

EARLY GROWTH PERFORMANCE OF SOME *HEVEA* CLONES IN KONKAN REGION OF WESTERN INDIA

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Fifteen clones of *Hevea brasiliensis* were evaluated for their early growth performance in the non-traditional rubber growing tract of the Konkan. The vigour of the clones at the age of four years was assessed in terms of ten morphological and anatomical traits. Clonal variation was studied and correlations worked out. On the basis of a growth index clones RR11 6, RR11 208, RR1M 605, PB 311, RR11 105 and PB 260 were identified as better adapted to the stress situation in the Konkan tract.

Key words: *Hevea brasiliensis*, Early performance, Growth index, Non-traditional area, Konkan, India.

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INTRODUCTION

Konkan region of Western India (15° to 20° N) is one of the non-traditional areas where rubber cultivation is attempted due to non-availability of land for expansion of the cultivation in the traditional rubber growing tracts of India. In this region, prolonged severe soil moisture deficit and high summer temperatures are the major environmental constraints affecting growth and productivity of rubber (Chandrasekhar *et al.*, 1990). The adverse effect of environmental conditions on early growth of certain rubber clones has been reported by Sethuraj *et al.* (1989). In the present paper, an attempt has been made to assess the early growth vigour of fifteen clones of

H. brasiliensis at the age of four years through a growth index. This is the first report of the performance of these clones in this region.

MATERIALS AND METHODS

Fifteen clones of *Hevea brasiliensis* (RR11 5, RR11 6, RR11 105, RR11 208, RR11 308, RR1M 605, PB 260, PB 310, PB 311, RR1C 52, RR1C 100, RR1C 102, RR1C 105, PCK 1 and PCK 2) were planted in a randomised block design with three replications, during 1985. The spacing adopted was 4m x 4m with 36 plants per plot. During drought period (December to May) the plants were given irrigation at the rate of 40 litres per plant at monthly intervals during 1985-86 and