Flowers are the organs of sexual reproduction in flowering plants. Their biological world is astonishing. The sexual reproduction is carried out by sexual organs called stamen (male sex organ) and carpel (female sex organ) in them. These sexual structures produce gametes which fertilize during sexual reproduction producing zygote. The stamen consists of anther and filament. The anther is also called microsporangium where microspores or pollen grains are formed by the process called microsporogenesis. The pollen grain represents the male gametophyte in flowering plants and their structures are beautifully seen under microscope. These have an outer covering called exine and inner covering intine. Exine is responsible for the different shapes and external look of pollens. It can be smooth, spiny, tuberculated, reticulated etc. And these tiny, minute pollens have always fascinated me! And therefore with the help of foldscope I want to explore the ‘pollen world of plants’.

1. Tradescantia plant growing in my house. It is a monocot ornamental plant.
2. Flower of tradescantia showing exerted stamens.

3. I picked up one stamen and placed it on glass slide. Teased its anther to break anther wall and then observed it under foldscope.

4. Here we can see the rupturing of anther wall and release of pollens.
5. Anther lobe having numerous pollens break off and pollens are exposed now. The lightish green line seen here is the wall of microsporangium.

6. Zooming the pollens present near anther lobe.

7. Pollens present near filament of stamen.
8. Upper surface of anther.

9. Pollens attached to each other showing their sticky nature.

10. Pollen grain is somewhat coffee seed shaped. It is oval in outline or we can say ‘boat shaped’.
11. Pollen mass seen here. These pollens are smooth walled.