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DIPLOMA IN PLANTING INDUSTRY MANAGEMENT(DPIM)

AGR 232 :PLANT PROPAGATION

PRACTICAL REPORT 1:

(PROPAGATION BY SEED)

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PROPAGATION BY SEED

INTRODUCTION:

Propagation by seed is the major method by which plant reproduce in nature.This is the one of the most efficient and widely used propagation method for cultivated crops.Plants produced from seeds are referred to as seedlings.

OBJECTIVE:

1. To determine the suitable condition for seed to germination.
2. Determine the environment condition for seed sowing.
3. To identify and label parts of the plants.
4. To measure the growth of plant by days and weeks.
5. To prepare future root stock for other used like grafting, budding and other else.

APPARATUS AND MATERIAL:

Poly bags,soil mixture,jackfruit seeds(**recalcitrant** seed)and watering pot

PROCEDURES:

1.Prepared a medium with ratio of 2:1:1 consist of topsoil,sand and compost.

2.Filled up the poly bags with the medium.

3.Our group provide 7 seeds for planted.

4.Then,sowed the seed thinly around 1 inch from above and evenly across the surface.

5.Covered the seed with a fine layer of compost which can be sieved over to overcome any grit.

6.Lastly,watered the plant and placed it at the nursery.

What is **recalcitrant seed**?

(subsequently Known as unorthodox seeds) are seeds that do not survive drying and freezing during ex-situ conservation and vice versa.By and large,these seeds cannot resist the effects of drying or temperatures less than 10°C,thus,they cannot be stored for long periods because they can lose their viability.Generally speaking,many climax species have recalcitrant or intermediate seeds.

PROCEDURE AND RESULT :

Week 1

Week 5

After 9 week

RECORDS OF THE GROWTH OF SEEDS WEEK 1 UNTIL WEEK 9 (CM)

Seed planted /week	Poly bag 1	Poly bag 2	Poly bag 3	Polybag4	Poly bag 5	Poly bag 6	Poly bag 7
Week 1	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Week 2	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Week 3	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Week 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Week 5	**0**	**0**	**0**	**10**	**0**	**0**	**0**
Week 6	**0**	**0**	**0**	**20**	**0**	**0**	**0**
Week 7	**0**	**0**	**0**	**25**	**0**	**0**	**0**
Week 8	**0**	**0**	**0**	**31**	**0**	**0**	**0**
Week 9	**0**	**0**	**0**	**38**	**0**	**0**	**0**

DISCUSSION:

Based on this experiment,only one of seed(poly bag 4) was germinate and the other still not show their growth.This may happen based on the texture of the soil.If the soil is too compact,it will prevent water and oxygen to going through the soil.In week 4,we identify there are no growth.We discuss each other to take an action to our project.After we do some proper tillage in a polybags,one of them are growth but the other maintain not to growth.This show how soil give an effect to plant growth.In addition,low proper care such as watering also can effect the seed to germinate as well.Water is very important to soil to supply nutrient for seed and plant.Lastly,most of the coat of the seed is broken,but there are stunted just like that.

CONCLUSION:

In conclusion,we can conclude there are many factor of affecting seed to growth such as availability of supplement irrigation,soil moisture,and ability to isolate open or cross pollinated crops.Next,we also can learn on determine the suitable condition for seed to germination, identify and label parts of the plants,to measure the growth of plant by days and weeks and to prepare future root stock for other used like grafting, budding and other else.