Forest plantation/ Practical Third stage

Forestry Department

**Types of seedlings**

**1- Bare-root**: These are usually the least expensive nursery plants. Nursery workers dig them when they redormant. You must protect the roots from drying out and from mechanical damage. You should plant them only while they are dormant.

**2- Machine-balled:** Nursery workers dig these plants bare-root, then pack the roots in sphagnum peat moss or wood shavings and wrap them in plastic. Handle them carefully to avoid breaking roots. These, too, should be planted while they are still dormant.

**3- Balled and burlapped (B & B):** These plants are dug from a production field with an undisturbed ball of soil around the roots. Workers wrap the soil in burlap, bind them with twine or wire and pin them together with nails. They may place the ball in a wire framework or basket.

**4- Containerized plants:** Nurseries sell these in pots. These plants may have grown in the container for a year or more; may have been dug bare-root and planted in the pot earlier that year; or may have been field-grown, dug with a soil ball, and potted. Both B & B and containerized plants usually cost more than bare root plants. However, since you move soil with the roots, the plant is more likely to survive.

**Differences between Balled planting stock and Naked planting stock** (Bare root)

|  |  |  |
| --- | --- | --- |
|  | Balled seedling | Naked seedling (Bare root) |
| 1-  2-  3-  4- | They are successfully for planting in arid and semi-arid zones because their roots are not exposing to the external factor.  Their growth is sustained over all seasons.  Their survival percentage is higher.  They are planted easily. | -They are not successful for planting in this condition.  -Their growth is stopped in winter.  -Their survival percentage is lower.  -They are planted difficulty. |

**Instance that can be used balled seedlings:**

1. For planting arid and semi-arid zones.
2. For planting road sides and urban afforestation, especially using a big stock.
3. Instate of caring out of planting operation out seasons of planting.

**Technique of Planting**

In order to guarantee successfully planting process and to get a higher survival percentage of planting seedlings under field conditions, the following points should be observed:

1. Place the soil extracting from the making hole at the lower of sloping area.
2. Pruning root system of the seedling.
3. Place seedling vertically in the hole with a suitable depth and good position of roots.
4. Filling the hole after planting with surface soil.
5. Compact the soil around the roots by feet to prevent formation of spaces between roots and surrounding soil.
6. Using small size stocks in arid and semi-arid areas and large size stocks in moist condition.
7. Using pits planting in arid condition and mound planting in moist condition.
8. Irrigation the planted stocks directly.