

Expt: 12 Controlled pollination - emasculation, tagging and bagging.

Aim:

To perform emasculation, bagging, tagging, re-bagging for the study of controlled pollination.

Materials Required:

Plants with large bisexual flower, scissors, tweezers, brush, polythene bags, paper clips, tags.

Procedure:

Emasculation

Select a flower in bud condition where anthesis has not occurred. Open the bud carefully and remove the stamens. Mark this as female parent plant.



(Process of Emasculation)

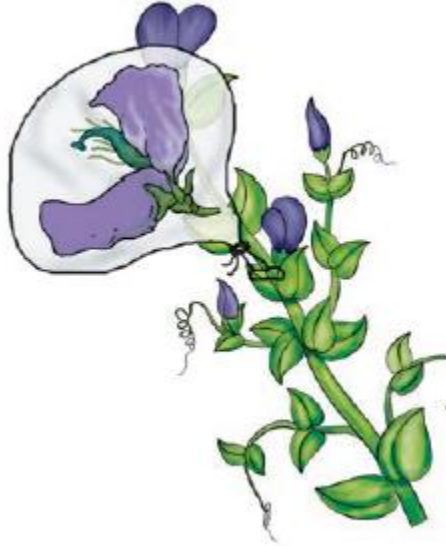
Bagging

Cover the emasculated flower with a plastic bag to protect it from undesired pollen (Bagging).

The bag should be held securely in place with a paper clip/string/thread.

Select the size of bag in accordance with the flower size.

Bags must be transparent with minute pores.



(Bagging)

Cross Pollination

Bring into physical contact anthers of a desired male plant containing mature pollen grains with the stigmatic surface of emasculated female flower.

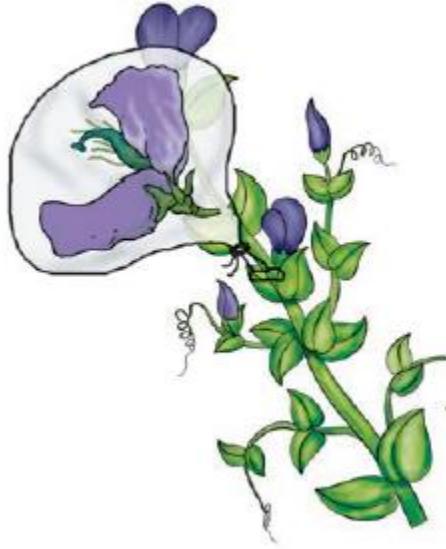
Use tweezers/brush to dust the stigmatic surface with pollen.



(Cross Pollination on the Emasculated Flower)

Rebagging

Cover the cross pollinated flower again with the bag immediately.



(Rebagging)

Tagging

For identification, label the female parent (Tagging).

Each pollinated flower should bear a label containing the following:

Name of the seed parent: _____

Name of the pollen parent: _____

Date on which the cross was effected: _____
