

Fruit Growing in the Plains.

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ALTHOUGH fruit growing in the plains has been practised from time immemorial, it is only very recently that, as a commercial industry, it has begun to make an appeal to the rural classes in this Presidency. The phenomenal success achieved in the development of fruit industry in other parts of the world, the recently accumulated scientific evidence on the valuable dietetic qualities of fruits combined with the general post-War depression in the price of the agricultural produce, have been to a large extent responsible for inducing the agricultural classes to take up commercial fruit growing in right earnest. The few pioneer attempts that have been made here and there in the Presidency have stimulated this desire by demonstrating the fact that fruit growing, if carried on properly, is one of the most paying agricultural professions.

In recent years, it has been the good fortune of some of the fruit growers of the Kodur Pirka to get an annual income of over a thousand rupees per acre from citrus growing. Such huge profits have, no doubt, served as an incentive for the rapid extension of acreage under this fruit in several parts of this Presidency.

The Government of Madras have fully realised the importance of giving an impetus to this industry for a long time past. Thanks to the Imperial Council of Agricultural Research, who generously made a grant of about Rs. 66,000 spread over a period of five years, the Government of Madras have now been able to give a practical shape to its desire of furthering the industry by the starting of this Research Station in the centre of an important Citrus and Mango Belt of this Presidency. The above grant was supplemented by the Madras Government to the tune of Rs. 12,000 towards the cost of land. The sanctioned scheme includes a recurring annual grant of Rs. 3,500 towards working expenses besides, pay and allowances of staff and a non-recurring grant of Rs. 8,656 towards buildings, Rs. 3,000 for fencing, Rs. 600 for livestock and Rs. 4,000 towards other miscellaneous requirements.

The Fruit Research Station at present comprises an area of about 50 acres, and in addition to the Superintendent, it has a staff consisting of a Farm Manager and a fieldman. Although the land was taken possession of on 1st March 1935 the actual research work can be said to have commenced in the beginning of August 1935 when

the Superintendent took over charge of the Station. Though the aim of the Station is to tackle problems involving all aspects of fruit growing, it is manifestly impossible to do all this simultaneously for various obvious reasons. Among the major problems to be dealt with, are the introduction and trial of almost all the varieties of citrus, mangoes and other fruits of proved merit and of acknowledged importance in the fruit trade, with a view to find out the most suitable and commercially profitable ones to the region. Side by side, a comprehensive scheme of experiments on the cheapest and most convenient methods of raising trees with the ultimate object of stocking our gardens with healthy, vigorous, precocious and most productive trees, budded or grafted as the case may be on most desirable stocks, are proposed to be taken up. Every fruit grower realises the very great importance of this work, for, the selection of stocks and method of propagation makes all the difference between failure and success in the case of permanent crops like fruits, particularly because of the fact that the result of the defective nursery practices would become evident only six to eight years after planting.

Besides these, it is well known that there are other problems like cultivation, manuring, irrigation and disease and pest control of fruit trees with which the fruit growers are at present almost entirely in the dark, as is evidenced by the marked variation in the orchard practices from place to place. The research station aims at standardisation of such practices and impart knowledge of practical value in all these various aspects of fruit culture.

There is another aspect in which the fruit growers are at present greatly handicapped and that is the purchase of reliable nursery plants. Without dilating much upon this important phase it may however be stated that the failure of many gardens all over the Presidency is in a large measure due to planting of useless trees of unknown parentage, sometimes supplied even under wrong names. The Research Station wishes to solve this difficulty by arranging to supply, if possible, reliable plants of known parentage propagated from trees of proved merit.

These problems are also intimately connected with the proper nomenclature and classification of fruits—a subject on which there exists at present very great confusion and therefore needs to be dealt with exhaustively.

Food Investigation.

THE report of the Food Investigation Board for 1935 (His Majesty's Stationery Office, 4 sh. net.) contains a number of items of general and scientific interest. Amongst them may be mentioned the successful experimental shipments of chilled beef from New Zealand, stored in air enriched with carbon dioxide. This method enables the chilled beef to be stored from 60 to 70 days. With regard to fruit storage, the value of iodised paper as a wrapping material has been demonstrated. The method delays the development of fungi which cause rotting by considerably retarding the growth of the germ tubes. It can be employed without impairing the flavour, for grapes and other fruits, but as yet the method is

unsatisfactory with peaches and some varieties of plum.

It has been found that the concentration of Vitamin C in an apple increases as the skin is approached and is six times as great in the peel as in the region of the core. In the variety "Bramley's seedling", it was found that the rosy apples had more than twice the vitamin potency of those with green skins. Canning appears not to impair the vitamin activity to any great extent and successful results have been obtained in the addition of synthetic Vitamin C to tinned products such as spinach and runner beans which do not naturally contain it.

—*Science Progress*, 1936, 30, 521-22.