

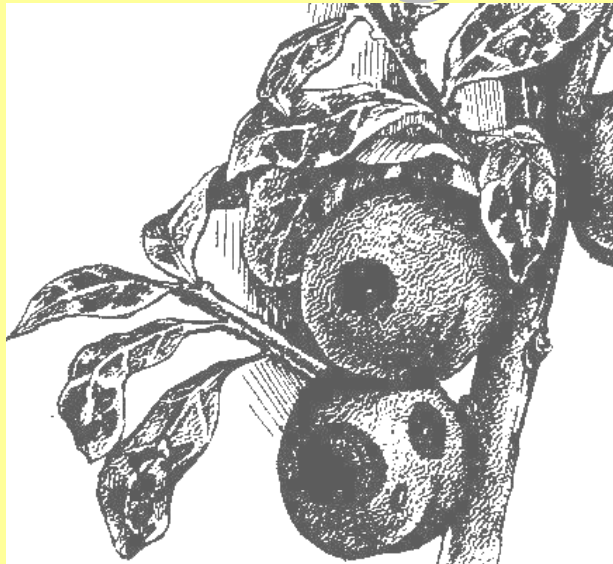


NQF Level: 2 US No: 116124

Assessment Guide

Primary Agriculture

Pest, disease and weed Management




Assessor:


Workplace / Company:

Commodity: Date:

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agriculture
Department:
Agriculture
REPUBLIC OF SOUTH AFRICA



Before we start...

This assessment guide contains all necessary activities and instructions that will enable the assessor and learner to gather evidence of the learner's competence as required by the unit standard. This guide was designed to be used by a trained and accredited assessor whom is registered to assess this specific unit standard as per the requirements of the AgriSETA ETQA.

Prior to the delivery of the program the facilitator and assessor must familiarise themselves with content of this guide, as well as the content of the relevant Learner Workbook.

The assessor, facilitator and learner must plan the assessment process together, in order to offer the learner the maximum support, and the opportunity to reflect competence.

The policies and procedures that are required during the application of this assessment are available on the website of the AgriSETA and should be strictly adhered to. The assessor must familiarise him/herself with this document before proceeding.

This guide provides step-by-step instructions for the assessment process of:

Title: Control pests, diseases and weeds on all crops effectively and responsibly
US No: 116124 NQF Level: 2 Credits: 2

This unit standard is one of the building blocks in the qualification listed below. Please mark the qualification you are currently assessing, because that will be determined by the context of application:

Title	ID Number	NQF Level	Credits	Mark
National Certificate in Animal Production	48976	2	120	<input type="checkbox"/>
National Certificate in Mixed Farming Systems	48977	2	120	<input type="checkbox"/>
National Certificate in Plant Production	48975	2	120	<input type="checkbox"/>

Please mark the learning program you are enrolled in:

Are you enrolled in a:	Y	N
Learnership?	<input type="checkbox"/>	<input type="checkbox"/>
Skills Program?	<input type="checkbox"/>	<input type="checkbox"/>
Short Course?	<input type="checkbox"/>	<input type="checkbox"/>

Note to Assessor:

If you are assessing this module as part of a full qualification or learnership, please ensure that you have familiarized yourself with the content of the qualification.

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SO 1 AC 1-4

Instructions to learner:

Group work and discussion.

Learner Guide: Page 17

Facilitator Guide:

Page 11

- 1.1 Look at the insect collection provided and separate the insects in two groups, namely pests and beneficials. Discuss the difference between the two groups with each other.

Model Answer(s):

As a complete list of insect cannot be included in the Learner Guide, the learners could use a copy of Field guide to Insects of South Africa, 2004 – M. Picker, C. Griffiths and A Weaving from Struik publishers, as a reference guide.

On basis of the information in Session 1 in the Learner Guide, the learner should be able to identify the different types of insects and explain why they have separated the insects in the way they have done.

- 1.2 Now separate the pest into two groups on ground of their feeding habit. Discuss the difference between the two groups with each other.

Model Answer(s):

On basis of the information in Session 1.1.1 in the Learner Guide, the learner should be able to identify the different types of insects and explain why they have separated the insects in the way they have done

My Notes ...

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Instructions to learner:

Group work, collect weed examples

Learner Guide: Page 31

Facilitator Guide: Page 13

- 3.1 Look at the weed examples provided by the lecturer. Now go outside and collect two grass and two broad leaf weeds.

Model Answer(s):

On basis of the information in Session 3.1 in the Learner Guide, the learner should be able to identify the different types of weeds and explain why they have separated the weeds in the way they have done

- 3.2 Are the weeds you have collected annual, biannual or perennial? Discuss the importance of these differences in your group. Report back to the class.

