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UNIVERSITI
TEKNOLOGI
MARA



FACULTY OF PLANTATION AND AGRO-TECHNOLOGY

AGR232 : PLANT PROPAGATION

PRACTICAL REPORT

PART 3

TITLE

SEED SOWING

NAME

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GROUP

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PREPARED FOR

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INTRODUCTION

Seed sowing is defined as the process of placing the seed in soil to germinate and grow into plant. In comparison, planting is the putting plant propagules in soil for growing plants. Propagules can be seedlings, roots, tubers, leaves, or cuttings. And transplanting is term used for the planting the seedling grown into nursery to different field, pot or plot for different purposes. Seed sowing is a sexual propagation. The Jackfruit(*Artocarpusheterophyllus*) is a common village tree cultivated throughout Malaysia. Jackfruit can be found in all states in Peninsular Malaysia. The total area under jackfruits in 1976 was about 746.20 hectares. The most common and simplest method of raising jackfruit trees is from seeds, though other methods are also known in Malaysia. The trees do not generally breed true from seeds, so the practice has led to immense variation in yield, fruit characters and quality. It is a hypogeal germination because the cotyledon were remains below the soil surface. However, there are advantages and disadvantages of this seed sowing.

ADVANTAGES

1. Most effective natural method of propagation in many plants.
2. Seed propagation increases genetic. Variation forming hybrids with superior qualities.
3. Seed is the most important means of developing new cultivars.
4. Effective for producing virus free plants.
5. Seedlings are comparatively cheap.
6. Seed germination often result in plants with superior qualities than vegetative propagation.
7. Transport of seed as a propagule is easy.

DISADVANTAGES

1. Due to genetic variation, very difficult to retain superior qualities.
2. Trees may take more time to produce seeds than grafted plants.
3. Seedlings trees are often large, therefore comparatively expensive to maintain in an orchard.

APPARATUS & MATERIALS

Soil mixture, Jackfruit's seeds(13), and polybags.

OBJECTIVES

1. To provide a new rootstock of Jackfruit in future.
2. To obtain new varieties.
3. To increase hybrid vigor of crops in future.

PROCEDURE

- 1) Firstly, MrSyukrie provided the Jackfruit's seed for us. Each group has a different amount of the seed. And our group have 13 seeds of Jackfruit.
- 2) Next, we was filled the polybags with soil mixture to provide a medium for planted the seed.
- 3) We were planted the seeds into the medium that have been prepared.
- 4) We were watering the seeds after we planted the seeds into the polybags
- 5) Then, we were measuring the height of the Jackfruit's growth once a week.



We were prepared the medium for the seeds to be planted. We planting the seeds into polybags.

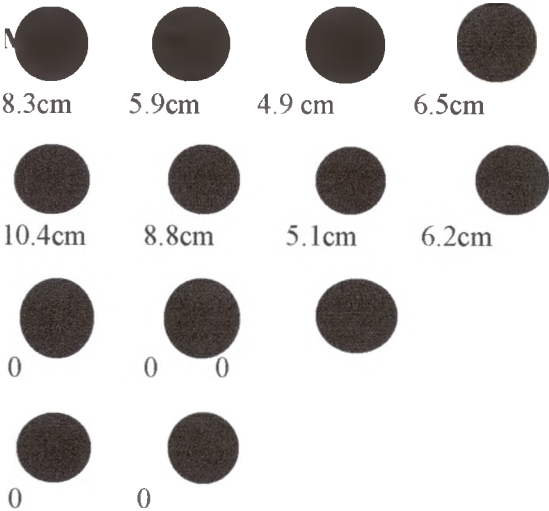


We were transfer the polybags into the nursery.

RESULT



POLY

WEEK	SEED GERMINATION
1 (27/10/17)	Seed germination has not yet occurred
2 (3/11/17)	Seed germination has not yet occurred
3 (10/11/17)	Seed germination has not yet occurred
4 (17/11/17)	

DISCUSSION

From the result, we can see that only 2 seeds does not successful to germinate and other seeds are germinate very well. The seeds' growth was stunted which maybe cause by the condition of seed dormancy was damaged. In addition, this seeds is a recalcitrant. It's must be planted immediately as the seeds was taken from the fruit.

To prevent this problem, ensure that the seeds get enough moisture of soil to get a good germination. And do not planted the seed too deep because it will prevent the sunlight from penetrating the jackfruit seed.

CONCLUSION

In conclusion, seed sowing is the easier and simplest method of plant propagation because it will produce a taproot that can hold the plant for a long period of time from falling that may cause by wind, pests attacking or human. In addition, this sexual propagation is a less expensive because it only involved seed and bag plastic as the materials. But, this method take a long time to produces fruit and it will maybe have a success result or not in the end.