as per pest/ disease identified and mapped area.</li> </ul>
5. Dispose expired	5.1 Waste and <i>recyclable materials</i> are collected and sorted

chemical and empty	according to OSH standards and workplace policy
containers	5.2 Expired chemicals are disposed in accordance with workplace policy, manufacturer's instructions and OSH Standards
	5.3 Tools and equipment are cleaned and stored as per manufacturers manual
	5.4 <i>First aids skills</i> are demonstrated in accordance with Safe Use of Pesticide Manual
6. Prepare crop	6.1 Crop pest/disease situation report is prepared as per SOPs
protection report	6.2 Crop pest/disease report is shared as per SOPs
	6.3 Crop protection schedules/activities are prepared and
	documented in the journal

## **RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

Range	Variables
1. Pests and diseases may	• Insects
include but not limited to:	• Birds
	• Mammals
	<ul> <li>Nematodes</li> </ul>
	<ul> <li>Physiological</li> </ul>
	<ul> <li>Fungal diseases</li> </ul>
	Bacterial diseases
	<ul> <li>Viral diseases</li> </ul>
2. Pest/disease control	Cultural methods
method may include but	<ul> <li>Biological</li> </ul>
not limited to:	• Chemical
	• IPM
	• ITK
	<ul> <li>Physical</li> </ul>
3. Recyclable materials may	• Plastics
include but not limited to:	• Paper
4. First aids skills may	Cleaning
include but not limited to:	• Anti-dote
	<ul> <li>Resuscitation</li> </ul>

## REQUIRED KNOWLEDGE AND UNDERSTANDING

The individual needs to demonstrate knowledge and skills **SKILLS** 

The individual needs to demonstrate the following skills:

#### **KNOWLEDGE**

The individual needs to demonstrate the following knowledge:

- Disease and pest's symptoms
- Dispose expired chemical and empty containers
- Methods of pests and disease control
- Environmental protection guidelines
- First aid
- Safe use of pesticide
- Pesticide transportation
- Pesticide storage
- Recording farm pests
- Integrated pest management
- Indigenous technical knowledge
- Pest and disease resistant cultivars
- Maintaining tools and equipment
- Situation reporting
- Crop protection scheduling

## **EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

1. Critical Aspects of	Assessment requires evidence that the candidate:
Competency	Demonstrated:
	Understanding pests and diseases
	Ability to map out infected areas
	Understanding pests and disease control methods
	Ability to observe safety measures
	Ability to use tools and equipment
	Ability to dispose surplus materials
2. Resource	The following resources must be provided:
Implications	Assessment location
	Personal protective equipment

	Tools, equipment and materials
3. Methods of	Competency may be accessed through:
Assessment	Written tests
	Oral questioning
	Third party reports
	Case studies
4. Context of	Competency may be assessed:
Assessment	On the job
	Off the job
	In work placement (attachment)
	Off the job assessment must be undertaken in a closely simulated
	workplace environment
5. Guidance	Holistic assessment with other units relevant to the industry
information for	subsector, workplace and job roles is recommended.
assessment	

