EFFECTS OF SOWING MEDIA ON BUDGRAFTING AND BUDDED PLANT PERFORMANCE OF RUBBER (Hevea brasiliensis) UNDER NURSERY CONDITIONS



BY

K.D.L. KUMUDU KUMARI



DEPARTMENT OF AGRICULTURAL BIOLOGY FACULTY OF AGRICULTURE

EASTERN UNIVERSITY

SRI LANKA

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ABSTRACT

Rubber is mainly grown for its latex. Currently river sand is used as the sowing media for germination of rubber seeds. Since river sand is expensive, scarcer and has environmental concerns in some areas, due to mining problems, it is very much essential to find alternative sowing media for germination of rubber seeds. The present study was conducted to see effects of four alternative sowing media, as compared to river sand (control) on bud grafting and budded plant attributes of rubber. Seedlings raised in five sowing media (river sand (control), coir dust, saw dust, elephant dung, and purified sea sand) and budgrafted with the clone RRIC 121 were used for the present study. Budgrafting percentage was recorded three weeks after grafting and the successful grafted plants were cut back one month after grafting. Dry weight of roots of budded plants (10 plants from each treatment) was recorded two weeks after the cut back. Growth and physiological data viz., shoot length, shoot angle, number of leaves shoot diameter and chlorophyll content were recorded. After first and second leaf whorls matured l. Analysis of variance was done to analyze the significant difference. Budgrafting success of seedlings raised from seeds sown in all four alternative media, except for elephant dung, was satisfactory as compared to those in river sand (control). There was no significant difference in growth and physiological attributes viz., shoot diameter, shoot height, shoot angle, number of leaves and chlorophyll content of budded plants raised from seedlings derived from seeds sown in alternative media as compared to those in river sand after first and second leaf whorl matured.

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