

ชื่อเรื่อง

Performance of *Vetiveria Zizanioides* in Rainfed Areas of Vindhyan Plateau of Madhya Pradesh, India

ชื่อผู้วิจัย

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Abstract

The seven year study since 1987-1994, on the performance of vetiver was carried out under World Bank aided Watershed Development Project at Rafi Ahmad Kidwai College of Agriculture, Sehore (M.P.) India. The seeds of vetiver from different locations in different years were tested under laboratory and field conditions for their germination. The germinability of vetiver seeds reduce as the increase in storage period. Relatively higher germination 28.33% was observed in laboratory compare to 11.66% in field condition. The naturally germinated number of vetiver plants was observed 16.22 and 17.44 /m² with up and down stream on existing vetiver hedge row respectively when the field was cultivated during winter and rainy season. While in uncultivated field during both crop season, the vetiver plant was 48 / m².

In a study on application of fertilizer doses on the establishment of vetiver hedgerow. It was found that the application of 20 kg N + 20 kg P₂O₅/ha as basal dose was most effective. The vetiver barrier caused higher soil deposition in upstream with the average soil deposition from 6.78 cm in two rainy season to maximum of 21.15 cm in seven rainy seasons. Four to five percent higher moisture conservation on upstream was recorded than the down stream.

In the screening of various locally available grasses in comparison to vetiveria for establishing soil and moisture conservation. It was found that the vetiveria recorded higher survival percent and higher soil particle binding capacity.