

that had set a couple of months before the spraying was given and as such could not have had the benefit of the treatment.

Conclusions. (1) Reduction of scab injury due to thrips attack is possible through insecticidal treatment.

(2) Tobacco decoction spraying alone has been found to give statistically a higher percentage of good pods totally free from scabs.

(3) Early and later rounds of sprayings are indicated to be necessary if effective control of scab injury in capsules is desired in the first two and later pickings.

Acknowledgements. The authors are greatly indebted to the Anamalais Planters' Association and to Mr. K. M. Thomas, Government Mycologist, Coimbatore, for their active assistance in the initial stages of the experiments. Our special thanks are due in a great measure to Mr. E. N. House, Manager, Pudutottam Estate, for placing the field and bungalow on Korangumudi Estate at our disposal and for sparing no pains in giving continued help right through. The arduous task of harvesting and curing the capsules from the experimental plots was solely done by Mr. Thomas, the field assistant to Mr. House, to whom our thanks are also due.

References.

1. Molegode, W. (1938). *The Tropical Agriculturist*, 91 : 325.
2. Ramakrishna Ayyar, T. V. (1935). *Bull. Ent. Res.*, 26 : 357.
3. Ramakrishna Ayyar and M. S. Kylasam (1935). *Bull. Ent. Res.*, 26 : 359
4. Subbiah, M. S. (1940). *Madras Agricultural Journal*, 28 : 379.

A Short note on dry-land paddy in Udayarpalayam.

By T. V. AYYASWAMI IYER,

Agricultural Demonstrator, Ariyalur.

The Udayarpalayam taluk of the Trichinopoly district is noted for the cultivation of dry (purely rain-fed) paddy. This occupies about 30,000 acres of red sandy soils. The average rainfall of the tract for the preceding five years is 13.9 inches in the South-West Monsoon (June to September) and 23.4 inches in the North-East Monsoon (October to December). The important dry paddy varieties are (1) *Perunel*, (2) *Kaivirai samba*, (3) *Kalian samba*, (4) *Kattaikar* and (5) *Motta kuruvai*, and all these varieties are invariably sown broadcast. Taking advantage of the summer showers, the lands are ploughed 4 or 5 times, cattle manure at the rate of about 12 cart-loads per acre applied and the fields kept ready for sowing on the receipt of the first rain.

Peru nel is a coarse variety of about 8 months' duration and is confined to low lying lands where water stagnates till January. This is, therefore, sown early before the land gets too wet for sowing. *Kaivirai samba*, *kalian samba* and *kattaikar* are also coarse varieties but 6 months in duration.

They are sown between 15th July to 31st August. Of these *kalian samba* is more drought resistant than the other two. *Mottakuruvai* is also a coarse but short duration variety of 3 months. This is sown in August—September in high level lands. Generally two weedings are given before the crop is harvested.

The rainfall during the North-East Monsoon period was above average in 1937, 1939 and 1940 and in these years the yield of dry paddy crop was fair. It is, therefore, felt that in places where the rainfall is about 14 inches during the South-West Monsoon period and above 24 inches during the North-East Monsoon period, dry paddy can be tried. As the varieties mentioned above are not fastidious about soil and are doing well in sandy soils where groundnut is grown, it is suggested that these can either replace groundnut or be rotated with it.

EXTRACTS

Importance of the Fruit Products Industry in India. *By Kr. Birendra Narain Singh, M. Sc.* Fresh fruits preserved temporarily are imported into India at an average of thirty lacs of rupees per year, as follows:—1931—Rs. 33,66,661, 1932—Rs. 26,63,242, 1933—Rs. 32,17,543; 1934 Rs. 28,25,884. Canned and bottled fruits and vegetables worth eleven to twelve lacs of rupees per year are imported:—1931—Rs. 8,35,610; 1932—Rs. 6,96,339; 1933—Rs. 9,50,102; 1934—Rs. 10,66,985; 1935—Rs. 11,02,793; 1936—Rs. 11,23,025; 1937—Rs. 10,06,393 and 1938—Rs. 12,11,598. Fruit products in the form of jams and jellies are imported as follows:—1931—Rs. 4,34,808; 1932—Rs. 3,86,025; 1933—Rs. 6,40,577; 1934—Rs. 6,28,948; 1935—Rs. 6,89,192; 1936—Rs. 6,74,289; 1937—Rs. 7,31,887 and 1938—Rs. 6,54,847. Besides the above, preserved fruits in the form of pickles, chutneys, sauces and other condiments are annually imported as follows:—1931—Rs. 4,24,941; 1932—Rs. 3,87,829; 1933—Rs. 6,27,910; 1934—Rs. 7,05,295; 1935—Rs. 6,78,835; 1936—Rs. 6,48,872; 1937—Rs. 7,19,882 and 1938—Rs. 6,21,675.

Besides, it has come to the notice of the present author that a few commercial concerns, constituted to manufacture fruit products on a large scale, failed, not for want of capital, machinery or organization, but for want of accurate and scientific information about the behaviour of different Indian fruits when preserved. Therefore, a systematic study was needed and consequently the author thought it advisable to undertake this kind of investigation particularly with a view to the most satisfactory utilization of the tremendous fruit resources in this country.

As a matter of fact all the Indian fruits can be converted successfully into some form of preserve. But none of this product is being made on a large scale in our country and as a result there is a tremendous waste of fruits and vegetables. Fruit products in the form of canned and bottled fruit jams, jellies, pickles and sauces are imported in our country at an average of about sixty lacs of rupees per year. Such a huge problem which faces us at the present time has attracted but little attention from Government or the public.

Let us examine the fruit gardens of some other lands, where every blade of grass is taken into account and people have made their fortunes out of fruit cultivation; e. g. the Hawaiian Islands, California and the Malay Peninsula. The fruit industry there is very prosperous; they export huge quantities of fresh and preserved fruits, to all parts of the world every year. In the course of the