Agri. Res. J. Kerala, 1973, 11 (1)

STUDIES ON VETIVER, VETIVERIA ZIZANIOIDES IN RELATION TO THE TIME OF HARVEST

Vetiver is one of the important oil yielding crops growing wild in North India and cultivated as an aromatic crop in South India. An experiment was carried out at Lemongrass Research Station, Odakkali to find out the optimum stage at which the crop has to be harvested for maximum root and oil yield. A Randomised Block Design with 8 treatments of harvesting 11, 12, 13, 14, 15, 16, 17, and 18 months after planting and 4 replications was adopted. The quantity of roots and oil extracted from the roots were recorded. The yield data are presented in Tables 1 and 2.

Table I. Root yield of Vetiver in kg at different intervals of harvest

Maturity	of the crop.	1964-65	1966-67	19≨8•59	1972-73	Mean
11	Months	203,9	28.0	23.5	45.5	75.05
(2	Months	144.0	43.0	31.0	79.0	74.25
13	Months	186 2	480	27.5	79.0	85.32
	Months	187.2	50.0	32.5	61.0	82.68
15	Months	202.0	74.0	43.0	79.0	99.50
16	Months	192.0	5S.O	33.0	93.0	94.00
17	Months	1 18 0	85:7	61.0	103.0	99.42
18	Months	88.4	63 5	55.5	89.5	74.23

Tble 2. Oii yield of Vetiver in ml. extracted from roots harvested at monthly intervals

Maturity	of the crop	1964-65	1966-67	1968-69	1972-73	Mean
11	Months	601.4	183 0	62.0	84.0	232.60
12	Months	386.8	213.0	56.0	98.0	188.45
13	Months	463.0	125 0	41.0	145.0	193.50
14	Months	428.2	160.0	71.0	135.0	198.55
15	Months	453.4	180.9	94.0	116.0	210.85
!6	Months	4072	190.0	67 0	154 0	204.55
i.	Months	4034	245.0	66.0	272.0	247.85
18	Months	289.0	281.0	100.0	362.0	258.00

The data for the four years when subjected to pooled analysis showed that there was no significant difference in the yield of roots and oil when plants were harvested at different intervals of 11 to 18 months after planting. But there was significant difference in the yield of the harvests in the same year. During 1964-1965 root yield was maximum at 11th month. The yield was increasing from 12th to 15th month and then again it decreased. During the remaining years there was a general trend of increase in yield from 11th to 17th month. But on 18th month the root yield suffered a reduction in all the four years. In the case of oil yield the maximum was obtained when the plants were harvested after 18th months except in the case of the first year of experiment. This anomaly may be due to the weather conditions which prevailed during the year. Obviously though the quantity of root decreases in the 18th month, the yield of oil per unit weight is in the maximum during the month. It appears from the data that the harvesting of the crop 17 and 18 months after planting will be more beneficial though the results were not consistent for the four years. This is in agreement with the views of Murti and Moosad (1949).

REFERENCE

Murti and Moosad. (1949) American Perfumer, 54, 113.

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 $(M \cdot S. received on 20-8-1973)$