



اَوْبُورْسِيْتِي تِيكْنُولُوجِي مَارَا  
UNIVERSITI  
TEKNOLOGI  
MARA



**UNIVERSITI TEKNOLOGI MARA**

**KAMPUS MUKAH**

**FACULTY OF PLANTATION AND AGROTECNOLOGY**

**DIPLOMA IN PLANTING INDUSTRY**

**MANAGEMENT (DPIM)**

**AGR 232 : PLANT PROPAGATION**

**PRACTICAL REPORT 3:**

**(GRAFTING AND BUDDING)**

**PREPARED FOR : MR MUHD SYUKRIE BIN ABU TALIB**

**PREPARED BY : MUHAMMAD NUR HAKIM BIN HAMDI**

**2016611546**

# **GRAFTING**

## **INTRODUCTION**

Grafting is a horticultural technique whereby tissues of plants are joined so as to continue their growth together. The upper part of the combined plant is called scion while the lower part is called the rootstock. The success of this joining requires that the vascular tissue grow together and such joining is called inosculation. The technique is most commonly used in asexual propagation of commercially grown plants for the horticultural and agricultural trades.

In most cases, one plant is selected for its roots and this is called the stock or rootstock. The other plant is selected for its stems, leaves, flowers, or fruits and is called the scion. The scion contains the desired genes to be duplicated in future production by the stock/scion plant.

For successful grafting to take place, the vascular cambium tissues of the stock and scion plants must be placed in contact with each other. Both tissues must be kept alive until the graft has taken, usually a period of a few weeks. Successful grafting only requires that a vascular connection take place between the grafted tissues.

## **APPARATUS AND MATERIAL**

Scissors, polythene tape, secateurs, hand knife, *Bougainvillea* red (stock), *Bougainvillea* white (scion)

## **OBJECTIVE OF GRAFTING :**

1. To know what grafting is and how to work with it.
2. To make plant stem grafting correctly.
3. To produce a new plant using the cleft grafting techniques

## PROCEDURES

1. Firstly, choose the healthy scion (white Bougainvillea) plant where we can get the shoot to joint into rootstock



2. This is scion that has been cut off from the shoot..





3. Cut the end of the scion that we have made into a wedge shape. For reminder, do not touch the cut area for it will cause the growth of disease.

4. We choose the rootstock (red *Bougainvillea*) of the plant to combine it with the scion that we have made.

5. Then, we cut in-between the rootstock to prepare the union of the scion and the rootstock.

6. To finish the propagation technique, combine both of the scion and the rootstock together to complete the cleft grafting technique.

7. For the final step, wrap the combined scion and the rootstock with a polythene tape. This is to make sure the scion won't fall off from the rootstock and plus to prevent water from entering.



8. And so the grafting technique is complete.

## **CONCLUSION**

As conclusion,we can identify on what is grafting and how to work with it,to make grafting correctly applied to plant stem and to produce a new plant using the cleft grafting techniques.Grafting also ca identify regions where there are no occupancy and correct the poor class which increased the accuracy.The extension to graft multiple branches at each leaf reduces the number of errors.However,the potential new branches have to be selected carefully to avoid increasing the error and failure cases.