**OATS**

*Avena Sativa*

**Equipment**

A pair of scissors, pointed needle, forceps, a magnifying lens, camel hair brush. Petri dish, butter paper bag (4'x2‘), methylated spirit, tag and lead pencil.

**Procedure**

Oat is a highly self-pollinated crop. Anthesis begins first in the upper spikelets and generally a panicle takes 5-7 day’s to bloom completely. Best pollen is available usually just before or at the time of natural anthesis.

**Selfing**

To avoid even a little chance of cross pollination, cover the panicle with butter paper bag

**Crossing**

**Emasculation**

1. In the evening, visit the field and select the desired plant.
2. Retain a few good spikelets on the spike and cut the rest by a pair of scissors.
3. Clip off 1/3 top floret and remove the anthers by opening the floret with a fine forceps and a pointed sharp needle.
4. Cover the spike so emasculated with butter paper bag.
5. Handle the flower very gently.

**Pollination**

1. In the evening. bag the spike of the male parent before the opening of anthers.
2. Next morning collect the pollen grains in the Petri dish from the male parent already begged for the purpose.
3. Remove the bag from the emasculated floret and apply pollen grains with a soft camel hair brush on the hairy stigma or place the mature anther as such inside the floret.
4. Cover the spike again with its respective bag after pollination.
5. Sterilize your hands and instruments with methylated Spirit

**Labelling**

Tag the plant, indicating the name of the cross, date of pollination and your signature. Write the-female parent first and then the name of the pollen parent (male). Always use lead Pencil as it is water proof and will, not be damaged during rains or due to dew.