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EFFECT OF FERTILIZERS ON THE YIELD OF ROOT AND OIL OF

VETIVER, *Vet/Vena zizanioides*

As no attempt has so far been made to find out the responsiveness of Vetiver to fertilizer application an experiment was laid out at the Lemongrass Research Station, Odakkali to assess the fertilizer requirement of the crop. It was laid out in a randomised block design with 3 levels of potash and phosphorus @ 0.20 and 30 Kg per hectare. Muriate of potash and superphosphate were applied. The study was conducted during 1964-65 to 1972-73.

The data are given in Table 1. It is seen that the potash and phosphorus have no significant effect on the yield of Vetiver roots. But the quantity of oil has increased by the application of these fertilizers and the maximum production corresponded to the dose of 20 kg. each per hectare of potash and phosphorus. The supply of phosphorus alone at 30 kg per hectare was also found to be effective for increased production of oil. The poor response of the crop for the production of root can be attributed to the relatively higher quantities of available forms of these nutrients in the soil. Higher production of oil due to the supply of the nutrients shows that these are utilised for the synthesis of the components in the oil.

സംഗ്രഹം

കേരള കാർഷിക സർവ്വകലാശാലയിൽ ഓടക്കാലി ഇഞ്ചിപ്പല്ലശവേഷണ കേന്ദ്രത്തിൽ rooroaigsoBco ഉപയോഗിച്ച നടത്തിയ ഒരു പരീക്ഷണത്തിൽ ഭാവഹം ഒരു ഹെക്ടറിന് 20 rffelsejoiyjosjo ക്ഷാരം 20 കിലോഗ്രാമും ഒരുമിച്ചു നൽകിയപ്പോൾ കൂടുതൽ രാമച്ച തൈലം കിട്ടിയതായി കാണുന്നു. അതുപോലെ ഭാവഹം മാത്രം ഒരു ഹെക്ടറിന് 30 കിലോഗ്രാം നൽകിയപ്പോഴും കൂടുതൽ തൈലം ലഭിച്ചതായും കണ്ടിരിക്കുന്നു.

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Table 1

Treatment	Root yield in Kg.					Oil yield in C. C.				
	1964-65	1966-67	1968-69	1972-73	Total	1964-65	1966-67	1968-69	1972-73	Total
P ₀ K ₀	198.4	56.5	103.0	124.0	481.9	253.0	159.0	378.0	432.0	1222.0
P ₀ K ₁	188.8	60.0	106.0	134.5	489.3	363.5	166.0	360.0	466.0	1355.5
P ₀ K ₂	231.6	59.0	115.5	135.0	541.1	305.4	169.0	420.0	399.0	1293.4
P ₁ K ₀	176.0	51.0	82.5	130.0	439.5	311.3	117.0	243.0	478.0	1149.3
P ₁ K ₁	248.8	68.5	127.5	155.0	599.8	446.1	154.0	497.0	431.0	1528.1
P ₁ K ₂	240.8	59.5	81.0	121.0	502.3	366.4	96.0	366.0	443.0	1271.4
P ₂ K ₀	242.4	59.0	104.0	145.0	550.4	387.9	141.0	356.0	563.0	1447.9
P ₂ K ₁	208.8	63.0	124.0	138.0	533.8	295.8	133.0	386.0	500.0	1314.8
P ₂ K ₂	205.6	63.0	83.5	124.0	476.1	333.2	160.0	418.0	403.0	1314.2
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Critical difference					N. S.					45.51

* Not Significant