MATERIAL
AND
METHODS
MATERIAL AND METHODS

The study of the germ cell cycles has been done in the following four species of phytophagous beetles.

- **Aulacophora femoralis** - August to December
- **Aulacophora indica** - August to December
- **Aspidomorpha andrecorsi** - September to March
- **Oocassida circumtata** - October to February

These beetles were collected from the grass fields, herbs, shrubs and agricultural crops. These insects were starved for a day to reduce their body fats. Then the insects were dissected under normal saline solution and the dissected testis were kept in hypotonic saline solution (0.3%). After, they were fixed in fixatives like acetic-alcohol, Cornoy’s aqueous and alcoholic Bouin’s fluid and Susa fixatives.

For the present study three types of preparations have been made - Squash, Smear and paraffin sectioning.

The testis from the living insects were dissected with great care, with the help of fine needles and their squash preparation were made and stained in acetocarmine. Temporary and permanent squashes were made to study the chromosomal
behaviour in the germinal cells.

The smear of the testis were prepared, smear was made, by teasing the testis under a binocular microscope and spreading them uniformly over the slide. They were transferred immediately and fixed in one of the fixative mentioned above for 10-15 minutes. After staining these slides were made permanent.

For preparing sections, the material was fixed in one of the fixatives mentioned above. Further, they were dehydrated in alcohol series and cleared for embedding in the paraffin wax (56°-60°C). The sections were cut and stained in haematoxyline and eosine stains. These were cleared in xylol and mounted in D.P.X. for making them permanent.