

PARASTOLOGY

ISCED UNIT CODE: 0841 551 38A

TVET CDACC UNIT CODE: HE/CU/AHP/CR/01/6/MA

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Manage livestock parasites.

Unit Duration: 80 hours

Unit Description

This unit describes competencies required by animal health and production technologists to apply parasitology in disease control. It involves managing livestock nematodes, livestock trematodes, livestock cestodes and livestock protozoa.

Summary of Learning Outcomes

By the end of this unit, the learner should be able to:

S/No	Learning Outcomes	Duration (Hours)
1.	Manage livestock nematodes	15
2.	Manage livestock trematodes	15
3.	Manage livestock cestodes	15
4.	Manage livestock arthropods	15
5.	Manage livestock protozoa	20
Total		80

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Methods of assessment
1. Manage livestock nematodes	1.1. Introduction to nematodes 1.2. PPEs on parasite management, 1.2.1. Glove 1.2.2. Overall	<ul style="list-style-type: none">• Practical• Project• Portfolio of evidence• Third party report

	<p>1.2.3. Dust coat</p> <p>1.2.4. Gum boots</p> <p>1.2.5. Face masks</p> <p>1.3. Tools and equipment</p> <p>1.3.1. Microscope</p> <p>1.3.2. Centrifuge</p> <p>1.3.3. Microscope slides</p> <p>1.3.4. Forceps</p> <p>1.3.5. Magnifying glass</p> <p>1.3.6. Incubator</p> <p>1.3.7. Refrigerator</p> <p>1.3.8. Autoclave</p> <p>1.3.9. Hot air oven</p> <p>1.3.10. Cover slips</p> <p>1.3.11. McMaster Chamber</p> <p>1.4. Livestock nematode identification</p> <p>1.4.1. <i>Ascarids</i></p> <p>1.4.2. <i>Haemonchus</i></p> <p>1.4.3. <i>Ostertagia</i></p> <p>1.4.4. <i>Trychostrongylus</i></p> <p>1.4.5. <i>Cooperia</i></p> <p>1.4.6. <i>Trichuris</i></p> <p>1.4.7. <i>Oesophagostomum</i></p> <p>1.4.8. <i>Bunostomum</i></p> <p>1.5. Treatment of affected livestock</p> <p>1.6. Prevention and control</p>	<ul style="list-style-type: none"> ● Written assessment ● Oral questioning
<p>2. Manage livestock trematodes</p>	<p>2.1. Introduction to livestock trematodes managements.</p> <p>2.2. Livestock trematodes identification</p> <p>2.2.1. <i>Fasciola</i></p> <p>2.2.2. <i>Paraphistosomes</i></p> <p>2.2.3. <i>Schistosomes</i></p>	<ul style="list-style-type: none"> ● Practical ● Project ● Portfolio of evidence ● Third party report ● Written assessment ● Oral questioning

	2.3.Livestock trematode treatment 2.4.Prevention and control	
3. Manage livestock cestodes	3.1.Introduction to livestock cestodes. 3.2.Livestock cestodes 3.2.1. <i>Taenia</i> 3.2.2. <i>Echinococcus</i> 3.2.3. <i>Hymenolepis</i> 3.3.Livestock cestodes treatment 3.4.Prevention and control	<ul style="list-style-type: none"> • Practical • Project • Portfolio of evidence • Third party report • Written assessment • Oral questioning
4. Manage livestock arthropods	4.1.Introduction to livestock Arthropods 4.1.1. Insects 4.1.2. Arachnids 4.1.3. Myriapods 4.1.4. Crustaceans 4.2.Livestock arthropods treatment 4.3.Prevention and control	<ul style="list-style-type: none"> • Practical • Project • Portfolio of evidence • Third party report • Written assessment • Oral questioning
5. Manage livestock protozoa	5.1.Introduction to livestock Protozoa 5.1.1. <i>Theileria</i> 5.1.2. <i>Eimeria</i> 5.1.3. <i>Trypanosomes</i> 5.1.4. <i>Anaplasma</i> 5.1.5. <i>Toxoplasma</i> 5.2.Livestock protozoon treatment 5.3.Prevention and control	<ul style="list-style-type: none"> • Practical • Project • Portfolio of evidence • Third party report • Written assessment • Oral questioning

Suggested Methods of delivery

- Practical
- Projects
- Demonstrations
- Group discussion
- Direct instructions

Recommended Resources for 25 trainees

S/No.	Category/Item	Description/ Specification	Quantity	Recommended Ratio (Item: Trainee)
1.	Learning materials			
2.	Projector		1	1:25
3.	Whiteboard/Smart board		1	1:25
4.	Desktop/computer		1	1:25
5.	Lecture/Theory room		1	1:25
6.	Animal farm	As guided by KVB	1	1:25
7.	Library		1	1:25
8.	E-Library		1	1:25
9.	Hot air oven		1	1:25
10.	Syringes and needle		25	1:1
11.	Scalpel blades		25	1:1
12.	Microscope		5	1:5
13.	Acaricides		5	1:5
14.	Autoclave		2	1:25
15.	Refrigerator		1	1:25