this white tusklike projection ryots call the disease "Anaik-kombu" or 'Ivory disease.' The growing part being thus affected, branches shoot from the node next below. A badly affected plant with leafy branches looks like Varagu (Paspalum Scrobiculatum), of course, with no earheads.

The impudent fly is more or less musquitolike in appearance with a pair of antennae or feelers, each about a fourth part of an inch in length. The abdomen is pale white and pointed towards the anal end. This lays eggs singly on plants.

Fortunately the insect is not left unchecked to work havoc in the fields. A very small fly known as a chalcid, less than a pinhead in size, parasitises the maggot by laying its eggs on its body. The larvae hatching from the eggs feed on the non-vital organs of the maggot inside till it finishes up its pupa case. Now the chalcid larvae feed on the vital organs and finally, after eating up the maggot, pupate in the same case. Out of this, a number of chalcid flies come out to do the beneficial work. Yet these useful insects which appear rather late in the season cannot prevent the heavy loss which occurs to an appreciable extent. Long duration Samba is found to withstand to some degree while the short duration varieties suffer most.

K. R. SANKAR, Farm Superintendent, Pudukotta.

## Cultivation of Colocasia (Chemboo) as practised in South Malabar.

Varieties:—There are three varieties:—I Ordinary (Sadharana) 2 Notti and 3 Kizakkan. Leaves and leaf stalks of No. 2 are bigger than No. 1. No. 3 is the biggest, the tuber of which is stout and is 6 inches to 2 feet in length; the colour of the tuber

and leaf stalk is generally reddish. Seed tubers of the first two can be had at about 2 as. per 100, whereas Kizakkan tubers cannot be had for anything less than Re 1 per 100. On the whole Notti is the best and most paying variety.

Soil:—All the above varieties are generally grown in the laterite and loamy soils of the District. Red loams probably are best suited. Chemboo is cultivated in dry and wet lands; if in the latter, they must be of a slightly higher level and fairly drainable.

Cultivation as adopted in the wet land:-To avoid failure in germination and economy in watering, germinated seeds are generally planted out. Seed is first immersed in cowdung water for about two hours, kept in loose soil nursery for two weeks and the nursery is slightly watered daily. In February-March germinated tubers are planted out in circular pits, more than a foot in diameter and 9 inches deep, leaving a distance of 3 feet from the centre of one pit to the other. Pits are made on slightly raised beds. 3 or 4 tubers in the case of the first two varieties are planted in each pit and only one tuber in the case of Kizakkan. The pits are in all cases manured with dried cattle manure at the rate of two seers per pit. Kizakkan is planted 2 or 3 weeks earlier. About 30 days after planting, pits are weeded, slightly hoed and manured with dried cattle manure at about a seer per pit. In June, after getting a few showers, the pits are opened out slightly, another dose of cattle manure at the above rate is given and green leaves at about 2 or 3 lbs. each pit are also applied. Pullangi (calycopteris floribunda) leaves are considered to be the best. Over the leaf, earth is also thrown and it is taken from the opposite sides of the pit so that a drainage channel is made between the rows of chembu pits. is not uncommon to mix some ashes also with cattle manure for the 2nd and 3rd manuring. Hand watering is given till the beginning of the rains once in 4 or 5 days. Nothing else is done till the crop is harvested in August.

There is no doubt the crop is a very paying one. From 4 pits, about a riddleful of tubers worth 4 to 8 as. is obtained. Roughly the yield is about 40 fold in good lands.

A second crop of paddy is often raised in the land after the harvest of chembu.

Cultivation in the dryland:—Planting is done in May after a few showers have been obtained. Crop is harvested in November. No irrigation is necessary and other treatment (manuring etc) is exactly as detailed above.

Seed:—It may be noted that chembu cultivated in the wet land is more tasty and easily digestible but it does not keep very long. The tubers selected out of the dryland harvest has therefore to be preserved in pits for seed. Some ryots keep a few pits unearthed till the planting time. The germinating tubers are dug out and planted straight away at the proper time.

M. GOVINDA KIDAVU,
Farm Manager.

## Sadai Samba cultivation in the Gobichettipalayam Taluk.

The cultivation of this variety of paddy is confined to the lands under the branch channels from the main ones of the Bhavani river where water is allowed from 15th June to 15th November to these reaches. This is a heavy yielder when treated in the 'dry seed bed' system. As much as 30 salagais or nearly 5000 lbs. are obtained. The object of the ryots is to raise seedlings so as to enable them to plant them by the end of June