

Pasture study in this country is still in its infancy. Work is being continued here with a view to throw light on the pastures from the point of view of animal husbandry.

**Summary:**—The pastures at the Livestock Research Station, Hosur, have been classified as permanent, tank bed, tank bund, channel banks, temporary and irrigated pastures and studied. In addition to botanical analysis the quantity and quality of pastures are explained. The competition between species of grasses is explained and those species suited for temporary and permanent leys are mentioned. From observations made at Hosur grass mixtures are suggested.

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#### References.

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## THE CULTIVATION OF CUMIN<sup>2</sup> IN THE PERIAKULAM TALUK.

By S. V. RAMACHANDRAN, B. Sc. Ag.,  
Agricultural Demonstrator, Periakulam.

Cumin is a crop cultivated in very few places in this Presidency and Periyakulam in the Madura District is one. Approximately it occupies an area of 300 acres in this Taluk. It is a very delicate crop, requiring much attention and care. It requires a mild climate and is grown during the South West Monsoon season in garden lands under wells. The duration of the crop is two months and it is cultivated between June and August.

Good, well drained, rich red loam is best suited for a successful growth of the crop, and it is not systematically rotated with any crop. But it is generally followed either by chillies or late Ragi and cholam.

The soil is ploughed as many times as possible and a good fine tilth is obtained. Usually seven ploughings are given. After the third ploughing, good, well-rotten cattle manure, at 30 to 35 cart loads per

Latin *Cumin cuminum*; Tamil *Jecragam*; Telugu *Jilakara*; Malayalam *Jecrakam*.

acre, is applied and covered. Sheep penning is also done usually. One or two more ploughings are given. Small beds about 4 feet broad are then formed so that the sower's hands reach the middle of the bed with ease when he sits in the irrigation channel. The length is determined by the convenience with which they may be irrigated. Small stones, pebbles and bricks are carefully picked out and removed from each bed.

Sowing is done in the beginning of *Ani* (June 15th) and it is a very important operation, requiring much care. The sower sits in the irrigation channel and sprinkles the seed lightly and evenly bed by bed and then covers them with his fingers. The seed rate is 10 Madras measures per 60 cents.

Next comes irrigation, the most laborious of all operations. The water should be let in slowly and lightly, as otherwise the flow of water will spoil the crop especially in the earlier stages if allowed to run fast. The water baled out with a single mhote is divided into two streams and two men are engaged to guide it. The irrigation channels should be half a foot deeper than the bed, so that the water will spread slowly and evenly. For the first 7 days after sowing, the beds are irrigated every day and after that every alternate day till the harvest of the crop. During the growth, three weedings are given.

**Pests and Diseases.**—Among the pests and diseases, a leaf caterpillar (*Laphygma exigua*, H.) is known to feed on leaves and tender buds. But the incidence is only occasional. No other serious pest or disease is known.

**Harvest.**—The crop gets ready for harvest by the middle of August (beginning of *Avani*). The plants are pulled out, dried, and thrashed with light sticks. Cleaning is another tedious process. The produce is disposed of in the Taluk itself at the weekly markets at Theni where there are dealers and merchants who are ever ready to purchase it.

The cost of cultivation and the value of the produce is given below and the figures are worked out for a 60 cents unit.

#### *Economics of Cultivation of Cumin. Area, 60 cents.*

Details	Bullock	Men	Women	Cost
	pairs at	at	at	
	Re. 1	0-4-0	0-2-0	
<i>Preparatory Cultivation.</i>				
7 ploughings	7			Rs. 7 0 0
Forming beds		4		1 0 0
Picking stones			6	0 12 0
<i>Manuring</i>				
30 cart loads of cattle manure				
@ 0.8-0 per cart load				15 0 0
Sheep penning—(500 Sheep)				2 0 0
Spreading cattle manure			10	1 4 0

