Marabella North Secondary School

LESSON PLAN

Teacher's Name: Riad Rampat	Subject: Agriculture Science		
Date: Monday 12 th March 2025	Class: 404	Number of Students: 06	
Time: 9:55a.m. – 11:35 a.m.	Length of Session: 70 minutes		
Unit Title: Crop Production			
Lesson Title: Methods of Weed Control			

Resources			
Teacher's Resources	Students' Resources		
1. Slides showing the procedural steps of weed management.	5. Notebooks and Pens		
2. Hand tools, mulch.	6. Handouts		
3. Whiteboard/Chalkboard	7. PPE		
4. Handouts			

Previous Knowledge - Topics

- 1. Previous knowledge of soil types and their fertility will help students understand how weeds thrive in different soil conditions.
- 2. Knowledge of soil tillage and its impact on weed control and crop health.
- 3. Familiarity with types of vegetable crops and their growing requirements.
- 4. Knowledge of the relationship between soil health and plant growth.

General Objectives:

Students will:

- 1. Describe different methods of weed control.
- Compare the advantages and limitations of each method.
 Demonstrate the application of various weed control techniques in grow boxes.

Specific Objectives

COGNITIVE At the end of the lesson students will:	PSYCHOMOTOR At the end of the lesson students will:	AFFECTIVE At the end of the lesson students will:
 Define weed control and discuss its importance in crop production. Differentiate among physical, biological, chemical, and integrated weed management methods. Identify examples of selective and non-selective herbicides. 	 Demonstrate proper techniques for hand weeding and mulching. Identify natural agents used in biological weed control. 	 Show appreciation for the role of weed management in sustainable agriculture. Develop responsible practices in handling chemical weed control. Show interest in integrated approaches to weed management.

Assessment Strategies

COGNITIVE/PSYCHOMOTOR	ASSESSMENT STRATEGY	AFFECTIVE	ASSESSMENT STRATEGY
 Define weed control and discuss its importance in crop production. Differentiate among physical, biological, chemical, and integrated weed management methods. 	 Assess the student using a worksheet guided by the PowerPoint presentation. Assess the student's practical skills as they perform each task. Ensure they are following proper techniques for hand weeding, mulching, and tillage. 	 Show appreciation for the role of weed management in sustainable agriculture. Develop responsible practices in handling chemical weed control. 	 Accuracy, technique, safety, and efficiency in performing physical tasks by observation
 Identify examples of selective and non-selective herbicides. 	 Ask open-ended questions during the activity to gauge understanding. Example questions: 	3. Show interest in integrated approaches to weed management.	worksheet.
 Demonstrate proper techniques for hand weeding and mulching. 			
5. Identify natural agents used in biological weed control.			

Set Induction

Two specimens are shown to the class—one with weeds covering the lettuce and the other healthy, weed-free lettuce. Ask the students:

Q1: What do you notice about these two lettuce plants? Q2: Why do you think one is much larger and healthier than the other?

Description of Teaching/Learning Methods

Teacher's Activities	Students' Expected Activities	Est. time to complete
Introduction/Set Induction Display two containers of lettuce: one overgrown with weeds and one weed-free with larger, healthier lettuce.	Discuss possible reasons why one plant grew better than the other.	5 mins
Q1: Describe the differences between the two plants. Facilitate a discussion on how weeds affect crop growth and why farmers need to manage them. Share the objectives of the lesson.	Listen and take notes on the different weed control methods.	10 mins
Introduce the topic: Weed Management – Methods of Controlling Weeds.	Participate in a discussion on the advantages and disadvantages of each method.	
Presentation 1 Definition of weed control in crop production. Cognitive 1&2 Present the four main weed control methods:	Conduct a quick oral quiz and answering questions.	
 Physical Control (Hand weeding, mulching, tillage) Biological Control (Using natural predators or competing plants) Chemical Control (Selective and non-selective herbicides) 	Participate in hands-on manual weed removal.	10 mins

	4. Integrated Weed Management (IWM) (Combining different methods for effective control)	Discuss and compare the effectiveness of different manual weed control techniques.	
	Summary 1 Formative Check) Q1 - What tool are used in land preparation? Q2 - What are the benefits of using machinery over manual tools? Q3 - When would you choose to use a hoe instead of a tractor? Land preparation is crucial for effective farming. Farmers can use manual tools or machines, depending on the resources available and the scale of farming. Presentation 2 Demonstrate proper hand-weeding techniques, including how to remove weeds by their roots. Show how to apply mulch to prevent weed growth.	Careful observation of teacher's demonstration. Participate in hands-on manual weed removal. Discuss and compare the effectiveness of different manual weed control techniques Teacher would record observations about the weeds removed and the difficulty level of each method carried out by students.	10 mins 10 mins 25 mins
,	Supervise students as they work in groups to manually remove weeds from an assigned area or container.		
	Summary 2 (Formative Check) Ask students to reflect on their experience: Q1 - What challenges did you face while weeding Q2 - Which method do you think is best for small farms and why? Q3 - How does mulching prevent weeds?	Teacher would correct assessment and give feedback.	
1	Evaluation Observe using a checklist, students performing weed management casks and asses their adherence to technique. Conclusion		

Provide feedback on students performing manual weed management tasks and their use of tools and adherence to technique.		
Contingency Plan		
 Teacher's Activities 1. If the video or projector fails, immediately switch to using printed materials or a whiteboard to demonstrate the concepts. Use a hands-on activity where students can identify tools used in land preparation or engage in a group discussion to explore land preparation steps. Provide printed diagrams or use physical examples of tools if available. 2. If some materials are missing, adapt the lesson by using images, videos, or online resources. Alternatively, ask students to research or bring their own examples for the next class. 	 Students' Expected Activities 1. Break up the lesson into shorter segments with more interactive elements. Use group discussions, hands-on activities, and quick, engaging questions to keep the class active. 2. Have students participate in a brainstorming session where they list the tools they know and discuss their uses. Use online videos or educational websites to demonstrate the missing tools. 	Est. time to complete 35 mins 35 mins

End of Lesson Activities

Students will summarize the key points, including the importance of weed management and the tools used. They will also record observations from the practical activity, noting different weed types and removal challenges. The lesson will conclude with a recap of how effective weed control improves crop growth and sustainability.

Closure to lesson

T.S. (Transition Statement)

Having explored the methods of weed management, apply this knowledge through a hands-on activity to see how manual weed removal works in practice.

B.S. (Bridging Statement)

Effective weed management is essential for healthy crop growth. By combining the right techniques, farmers can reduce competition and improve yields. Let's review what we've learned and reflect on the best strategies for different situations.

Critical Employability Skills

- Communicate ideas and information
- Think critically
- Problem solving
- Numeracy skills
- Work in groups or pairs (collaboration and cooperation)
- Environmental awareness

REFLECTIONS