

Agroclimatic conditions of the
region where the study has been conducted

The region lies in the Eastern Himalayan belt, between 26.31' and 27.13' north latitude and between 87.57' and 88.53' east longitude approximately and is near to the district town, Darjeeling, which is the northernmost district of West Bengal. The altitude of the locality varies from 1100 M - 1200 M and the climatological and soil data are given below :-

Climatological Data

(Average of three consecutive years)

Months	Temperature °C		Humidity %		Precipitation (mm)
	Max	Min	6 am	6 pm	
January	16.5	9.0	98	92	10.0
February	18.1	10.1	101	90	26.10
March	22.1	13.8	91	89	59.40
April	25.9	16.4	84	80	148.00
May	30.6	18.3	72	69	165.30
June	30.0	17.8	78	74	259.80
July	29.5	17.2	80	78	684.50
August	27.8	17.5	84	83	515.20
September	26.3	14.1	75	74	257.20
October	24.5	16.2	73	70	23.60
November	21.5	14.3	65	51	8.00
December	19.0	11.7	69	66	2.20

Soil data

Texture	pH	Water holding capacity (%)	Organic carbon (%)	Nitrogen (%)	Available phosphorus kg/ac	Potash kg/ac
Lomy sand	4.6	62.14	2.90	0.028	19.95	149.68

Experimental Materials

Experimental studies included two species of Dioscorea viz. 1) D.prazeri and 2) D.composita. Short botanical descriptions of two species and their medicinal uses and distribution in India have been given below :-

1) D.prazeri, Prain & Burk. is native to this country. In Bengal it is known as Kukur-torul and Lepchas call it Kencheong.

It is a left twining herb, ascending to a height of 4 m or more. Rhizomes very poisonous, superficial, stout, horizontally creeping, freely branched; branches about 10 cm X 1.5 cm, flesh white or creamy. Stem terete or faintly ridged, sometimes purplish-brown, speckled. Leaves alternate, rarely opposite on the lower nodes; petiole 4-8 cm. Lamina ovate, usually 12 cm X 10 cm from petiole to ocumen,