Casuarina Equisetifolia

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Introduction: The casuarina plantation is of an irrigated nature; water is being supplied from wells sunk inside the plantation at the rate of one well to irrigate every two acres. Because of the loose, porous sandy nature of the soil and the nearness to the river (Cavery and Coleroon) water is struck at a depth of from 8 to 10 feet from the ground level. A sort of crib-work is being put on the sides of the well to prevent the well being silted up constantly by the loose river sand from the sides.

The spacement adopted in Padugai Range is 7'×7'. This gives 900 seedlings per acre. Alignment and staking are taken up by May and completed by the middle of June and then pits I foot cube are dug at the places maked by the stakes, the excavated earth being kept heaped close to the pits. This is generally completed by the middle of July so that, planting of the seedlings can be taken up immediately after the premonsoon slowers.

Seedlings of about 1½ to 2 feet in height are very carefully picked out from the nursery beds and transported as quickly as possible to the area of planting. For planting areas which are 15 acres and above, the nursery beds will be located inside the area itself and for smaller planting areas, seedlings are being supplied from central areas located in convenient places.

Planting Details: The heaped up earth near each pit is being put back into the pits to a depth of about 4 foot and one full pot of water is being poured into each pit. Then the soil is well puddled and one seedling of Casuarina per pit is planted firmly in the centre of the puddled earth. Again another full pot of water is added to each pit. As far as possible, the entire area in each locality is planted up in the course of about a week to ten days, depending on the labour available in the locality and the area to be planted.

The Casuarina seedlings are watered on a regular scheme from the date of planting upto one Year. The rainy days are generally excluded. The watering schedule that is in vogue after the first day of planting is as follows:

- 1. From the middle of July to the end of July-one pot of water per plant daily for 15 days.
- 2. From the beginning of August to the middle of August-half a pot of water per plant daily for 15 days.
- 3. From the middle of August to the end of December-half a pot of water per plant on alternative days for (roughly) 75 days.

The total number of days from 16th August to the end of December of the same Year comes to 138 days.

- 4. From the beginning of January to the end of March-half a pot of water per plant once in three days for 90 days.
- 5. From the beginning of April to the end of July-half a pot of water per plant once in three days for 100 days (About 22 days are expected to be rainy days during this four-month period.)

From experience it is found that replacement of casualties can be done till the end of November. After this date, the Padugai soil in and round Tiruchirapalli gets very try and any amount of watering after replacement will not be of much use to the plants.

Tending: Weeding round the plants is done twice a year once in November and again in February. Thinning is not done in Casuarina plantations raised departmentaly; but in the case of private plantations, it is done after the third or fourth year. This is found necessary, as the planting is almost 2'×2' in case of private plantations. Further, these early thinnings yield interim revenue to the owners. In the departmental plantations, pruning of the side branches upto a height of about five feet is tried in plantations where the average height of the trees is 12 feet and above to improve the condition of the trees. After this pruning, the trees seem to put on some height-growth. The brushwood cut and removed also yield a small initial revenue to the Department.