

## Chapter 8

### CHALLENGES IN IMPROVING AGRICULTURAL PRODUCTION

#### Rood Nodules in legume plants:

In the roots of leguminous plants nitrogen fixation bacteria called Rhizobium is present. These bacteria observe the nitrogen from the soil, atmosphere and use some of the nitrogen for its purpose and remaining is provided into the plant. It is a type of symbiotic association where plant provide shelter to the bacteria and bacteria provide nitrogen to the plant in the form of ammonia which is utilized by the plant.

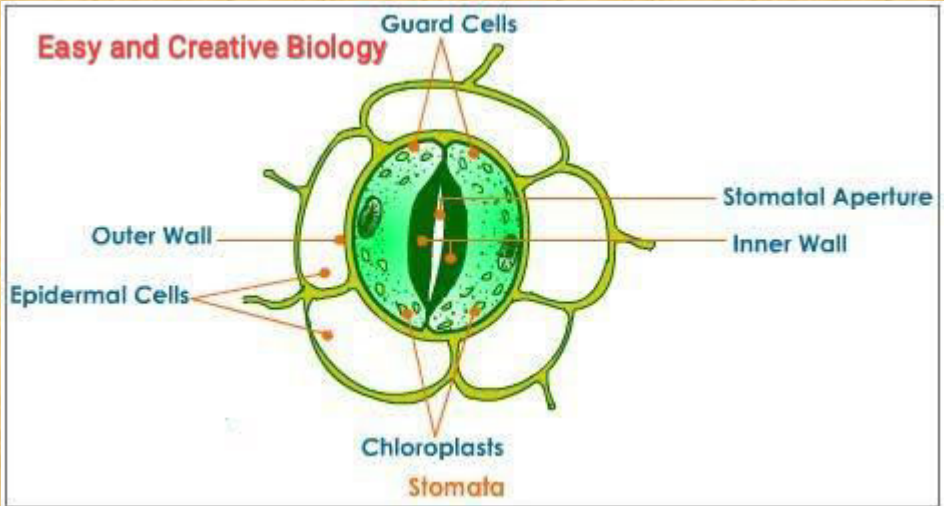
Leguminous crop gives about 50 kg to 150 kg of nitrogen per hectare.



Fig. Rood nodules in legume plants

## Transpiration:

- It is a process in which water passes out through the surface of leaves.
- Leaves have tiny, microscope pores called stomata through which transpiration takes place.



## Panchgavya:

- It is a natural manure which is prepared from dairy products like milk, curd, ghee, dung and urine of cow.
- It is a sprayer type of manure.
- It is also used as food for hens and fishes in ponds.



Fig. Panchgavya