Forest plantation/ Practical Third stage

Forestry Department

**Sustaining the Newly Planted Tree**

**5- Trunk protection**

May be needed for smooth, thin-barked species (crabapple, linden, maple) to prevent sunscald and frost injury. Standard paper tree wrap or the newer white synthetic wrapping materials should be applied from the bottom up so that it overlaps like shingles. Wrap up to the first major branch and secure with plastic expandable or duct tape.

Tree wrap should be used from early November to late March during the four- to five-year establishment period.

Rabbits and mice also can damage the trunks of small trees during the winter. Protect trunks with wire mesh, hardware cloth, or other products specifically designed for this purpose.

**Bordo mix**

It is a solution used to paint the stems of trees to protect it from sunscald, hot temperature and frost and fungi diseases.

Content ratio:

10:10:100

10: pound Copper Sulfate

10: pound Lime

100: gallon water

Note: 1 pound = 453 gram

**6- Watering**

It is the single most important task for new tree owners, but watering timetables are almost impossible to give. As a general rule, trees planted in the spring or summer may require supplemental irrigation one to three times a week in the first few months after planting. Daily irrigation maybe required if weather conditions are extraordinarily hot, dry, and windy.

At each watering apply about one to two gallons of water per inch of trunk diameter, directly over the tree's rootball. In later years, watering frequency can be reduced and the area to be watered enlarged as the root systems grows and expands.

But keep in mind, the amount of water to be delivered depends on:

1. **The amount of rainfall received**
2. **Moisture holding capacity of the soil**
3. **Drainage characteristics of the site**

Newly planted trees should be inspected at least once a week to determine if watering is necessary, and more often during hot, dry weather. Remember, trees can be killed by overwatering.

**7- Transplanting**

**Means** transport the produced seedlings from seedbeds to wider place such as containers or transplanting beds, in order to:

1- Develop the root system of seedlings.

2- Providing wider area seedlings to growth.

3- Make a balance between roots and shoot system which is the best characteristic of the good seedlings.

**Time of transplanting**:

Transplanting process could be done at any time if technical buildings provided like Lath house or glass house and we **avoiding** this process during **winter season**, and also in **windy** and very **hot days** to protect the new seedlings from dryness and evaporation and its more favourable to done in **morning**, **evening** at **cloudy** **days**.

For coniferous seedlings: it usually done when the seedlings length about (2-4) cm and for deciduous when the seedling have (2-5) leaves.

**Techniques of transplanting**:

1. Preparing the transplanting containers or beds.
2. Lifting the seedlings.
3. Place the root system of seedlings in clay solution.
4. Classification of the seedlings.
5. Pruning the root system of coniferous seedlings and root + shoot system in deciduous seedlings.
6. Planting the seedlings in transplanting containers or transplanting beds.