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EFFECT OF AGROCLIMATE OF MIZORAM ON EARLY ESTABLISHMENT OF *HEVEA* IN POLYBAGS

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A nursery experiment was conducted for two consecutive years with a view to study the effects of agroclimate on sprouting success and growth of two popular *Hevea* clones *viz.* RRIM 600 and RRII 105. Budded stumps of these clones were planted in the second week of every month consecutively for two years. The sprouting success and growth parameters recorded showed wide variations. Maximum air temperature and sunshine hours had a positive effect on sprouting and growth. The more favourable period for planting budded stumps in polybags was from March to May under the agroclimatic conditions of Mizoram.

Key words : Agroclimate, Budded stumps, *Hevea brasiliensis*, Mizoram.

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INTRODUCTION

Vegetative propagation of rubber (*Hevea brasiliensis*) through budgrafting followed by raising the budded stumps in polybags and finally transplanting the plants to the field is the accepted agronomical practice. Successful establishment of *Hevea* in polybag nursery is influenced by the environment, soil physico-chemical properties *etc.* In Mizoram, attempts have been made to cultivate rubber for the last two decades. However, no systematic study has so far been carried out to assess the influence of various climatic factors on sprouting success and subsequent growth of plants in the polybags. The present study was undertaken to identify the time best suited for planting budded stumps in polybags and to observe the influence of agroclimatic factor(s) on their growth.

MATERIALS AND METHODS

Rubber seedlings raised in a nursery at Tuichhuihan Farm, Regional Research Station of the Rubber Research Institute of India at Kolasib in Mizoram during August/ September 1992 and 1993, were used as stock plants for the study. Two popular clones, RRIM 600 and RRII 105 were used as scion material for budding. Brown budding was done on 16 months old seedlings. Budded stumps of each clone were planted in polybags in the second week of every month for two consecutive years. The experiment was laid out in a completely randomized design with fifty polybag plants per clone. Watering, manuring and other routine cultural practices were carried out as per recommendations (Rubber Board, 1990). Data on sprouting was recorded at an interval of fifteen days for each clone and continued up to a period of 150 days. Morphological parameters at 150 days after planting in polybags were also recorded from the sprouted plants. The data was subjected to angular transformation for analysis of variance (Gomez and Gomez, 1984). Agrometeorological parameters like rainfall, relative humidity, sunshine hours and mean air temperature were recorded during the experimental period.