

ชื่อเรื่อง

**Effect of Duration of Growth Period and Spacing of Planting on the Number of Planting Setts and Roots for Further Planting of Vetiver (*Vetiveria Zizanioides*) on a Vegetative Barrier**

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**Abstract**

The grass Vetiver is already recognised as an effective way to control soil and water erosion. In view of such important use of this grass an experiment in a nursery area at Zonal Agricultural Research Station, Igatpuri, Dist. Nasik during the years 1989 to 1991 was conducted. A study on some important growth characters such as number of culms and weight of roots/plant was undertaken periodically.

The Experiment was raised on shallow soils having depth of 20 cm. on 15<sup>th</sup> June, 1989. The treatments included were, Harvesting for setts after one year planing and two year planting with three spacings 60x60 cms, 70x60 cms, 90x60 cms. on ridges & furrow. The land was manured with 5 tons of organic manure and fertilized with 40 kg. N and 20 kg P<sub>2</sub>O<sub>5</sub> at the time of planting. Two setts/hill were planted.

It was observed that maximum setts i.e. 63 and 102 culms or setts were produced with the treatment of harvesting of setts after one year and two years with the spacing of 60x60 cm. respectively. A study regarding root system indicated that 110 and 140 gm. roots were produced/plant after one year and two years respectively when planted at 90x60 cm. When the crop was harvested for planting setts the upper vegetative growth was cut by keeping 30 cm. height of setts. It was observed that vetiver grass has been grown successfully when rainfall was 3000 mm with 150 rainy days in a year. It was well adopted to humid and dry conditions. The most important thing was observed that vetiver remains where planted as it spreads only around the base through tillering. Due to its very deep (90-100 cm.) and extensive root system Vetiver is very effective in establishing both cut & filled embankments.