



3

WATERING THE PLANTS

Plants are important for human being. They provide us clean air to live. We are also dependent on plants for foods. Not only Human being, other animals and birds get foods and shelter from trees and plants. That's why trees and plants are worshiped in Indian tradition. In this lesson, we will study some basic skills to nurture and care plants and trees.



OBJECTIVES

After studying this lesson, you will be able to:

- know the basics of nurturing the plants and trees;
- explain the appropriate technique to water plants and trees;
and
- care kitchen garden.

**Notes**

3.1 IMPORTANCE OF PLANTS AND KITCHEN GARDEN

Human beings, animals and birds live on food. Similarly plants and trees also live on food. Plants and trees grow in different ways. They get energy from different sources. They receive energy through water. Sun rays, air, minerals etc are the food of trees and plants. If the manure is put at the roots, the nourishment is carried through water. Water is a carrier. It carries everything a plant needs to grow.

The mother feeds the baby, dog feeds puppies, cow feeds calves, eagle feeds the little ones, nature feeds all of us. Human being should feed all the nature.

In front of the houses we should create a small garden, behind the house we should create a kitchen garden. Flowers in the garden will be used for Puja, decoration, fragrance etc. Vegetables and fruits from kitchen garden are used for cooking, feeding the cows, pet animals and birds. If we look after the plants, plants look after us. Plants keep our health in good condition. There are so many varieties of plants and trees found near to us.

3.2 NURTURING THE PLANTS

You may see different types of plants, flowers and trees around you. They may differ in height, use, time of sowing, requirement



of waters etc. Therefore, we need to care these plants and flowers as per their requirements. Let us know some basic requirement of a plant or a tree:

- i. Soil-** Soil is essential to grow a plant. We can find different types of soils i.e. black, alluvial etc. We should use fertile soil to grow any plants. Observe the soil and keep in mind your soil is like a sponge. Most houseplants like porous soil, which allows room for water and air pockets. If your soil is moist, to begin with, hold off on watering for now. If you notice water pours out through the drainage holes immediately, your soil is actually bone dry and the soil is repelling water, rather than soaking it in. Avoid pouring water onto bone dry soil. Water will only move through and around the edges of your planter and will not be absorbed by the roots. Your plant should absorb water slowly through its roots so, before you water again, you'll want to check how dry the soil is. Use your fingers and feel if the soil is wet at least 2 inches below the surface. If so, you can add water. If your soil is wet at the surface, you can hold off.
- ii. Air-** Proper availability of air is also important for the growth of Plants.



Notes

- iii. **Water-** Like air and soil, water is also important for plants. They get essential ingredients through water. Water provides structural support, cools your plant down, and moves minerals to all the right places.
- iv. **Sun rays-** Sun rays are also important. Plants use sun rays for photosynthesis. Photosynthesis is a process performed by plants to get nutrition for growth. However, some plants can be grown in shadow and doesn't require direct sunlight.

3.3 WATERING THE PLANTS

You can imagine when we do not get water, how we feel? Same happens with plants. Plants, flowers and trees get essential nutrients through water from soil. It is also essential for making food through photosynthesis. The ancient texts also reflect the importance of watering plants. It has been written in Vedas and other old scripts that watering plant is one of the sacred things. That's why giving water to Tulsi Plants is done by many people.

Giving water is essential for every plant, flower and trees. However, they require it in different quantity. The quality also differ in different reasons for example, plants needs more water in summers as waters get easily evaporated. That's why, we have to check the availabilities of water or moisture in soil.



Plant cells are like water balloons. When they are filled, they become stiff and your plant stands upright. When there is a lack of water, the cells deflate and the plant looks wilted - a clear sign your plant needs more water. Plants produce cellulose that help to keep its shape, but it's water pressure (water flowing through your plant) that helps plants gain and retain their shape better than cellulose alone.

When you water your plant, an invisible process called transpiration takes place where the sun evaporates water from the leaves through stomatal pores, causing water loss in the leaf. That's great, because water will go where it's needed most. Ideally, the water is pulled up from the roots, but if roots are dry, water is taken from the leaves themselves, which can result in a deflated plant - an indication your plant is thirsty.

The right way to water plants

- Water slowly as soil absorbs, not too quickly
- Water the plants with less quantity and slowing increase.
- Water the roots from very close distance, if you water from the height, the soil spreads and plant will not have any support to stand on the ground.



Notes

- Water the root zone.
- Water the plants when it is needed.

3.4 CARING KITCHEN GARDEN

In our homes, vegetables, fruits are essential ingredients of our food. We should try to grow these vegetables and fruits at our home in our kitchen garden as per the local climate. We should sow seeds according to season, give organic fertilizers and water. We should also use organic compost for the growth of the plants. We should avoid chemical fertilizers as these are harmful for our health.

Benefits of Kitchen Garden

- Vegetables and fruits can be grown and made available for whole year.
- We can save money while growing it at home.
- We can get organic vegetables and fruit at home which is healthy.



INTEXT QUESTIONS 3.1

True or False

1. Water is essential for plants.
2. Plants cells are like water balloon.

Watering the Plants

3. Air is not essential for plants.
4. Plants get nutrition through water.
5. Water is not offered to Tulsi Plants.



WHAT HAVE YOU LEARNT

- Soil, water, sunrays and air are important for plants growth.
- Plants and trees provide us food, shelter and other resources.
- We should give water to plants as per requirements.
- Kitchen garden can provide us nutritious vegetables and fruits.



TERMINAL QUESTIONS

1. What are the basic requirements of Plants?
2. How plants get essential nutrition?
3. Why sun rays are important for plants.
4. Write any two benefits of Kitchen garden.

CLASS-I



Notes



Notes



ANSWERS TO INTEXT QUESTIONS

3.1

1. True
2. True
3. False
4. True
5. False