

Resprouting in Different Geographical Locations

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Abstract

The resprouting of tree species is dependent not only on the species concerned but also upon its geographical location. In this paper, the resprouting of Eucalyptus is reported for the hill region of Tamil Nadu.

Key Words: Eucalyptus, light, resprouting, stumps.

Introduction

Eucalyptus sp. is planted all over Tamil Nadu under afforestation scheme of Tamil Nadu Forest Department. After the formation of wood, Forest department cut off the trees and leave the stumps as such. 10 cm tall stump is enough for the resprouting of Eucalyptus (Jacobs and Metro, 1981). In this paper we compare the resprouting of Eucalyptus in different regions which vary in their geographical locations. We selected Pachakumachi hill and Oragadam for our study.

Materials and Methods

Study sites:

The details of our study sites are given in Table 1. Our study sites varied in all important respects.

Table1. Details of study sites.

Parameters	Pachakumachi Hill	Oragadam
Geographical position	9° 35' N, 77° 15' E	12° 50' N, 79° 56' E
Altitude	1700 m	16 m
Maximum temperature	31 °C	42 °C
Minimum temperature	17 °C	20 °C
Annual Rainfall	2726 mm	1300 mm

Resprouting:

We screened the resprouting of eucalyptus with respect to the distance between the stumps and the number shoots produced per stump.

Result and Discussion

The rate of resprouting is greater in Oragadam. The distance between the stumps is highest in the lower altitude region. In the Pachakumachi hills, multishoot formation was highest. The number of stumps that did not resprout is also high in the Pachakumachi hill region (Table 2).

The resprouting of the species is defined by the availability of light to the stumps (Jegan et al., 2008). The stumps in Oragadam received more light than the stumps in Pachakumachi hill, thus the resprouting rate was also greater in Oragadam. But the multishoot formation is more at Pachakumachi hill, because the stump diameter is high.

Table 2. Findings of our study.

Parameters	Pachakumachi Hill	Orgadam
Number of trees planted	75	75
Number of trees cut down	25	25
Stump diameter (cm)	73.6 ± 1.7	18.3 ± 1.2
Number of shoots per stumps	15 ± 2	7 ± 1
Not resprouted stumps	20	8
Distance between individuals (m)	8 ± 0.5	10 ± 0.8

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References

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