Model Answer(s):

From the module on plant structure (116205), they should recall the definitions for annual, biannual and perennial plants

Annuals: *A plant that completes its life cycle in one growing season. It will grow, flower, set seed, and die. Annuals have a short life span and are therefore very competitive, causing severe damage to the plants. It usually only propagate by means of seeds and if the weed plant can be destroyed before it makes seeds, it can be more easily managed in following seasons, as fewer seeds will be available for germination*

Biannual: *A plant that completes its life cycle over a period of two seasons Biannuals also propagate mainly by seeds, but can also produce underground storing structures like roots, tubers etc. These roots and tubers can also be used to propagate the next generation of weed plants. Because these structures is below the soil surface, it is usually difficult to see and to destroy.*

Perennial: *A plant that lives for 3 or more years. It can grow, flower, and set seed for many years. Underground parts may re-grow new stems as in the case of herbaceous plants, or the stems may live for many years like woody plants (trees). These plant can also have below ground storing structures which makes eradication difficult.*

4**SO 4 AC 1-2****Instructions to learner:**

Group work and practical observation / monitoring.

Learner Guide: Page 37**Facilitator Guide: Page 14**

- 4.1 Go to the field and randomly mark five to ten plants for monitoring. Make sure not to choose plants at or close to the borders. The marked plants should not be next to each other.

Model Answer(s):*No specific model answer provided, as it will differ from learner to learner.*

- 4.2 Look at the marked plants. Determine the height and evaluate the general health of the plant in terms of the colour of the leaves, the presence of disease and insects etc.

Repeat this monitoring once a week till harvesting.

Also write down the climatic conditions during your visit.

Model Answer(s):*No specific model answer provided, as it will differ from learner to learner.*

Summative Test and Attitude & Attribute Evaluation

Before the knowledge test is undertaken, the learner must be reminded of what is expected from him / her in terms of summative and reflexive competence. Read and explain to the learner, the **Preparation for Your Final Assessment** section in the learner workbook. Learners and assessor should sign off this section to acknowledge that this step was completed.

Please set up a knowledge test from the questions given as a guideline to learners and supply each learner with a test sheet.

Supply each report with the following heading:

Unit Standard:	116124	NQF Level:	2
Learner Name:			

Questions	Model Answers
1. Are all insects pests? If not, what are they called and to what advantage are they to the farmer?	<p>Be able to identify different types of insects.</p> <p>Show basic knowledge of beneficial insects and describe how they (parasites and predators) can help the farmer in controlling other insects (pest).</p> <p>Pollinators as beneficial insects and the impact thereof on successful fruit/seed production.</p>
2. Group insect pest into two groups on ground of their feeding habit. What damage do these two main insect pest groups cause?	<p>Basic knowledge on sucking and chewing insects – identify the type of mouthparts the two types have.</p> <p>On basis of their feeding habit insects attach different parts of the plant – sucking mainly soft tissue as in the sap of leaves and fruits, while chewing insects feed on the stem and seed also.</p> <p>The type of damage which can be caused by the different insects. Exp cutworms chewing through the stem of young seedlings resulting in falling over of seedlings. Aphids sucking on leaf sap causing damage to the leaf leading to poor photosynthesis.</p>

Questions	Model Answers
	The spreading of diseases by insects (vectors) and the importance of good pest control to also prevent certain diseases.
3. How would you control pests?	The ability to identify possible steps in controlling insects. Chemical, biological etc.
4. What are the main differences between the three types of diseases found on plants?	The ability to recall the three types of diseases – bacterial, fungal and viruses. General characteristics of each type.
5. What part of the plant can be affected by diseases? What is the effect of the disease on that plant part?	Basic knowledge on crop disease symptoms – examples of some general crop diseases as discussed in class.
6. How would you control diseases?	The ability to identify possible steps in controlling diseases. Chemical, biological etc.
7. How would you prevent diseases?	Not only the use of disease free propagation material but also looking after general health (nutrients and water) of the plant and doing insect control to prevent the spread of diseases by vectors. General hygiene during production processes.
8. Explain the importance of Hygiene in preventing the spread of plant diseases.	Not only personal hygiene but also cleaning and disinfecting of tools and implements. Use of healthy propagation material.
9. Define a weed. What negative impacts do weeds have on the crop?	Basic knowledge on when a plant is weed as in growing where it should not. Negative impacts as competition (light, water etc.), allelopathy, host for insects and diseases, lowering of produce quality etc.

Assessment Feedback Form

Comments / Remarks	
<p>Feedback to learner on assessment and / or overall recommendations and action plan for competence:</p>	
<p>Feedback from learner to assessor:</p>	
<p>Assessment Judgement You have been found:</p> <p><input type="radio"/> Competent</p> <p><input type="radio"/> Not yet competent in this unit standard</p>	<p>Actions to follow:</p> <p><input type="radio"/> Assessor report to ETQA</p> <p><input type="radio"/> Learner results and attendance certification issued</p>
<p>Learner's Signature:</p>	<p>Date:</p>
<p>Assessor's Signature:</p>	<p>Date:</p>
<p>Moderator's Signature:</p>	<p>Date:</p>