

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
Ivy Klanjiku	11241001249	100

FOR OFFICIAL USE ONLY

Enter the score awarded in the box below.

Agriculture Teacher

18



REPORT

Project Title

Grafting of Avocado
Fruit Trees

(*Persea americana*)

Name: My Wanjiru

Index: 11241001249

Group No: 6

Introduction.

Grafting is the practice of uniting two separate woody stems. Usually one of the two parts provides the base and has a rooting system whereas the other part is obtained from another plant. The part with the rooting system is known as rootstock and the part which is grafted onto the rootstock is scion. Grafting helps to shorten maturing age and it makes it possible to grow more than one type of fruit on the same plant.

Identification of issues.

After I did my research, I found out that there is shortage of supply of fruits in the market. For example in our school we take a fruit two times a week whereas we are supposed to take a fruit everyday and to improve on our health. As the proverb says: a fruit a day keeps the doctor away. Therefore, grafting of fruit trees will solve this problem by shortening the maturity age and this will increase the fruit production and be a surplus supply of fruits in the market and now the students can take a fruit everyday for a balanced meal and improve on their health.

Project objectives.

By the end of the project 2025, I should be able to learn the following:

- i) To learn and know how to carry out grafting.
- ii) To learn and know the materials and tools used for grafting.
- iii) To know the precautions while carrying out grafting.
- iv)

Project Description.

I chose whip grafting technique where the scion and rootstock are of the same diameter. It is carried out when the diameters of the rootstock and the scion are 'pencil' thick.

materials required for grafting:

sterilised scalpel

rootstock

scion

grafting tape

scion

watering can

shade.

I carried out grafting ~~out~~ with my group members who are:

GROUP 6	
Group members	Index number.
Happiness Pendo	11241001248
Ivy wanjiku	11241001249
Kate kemachia	11241001255
Faith Njoki	11241001256
Bello blowing	11241001257
Purity Hamisi	11241001251

Budget:

Item	quantity	unit cost	Total cost
scalpel	5	10	50
watering can	1	400	400
Grafting tape	20	20	400
rootstock	20	100	2000
scion	20	10	200

item	quantity	unit cost	Total cost
Sterilizer	10ml	150	150
shade	5m x 10m	3000	3000
rake	1	350	350
Trainer	1	1500	1500
	TOTAL		8,050.

PROJECT IMPLEMENTATION AND TIMELINE

ACTIVITY	Jan	Feb	Mar	Apr	May	June	July
Instruction of the project surveillance							
Identification of the issue							
Individual prevention of the project							
Preparation of a budget plan							
Group presentation							
Site selection							
Arrival of the Avocado fruit tree seedlings							
Preparation of the nursery plots							
Training session with a grafting expert							
Fortnight report on the project							
Evaluation of the project							

	Jan	Feb	Mar	Apr	May	June	Jul
watering and inspection							
Report writing.							

Implementation procedures.

Training session → We were taught on how to carry out grafting by an external officer.

Assembling of tools → The materials for grafting were sourced from a reliable source according to the requirements needed and budget made.

Selecting of site → A site was selected near the school garden.

of planting materials which was 1m by 1m. We were able to carry out some of nursery management practices such as watering.

Performing grafting → After the trainer taught us on how to graft, we tried grafting on our own which was very fun and we took some videos as we carried out grafting as a group.

Monitoring growth progress → This was carried by all group members. We made a timetable on how to manage our trees and everyone has a responsibility for watering the trees early in the morning and in the evening to become successful.

3/ Caring for the plants → Each member had a responsibility to water and weed the plot that was allocated.

Evaluation / Reflection.

After we answered and finally evaluated our project. We observed that many of the trees had withered. During our project, we noticed that some of the trees were dying up because they did not form a union. During our second ^{midway} evaluation, we ensured that we carried out regular monitoring and watering of the trees regularly to avoid and ensure that the union was firm. The Avocado seedlings are now succulent and firm and the buds have started withering.

Conclusion.

In conclusion, the practice of grafting has impacted me positively. It has enabled me to know the procedure of grafting. It also has enabled me to know the precautions and tools required to carry out grafting. The exercise was very enjoyable and educative.

Recommendation.

So as to improve the project, I recommend on the following ideas:

- This project to be encouraged to farmers and they be taught how to carry out grafting to increase the supply of fruits in the market which will be their source of income and improve their living standards and also the country will have enough fruits to the locals and the country will not have to import fruits saving of foreign exchange.
- The project to be encouraged to other schools where there is scarcity of fruits.