

Varietal performance of turmeric

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ABSTRACT

Seven turmeric (*Curcuma longa*) varieties were evaluated under irrigated condition for two crop season in the Department of Horticulture Garden. The varieties differed in their production potential and growth characters (Plant height, number of tiller per plant, leaves per tiller, leaf length and leaf breadth). Among varieties tasted, Barua Sagar maximum production of fresh rhizome 33.50 t/ha (2006-07) and 30.25 t/ha (2007-08) and it was at par with the production of Azad Haldi-1 (32.60 t/ha and 29.85 t/ha) during 2006-07, 2007-08, respectively. These two varieties namely Barua Sagar and Azad Haldi-1 were significantly superior to the varieties during all the seasons and are suitable for general cultivation in the area of central Uttar Pradesh.

Key words : Turmeric, Evaluate, Variety, Clump, Rhizome yield

Turmeric is one of the important species and a dye of moderate importance which has good demand of India and other oriental countries. India is the largest producer and exporter of turmeric in the world. In India it is grown mainly in the status of Andhra Pradesh, Tamil Nadu, Uttar Pradesh, Bihar, Kerala, Orissa and Maharashtra. However Andhra Pradesh and Tamil Nadu contribute nearly 50% of the production. Crop improvement studies undertaken at various research organisation. Systematic efforts on introduction and evaluation of improved varieties of turmeric were not undertaken in the area of surrounding Kanpur of Uttar Pradesh. Hence the present study was carried out to evaluate the varietal performance of turmeric, suitable for this area.

Kanpur, Uttar Pradesh. It is situated between 25-26° to 26.50° North latitude and 79.31° to 80.34° East longitude. Kanpur lies in the alluvial belt of Gangetic plains. The trial was laid out in Randomized Block Design with three replications using for five varieties and two selections of turmeric viz., CO-1, Krishna, Suvarna, Rajendra Sonia, Azad Haldi-1, Parravona and Barua Sagar produced from various research organisations during 2006-07 and repeated in 2007-08 crop seasons. The net plot size was 1.5 x 1 m and a spacing of 30 x 20 cm was adopted. Standard package of practices recommended by Indian Institute of Spices Research, Calicut was followed for observation on plant height, number of tillers per plant, number of leaves per plant, leaf length, leaf breadth and yield attributes was recorded.

MATERIALS AND METHODS

The field experiment was carried out under irrigated condition at the Department of Horticulture garden,

RESULTS AND DISCUSSION

The mean data of varieties are presented in Table 1. Result indicated that there was significant variation among

Table 1 : Morphological and yield attributing characters of turmeric varieties

Variety	Plant height (cm)	Number of tillers/ plant	No. of leaves/ plant	Leaf length/ plant (cm)	Leaf breadth (cm)	Rhizome weight/ clump
CO-1	55.30	2.80	15.50	27.85	10.85	270.00
Krishna	40.10	1.85	13.20	30.70	11.50	235.40
Suvarna	46.20	2.95	10.50	32.20	13.63	221.80
Padrauna	45.25	2.15	12.25	34.33	13.50	310.60
Azad Haldi-1	75.60	3.60	10.35	33.60	15.17	330.50
Rajendra Sonia	30.20	1.95	12.10	26.30	9.50	245.50
Barua Sagar	48.15	2.95	14.15	45.25	17.50	295.30
S.E. ±	1.95	0.218	0.670	1.240	0.430	12.36
C.D. (P=0.05)	5.50	0.64	1.77	3.45	1.25	330.50