

443/3
AGRICULTURE PROJECT
Jan. - July 2025
(Declaration form)

THE KENYA NATIONAL EXAMINATIONS COUNCIL



Kenya Certificate of Secondary Education

443/3 AGRICULTURE PROJECT REPORT

DECLARATION BY CANDIDATE

This is to certify that this is a true project report of my Agriculture Project and that it contains the details of the operations.

Name of the Candidate	Index No.	Signature
Njeri Stella Pelis Wanjira .	11241001284	

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Enter the score awarded in the box below.

Agriculture Teacher

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ROSELY
REPORTS WRITING
OF GRADING OF
AVOCADO FRUIT
(PEES (PEES (PEES
AMERICANA)
NAME ON INTER
STELLA PEES
WANT RUA
~~ADAM 1121 1005 2816~~
GROWLP 7

INTRODUCTION.

- 2 Grafting is the Practice OF Uniting two separate woody stems.
- 2 Usually one of the two parts provides the base called the rootstock and has a rooting system where as the other part is obtained from the other Part of a plant which is called a scion.
- 2 There are different methods of grafting. Which are:

Whip or tongue grafting.	Notch grafting.
Side grafting.	Bark grafting.
Cleft grafting	Approach grafting.
- 2 Importance of grafting include:
 - i) Plants with desirable root characteristics such as vigorous root system grafted with desirable plant may be utilised to produce desirable products.
 - ii) Grafting facilitates the changing of the top of the tree from being undesirable to produce desirable
 - iii) Grafting makes it possible to grow more than one type of fruit or flower on the same plant.
 - iv) ^{Grafting} they to propagate clones that cannot be propagated in any other way.
 - v) Grafting helps to repair damaged trees.
 - vi) They help to shorten the maturing age.
- 2 The scion and the root stock should be from the same species for compatibility.

IDENTIFICATION OF THE ISSUE.

The Problems identified within the school environment and the community include:

- (i) In school, we only eat fruits twice a week. Grafting will help in faster maturity hence increasing the quantity of avocados and fruits in school.
- ii) In the community, People are discouraged to plant fruit trees

because of the longer maturity rate. Grafting will help to shorten its maturity rate.

(ii) In the school and in the community we find that there is wind erosion grafting and planting ^{of avocado trees} trees will help by the trees acting as wind breakers.

PROJECT OBJECTIVES.

To be able to graft the fruit trees ~~and~~ know how grafting is done.

To be able to know the tools used ~~for~~ grafting.

To find out the importance of grafting trees ~~and~~ ways to 2 solve the problems.

To find out the precautions that should be followed ~~during~~ grafting.

PROJECT DESCRIPTION.

We were kept in groups by our Agriculture teacher in order to do and assist each other in the project.

The group members are 6 members. They are:

No	Name	Index number.
1.	Ivyone Klacera Muturi	11241001261
2.	Shammah Vuyonzi Vgedi	11241001267
3.	Stacare Klonjira Kambugu	11241001270
4.	Melanie Esther Nyokabi	11241001279
5.	Brenda Nkatha Mwiti.	11241001282
6.	Njerr Stella Peter Klonjira	11241001284

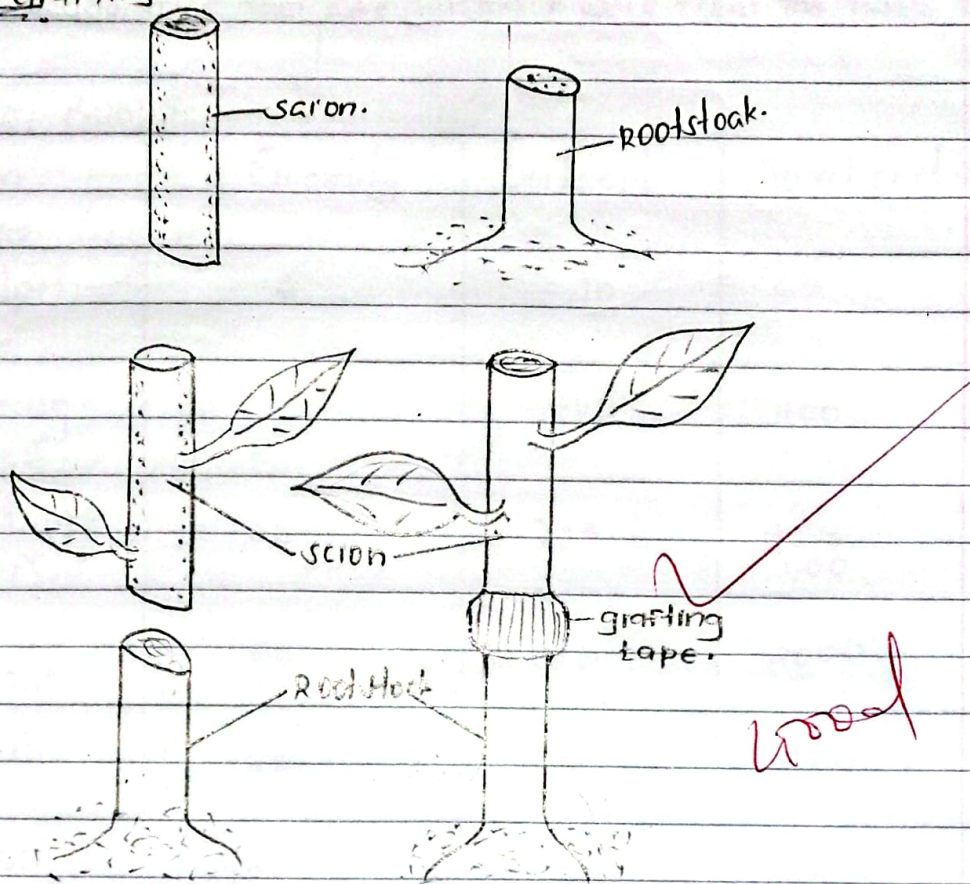
The selected method for grafting was whip grafting. I choose a rootstock and a scion which were of the same compatibility.

