

PERFORM CROP PROTECTION

ISCED UNIT CODE: 0811 351 04B

UNIT CODE: AGR/OS/EXT/CR/02/B

UNIT DESCRIPTION

This unit specifies the competencies required to perform crop protection. It involves preparing for disease and pest control, controlling diseases and pest and Completing pest and disease control.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes which make up workplace function (to be stated in active voice)	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements (to be stated in passive voice) <i>Bold and italicized terms are elaborated in the Range</i>
1. Prepare for disease and pest control.	1.1 <i>Personal protective equipment</i> is worn as per the Occupational Health and Safety policy 1.2 <i>Disease</i> control area/plot is identified according to the <i>farm plan</i> . 1.3 <i>Pest</i> control area/plot is identified according to the farm plan 1.4 Scouting for pest is done based on crop scouting manual 1.5 The affected areas are mapped out according to type of pest 1.6 Scouting for disease is done based on crop scouting manual 1.7 The infected areas are mapped according to the type of disease 1.8 Pest control <i>method</i> is chosen based on the type of pest identified 1.9 Disease control method is chosen based on the disease identified 1.10 <i>Materials, tools and equipment</i> are identified and verified based on the method chosen.
2. Control pest and disease	2.1 Pest control is carried out based on the method chosen 2.2 Disease control is carried out based on the method chosen

3. Complete pest and disease control	3.1 Waste and recyclable materials are collected and sorted according to workplace policy 3.2 The unused materials are stored according to the manufacturer's instructions 3.3 The tools and equipment are cleaned and stored according to manufacturer's manual. 3.4 Crop protection activities are documented in the journal as per the good agricultural practices manuals (FAO GAP, MOALF GAP)
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RANGE

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

VARIABLE	RANGE
1. Diseases May include but are not limited to:	<ul style="list-style-type: none"> • Fungal • Bacterial • Viral • Physiological injuries
2. Farm plan May include but are not limited to:	<ul style="list-style-type: none"> • Crop programme • Planting schedule • Type of crop planted • Rotational programme/plan • Enterprise location.
3. Pest May include but are not limited to:	<ul style="list-style-type: none"> • Insect • Birds • Mammals • Nematodes
4. Method May include but are not limited to:	Disease and Pest control <ul style="list-style-type: none"> • Chemical • Biological • Physical • Cultural • Integrated

5. Materials, tools and equipment May include but are not limited to:	<ul style="list-style-type: none"> • Materials <ul style="list-style-type: none"> • Pegs • Flag • Labels • Water • Chemicals • Biological agents • Cleaning agents • Tools and equipment <ul style="list-style-type: none"> • Sprayers • Mixing tanks • Measuring cylinders
6. Personal protective equipment May include but are not limited to:	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • Gumboots • Overall • Gloves • Breathing mask • Goggles • Caps
7. Environmental protection regulations May include but are not limited to:	<ul style="list-style-type: none"> • Environmental Management and Coordination Act – EMCA • National environmental management authority regulations • Food and Agriculture Organisation

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate the following skills:

- Disease and pest scouting
- Tools and equipment handling
- Measurement
- Recording
- Use of personal protective equipment
- Waste handling
- Agro-chemical handling

Required Knowledge

The individual needs to demonstrate knowledge of:

- Disease and pest symptoms and their control
- Environmental protection guidelines
- Basic first aid
- Maintenance of tool and equipment
- Occupational Safety and health
- Good Agricultural practices.
- Sanitary and phyto-sanitary measures
- Safe use of agro-chemicals

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 Competency	Assessment requires evidence that the candidate: 1.1 Thoroughly Scouted and mapped out areas infected with pests and diseases 1.2 Observed occupational safety and health measures appropriately 1.3 Controlled pest and disease effectively 1.4 Stored unused materials correctly 1.5 Observed laid down environmental workplace policy appropriately 1.6 Documented crop protection activities correctly 1.7 Cleaned tools and equipment properly 1.8 Used crop protection tools and materials appropriately
2. Resource Implications for competence certification	The following resources must be provided: 2.1 Access to relevant workplace where assessment can take place 2.2 Appropriately simulated environment where assessment can take place 2.3 Materials relevant to the proposed activity or tasks
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1 Observation 3.2 Oral interview 3.3 Written exam 3.4 Third party report
4. Context of Assessment	Competency may be assessed on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.
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