# **Propagation of Female Salak through Shoots**

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# Introduction

Salacca edulis (Salak) is a dioeciously plant. Planting by seeds do not guarantee the harvest since the plants in some occasions will produce 60 % of salak male plants. Tissue culture technique was not yet recorded to be successful. Therefore the objective of this work was to produce shoots of female plants. The purpose was to overcome the problem of planting male salak in the field. Three existing farms were used for the purpose of the experiments: 1. Kuala Lipis Salak Farm (Pahang) 2. Kangkung Farm (Kelantan) 3. Kampung Jimah Farm (Negeri Sembilan)

#### **Materials and Methods**

The shoots of the female plants were indirectly separated (Indirect separation) from mother plants. The separation was done by stages and it took about one month before the shoots were fully separated. (Direct separation from mother plants caused the shoot to lie). The separated seedlings were planted in the *polibag* and then transplanted into the field. The success of the method used was over 90 %.

# **Results and Discussion**

From the above experiment (project) 50 plants were successfully separated

from mother plants through stages of separation technique, which was invented during the process of trial and error. Since tissue culture was not yet a success in female *salak* productions, propagation through shoot is considered to be a major technique in answering the problem of planting female *salak* in the field. Since *salak* is a *dioecioes* plant, planting by seeds are not recommended since the ratio of male to female is over 60 %. The success of the experiment is a major tool in solving the problem of planting female *salak*.

#### Conclusions

The success of the female *salak* production through shoots is a major achievement in solving and establishing *salak* farm in the future. *Salak* is a shade loving plant and it can be grown successfully under rubber.

## Benefits from the study

Farmers have no hesitation to plant salak in large scale because of plant purity and identification of female salak. The salak farm could be as big as rubber plantations in the future because it can be grown under rubber (salak were estashihed under rubber at Kg. Jimah N. Sembilan). Technology developed was useful for products developments such as Salak juice and canned fruits for future export.

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# Project Publications in Refereed Journals

Project Publications in Conference Proceedings None.

Graduate Research None.



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