Cultivation of Sivapuri Tobacco

By C. S. KRISHNASWAMI, L. Ag.,

Agricultural Demonstrator, Chidambaram.

Sivapuri tobacco, is well known throughout South India and is considered as the best among the varieties grown for chewing. The same variety when grown in other places is not considered as good as the stuff grown in this village. This is attributed to the quality of the soil. Sivapuri village, is about two miles from Chidambaram Railway station and consists mostly of 'wet' lands irrigated by channels from the Coleroon river. Except for a limited area round about the village site, about 120 acres in extent, there are no other 'garden' lands, and the entire area is cultivated with this variety of tobacco.

Details of cultivation. (i) Soil. The soil is a sandy loam, become rich in humus due to heavy manuring every year with cattle manure and village and town rubbish. It is also rich in potash and the colour is grey. The cost of this type of land, ranges from Rs. 4000 to Rs. 8000 for an acre, but very few are willing to part with it, since they fetch a good amount Rs. 200 to Rs. 250 per acre when leased out. The assessment for such lands, however, varies from Rs. 2 to Rs. 3 per acre.

- (ii) Rotation. In this area, tobacco is raised every year from November to April. No rotation is practised. The lands remain fallow during the remaining months. The cultivators are of opinion that if any crop other than tobacco is cultivated, the quantity and quality of the cured leaves will be affected.
- (iii) Seed bed. Raising vigorous and healthy seedlings requires great skill and care. High level lands with good drainage are selected near a pond or a well for raising the nursery. It is dug to a depth of about 9 inches to I foot with mammutties twice or thrice till the soil attains fine tilth. two cartloads of well rotten cattle manure are evenly spread and incorporated into the soil. The surface soil is levelled and small beds are formed. One to one and half tolas of good tobacco seed, collected from the previous year's crop is sown mixed with one pound of fine sand. The mixture is evenly sprinkled twice or thrice to ensure uniformity. The seed-beds are then pressed with the palm of the hand to compact the soil. Water is sprinkled by means of a rose can and the beds are covered with plaited coconut leaves. The seed beds are watered regularly, both in the morning and evening for a week. The seeds begin to germinate by that time and the shade is removed. For the next 24 days, the beds are watered once a day generally in the evening. The beds are carefully hand-weeded twice or thrice during this period. Sowings are generally done from the middle of October to the middle of November. The seedlings will be ready for planting in about 40 days, after sowing.

- (iv) Preparatory cultivation. After the harvest of the tobacco crop in April, the fields lie fallow till next September. Not less than four or five ploughings are given with a fairly big sized country plough in September. In October or November, just a few days before planting, the land is thoroughly dug with mammutties to a depth of about 9" to 12".
- (v) Manuring. Nearly 60 tons of well rotten cattle manure and wood ashes are applied to one Kani (1.33 acres) of land from April to September. Not less than Rs. 100 is spent in manuring alone. Ammonium sulphate and oil cakes were tried by a few ryots but were found to produce poor quality leaves.
- Planting. After thoroughly preparing the land and just before (vi) planting, parallel lines 3' to 31' apart are marked out both lengthwise and breadthwise. If the soil is rich, 31' spacing is adopted. At the crossings of these lines holes are made with small tapering pags, enough water is poured and vigorous, well grown seedlings are planted, one in each hole. Green leafy twigs are planted beside each seedling, to provide shade till it is established. Planting is done only in the evening after 4 p. m. About 5000 seedlings, are required for one acre. Pot watering is continued for about 40 days, after planting.
- (vii) After cultivation and irrigation. Within 40 days, four hoeings are usually given at intervals of about a week beginning from the second week. The first hoeing is given round the plants with a pointed bamboo stick. Other hoeings are given with mammutties. The soil is thus kept in a very fine condition entirely free from weeds. After the final hoeing, beds and irrigation channels are formed enclosing four to six plants in each bed. From the 40th day the crop is irrigated once every alternate day. When the plants are about 70 days old they put forth flowers. Only three to four plants for each Kani are allowed to flower and set seed while the rest are topped', leaving 12 to 14 leaves per plant. The side-suckers are regularly removed. Each plant is individually examined for insects and remedial measures are adopted as soon as they are noticed. Another mammatty hoeing is given about the 80th day. To avoid injury, the spreading leaves are fied round the stem with 'paddy straw twist' and hoeing given around the plants. The leaves are untied after the operation. For about 10 days after the final hoeing, irrigations are given daily and later the crop is irrigated on alternate days till it is harvested.
- (viii) Pests and diseases. There are no serious fungus or other diseases affecting this variety. Plant lice (Myzus persicae) and tobacco caterpillars are the major insect pests invariably found every year. When plant lice make their appearance, a paste made of neem (Aziderachta indica) oil cake sweet flag (Acorus calamus) and chilli (Capsicum annuum) powder is smeared on the leaves with the aid of a crude coconut fibre brush. About 20 lbs. of neem cake, 3 lbs of chilli powder and \(\frac{3}{4} \) lb. of sweet flag rhizomes are required for treating plants in one acre. Irrigation is withheld for the next

two days. The affected leaves wither along with the insects and the pest is thus kept in check. The leaf eating caterpillers are regularly hand picked in the morning before 8 a.m. No special labour is engaged for picking them or for applying the paste as the regular coolies engaged for the cultivation do these operations with-out any extra remuneration.