The required items for grafting included:

- (i) A scion
- (ii) A rootstock
- (iii) A sterilised scapel
- (iv) Scissors
- (v) A grafting tape.

Selecting location for planting - I and my group members selected a suitable site for

Whip Grafting



Whip Grafting

We followed a ^{routine} ~~setting~~ of watering the grafted on the morning and evenings and also we weeded.

The avocado trees that were grafted ~~2~~ were from the hass species.

PROJECT BUDGET

Item used	Quantity	Unit cost	Total cost
Scalpel	6	10	60
Watering can	1	400	400
Grafting tape	20	200	2000 400
Root stock	20	100	2000
Scion	20	10	200
Steriliser	10 m	150	150
Shade net	5m x 10	3000	3000
Rake	1	350	350
Trainer	1	1500	1500
Total			8060 = /

PROJECT IMPLEMENTATION AND TIMELINE.

Project Timeline- Implementation	January	February	March	April	May	June	July
Project instructions Given.							
Preparation of a budget plan.							
Group presentation of the project.							
Individual presentation of the project.							
Arrival of the Avocado fruit tree seedling. Site selection							
Preparation of tree nursery and plots.							
Training session with extension officer.							
Grafting of the Avocado trees.							
Fortnight report on the project							
Nursery management practices.							
Evaluation of the Project							
Report writing.							

PROJECT IMPLEMENTATION AND PROCEDURE.

Training session. It was done by an external trainer on 16th May 2025, Sourced by the school.

Assembling tools. - The tools were sourced from a reliable place to prevent ~~transmission~~ of the diseases to the rootstock and the scion.

- The tools required were a scalpel, a grafting tape, a scion and a rootstock, also a watering can.

Selecting location for planting - We selected a place where it was suitable ~~for~~ planting. The area secured was secured, gentle sloping, well sheltered, it was near a water source for easy watering and the soil was well-drained, deep and fertile.

Performing grafting - We did the actual grafting on May where we were guided by the trainer who was sourced by the school. We were also helped by our agriculture teachers while one of us was taking a video. We assisted each other and ensured that every person in our group was able to do grafting.

Maintaining progress of growth and post-operation. - Checking and monitoring of the grafted trees was done every day by ~~our~~ group member to make sure the scion and the rootstock was not dehydrated.

Caring for plants. - Watering the grafted trees was done on daily bases during mornings and evening to prevent dehydration. We also weeded the nursery to prevent competition of light space and nutrients.

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A table of activity was made where all the group members were caring for the plants on specific days.

EVALUATION.

After doing evaluation, the grafting trees were successful as we saw that the grafted trees had started ~~removing~~ ^{showing} leaves growing. Sixteen trees out of twenty were successfully grafted. The avocado trees showed increased growth rate and high

Percentage of surviving.

Conclusion.

Through this project I was able to carry out grafting of trees and learnt a lot like the importance of grafting and the way grafting is helping in the society and the problem it is able to solve.

Also the materials used in grafting.

Recommendation.

I highly recommend that.

- i) Farmers who would like to plant trees should do grafting in order to shorten the maturity rate of the fruit.
- ii) A trainer should be awarded to farmers in order for the farmers to be taught on how to graft trees.

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