- (ix) Harvesting. The crop is ready for harvest in about 120 days after planting. The drying of lower leaves and the appearance of the oval shaped spots called 'Mohar' on the top leaves indicate that the crop is mature. The leaves are thick and gummy at that time. On any convenient day, not exceeding 125 days after planting, the plants are harvested in the evening about 4 p. m. by cutting the whole plants at the bottom of the stem. They are left in the field in an inverted position thoroughout that night till about 8 a. m. on the next day.
- (x) Curing. The next morning the plants are collected, stored in small heaps and covered with straw till about 4 p. m. Again they are spread out in the field till next morning. This sort of sun curing is continued for a week. The plants are then removed and hung in the shade without touching each other. This method of shade and air curing continues for a week. At the end of the period the plants are removed and the leaves cut off with a portion of the stem attached to the leaves. The central core of the stem is generally rejected. While stripping, the leaves are carefully graded. The top four leaves are generally 'graded as "class I". The next three or four form "class II". The next three or four form "class II" and the remaining ones which are usually brownish and withered, form "class IV". The classification is generally based on the thickness and weight of leaves, and 'Mohar' marks on them. Five leaves in each sort are tied together into a sheaf and 40 sheaves form a bundle.

These sheaves are arranged in the form of a rectangular heap in shade where there is not much draught. The bottom, sides and the top of the heap are covered well with dried tobacco leaves and pressed down with wooden logs and left undisturbed for a week to nine days. The heap is rearranged at the end of that period; and allowed to remain so for another week. The sheaves are then removed and allowed to dry in the shade for nine or ten days. The leaves will be sufficiently dry by then and will be ready for marketing. They are packed into bundles covered with mats and stored in a dry, cool place, till they are disposed. About 14 to 16 bundles with an aggregate weight of about 2000 lb, are obtained from an acre.

(xi) Marketing. The leaves are sold in terms of bundles only andnot by weight. Each bundle contains 2400 leaves. A bundle of "class I"
leaves weighs 150 to 170 lbs, "class II" 120 to 130 lbs, and "class III"
leaves only 100 to 110 lbs, per bundle. The last class leaves are very poor
in quality and do not weigh more than 70 to 90 lbs, per bundle.
The chief market for the "class I" leaves is Chettinad. Merchants from
Karaikudi and other towns in that area advance money to the cultivators
and purchase the cured leaves in May-June. Till very recently there

was considerable demand for Sivapuri leaves. Of late, and especially during the last two years the market is dull. Tobacco leaves are being sold nowadays in small packets in retail. It is reported that tobacco grown in Sivapuri is adulterated with tobacco grown in other parts and sold in retail as 'Sivapuri' tobacco.

Cultivation charges for one acre.

	D				rer acre.				
	Expenditure.								
1.	Nursary:-				7				
	Preparing the nursery	. 520 a.a.	\ est		. 0	8			
	Cost of 21 cart loads of cattle	manure	4.09		2	8			
	1½ tolas of tobacco seed	W#=()	:) (** 1	***	0	12 12			
	Pot watering for a month	•••	***	***	0	4.0			
2.	Main field preparatory cultivation :-	Main field preparatory cultivation :-							
	Ploughing with country plough, 4 times @ Rs. 1-4-0 per								
	ploughing	***	***	***	. 5	0			
	Digging with mammutty to a d	epth of 1	' 24 men @ 5 as.	***	7	0			
3.	Manures and manuring :-								
	Carting 45 tons of cattle manure from Chidambaram and the neighbouring villages including carting charges								
	@ Rs. 2 per ton		· in the contract of the contr	4	90	0			
	Spreading the manure evenly	444	***	14.00	3	Ω			
	Planting the seedlings in lines	31' apart	, in		10	0			
4.	After cultivation:								
	Hoeing with mammutties at intervals, 4 times								
	Suckering, topping and treating the affected plants								
5.	Irrigation:-		*						
	Fitting up Picottah for irrigati	on	***		2	0			
	그는 그 그 살아 아이들이 그 주요하다 되다 살고 되었다는 그 그는 이상이를 다 살았다.				4	0			
	Renewing leather rope bucket	etc	***	1000					
	Lifting water once in two day		onths		64	0			
6.	그리고 그러워 있는 이 사람들이 아무리는 사람들이 되었다. 그 사람들이 가게 하는 것이라고 있다.		onths	***	64	0			
6.	. Lifting water once in two day	s for 4 mo			64 32	0			
6.	. Lifting water once in two day Harvesting:—	s for 4 mo		***		1773			

5 men on Rs. 8 per mensum are engaged for each Kani for about 5 months. All the above mentioned operations including the curing are done by them. No casual coolies are engaged for any of the operations.

Receipts.

. The value of the cured leaves is :-

						Total Rs.	690	
1	110	" class IV "	100	Rs. 10		Rs.	10	0
1	**	"class III"	**	Rs. 20	300	Rs.	20	0
2	97.	"class II"	. **	Rs. 30	**	Rs.	60	0
	oundles	of "class I" le	eaves	@ Rs. 60 pe	r bundle	Rs.	600	0

LIBRARY



ain per acre Rs. 180.