

exposed to the air. Three or four stiff sticks were planted round the basket, and a tent-like arrangement with sacking protected the trees from too much air and sun on the journey. The baskets were charged for but returnable. As a matter of fact the cost was so reasonable, that we used to pay for and keep the baskets for own use.

Let us hope that our nursery-men will take this hint to heart, and cease to ruin their young trees that have taken so much time and anxiety to grow. (*Jour. of Forestry, Vol. 29, March 1935*)

AGRICULTURAL JOTTINGS BY THE DEPARTMENT OF AGRICULTURE, MADRAS

Cotton Pests in Bellary. In the 'Hindu' dated January 15, 1936, there appeared an alarming report that the 'Hingari' cottons round about Bellary were subject to a severe aphid attack called 'Karijigi' as a result of which 70 to 80% loss in yield was apprehended. An officer from the Entomology section, from Coimbatore was immediately deputed to visit the area, study the situation and take steps to combat the pest should it really be so serious. He traversed nearly the whole of the cotton belt in company with the Assistant Director of Agriculture, Bellary and found that there was absolutely no cause for alarm as the alleged pest nowhere existed on a scale depicted by the paper. Barring the presence of a few stainers and bollworms in isolated areas the cotton crop was generally found to be free from pest of any kind.

Bud and boll shedding was however found to be slightly more than normal in certain areas due to the drought conditions that had set in from November onwards. In certain tracts where drought conditions were acute immature bursting and mummifications of bolls known as 'Guggi' in vernacular were also noticed.

Spraying Against Betel-vine Wilt Disease. Satyavaram village of Yellamanchili taluk in Vizagapatam district has been famous for its betel-vine cultivation for the last half a century. It exports betel leaves to distant places like Bombay Poona, Calcutta and Malabar. But in recent years a disease called 'wilt' has appeared resulting in the withering, wilting and eventually death of the vines. Damage has been, of late, so heavy, that gardens have been entirely swept away by the disease. The pre-disposing cause of this trouble appears to be the local practice of growing the same crop over and over for 4 to 5 years in the same plot though an interval of 2 to 3 years is allowed by leaving land fallow. The fungi causing the trouble are *Sclerotium rolfsii* and *Phytophthora Sp.* which are both soil inhabiting fungi. To demonstrate the methods of control a series of trials were laid out during the season in 1935. A definite number of rows were each treated with bordeaux mixture 1%, kerol .07%, phenyl .25%, and liming with an equal number of rows untreated for control. The above treatment was done alone and in conjunction with provision for drainage channels. The results observed so far have been satisfactory and the indications are that the above treatment in combination with provision for drainage was more successful than that without drainage which shows the great necessity for drainage in betel vine cultivation.

Money in Growing Flowers. In Madura District, flower growing especially of Chrysanthemum is mostly taken up by the Christian ryots round about Tirumangalam, Ammayanaickanur and Dindigul. They are small holders intelligent and industrious and make good profit per acre.

An enquiry conducted shows that they spend about Rs. 165 per acre from the raising of the nursery to harvest and the yield is about 20,00,000 flowers per acre and is sold at 0-4-0 a thousand which works out to Rs. 500. Deducting the cost of cultivation of Rs. 165, a net profit of Rs. 335 per acre is realised.

It is desirable that land owners near Madura, Tallakulam, Chockikulam and Pasumalai grow flowers as a trial on a small scale under the channel irrigation. They can easily sell their produce in Madura Town where there is a great demand. The area could be extended if they find the business paying.

Some ryots in Alankulam near Palamkottah in Tinnevely District cultivate roses and jasmine in red loamy and gravelly soils and get very good profit per acre. Generally roses begin to give profitable yield from the 2nd year after planting to fifth year and yield about 225,000 flowers per year which sell at 0-3-0 a 100. Deducting the cost of cultivation etc. it is reported that about Rs. 270 net profit per acre, per year is obtained.

In the case of Jasmine there is no profit in the 1st year and profitable income is obtained from the 3rd year onwards to the seventh and annually about 6 400 *palams* of flowers are obtained which are sold at 6 pies per *palam*. After deducting the cost of cultivation, there is a net profit of Rs. 195 per acre for about five years. The flowers are easily marketed in Tinnevely town.

It will be seen from the above that there is plenty of money in growing flowers provided ryots take advantage of growing them in suitable places round about towns. In big towns there is always a demand for them and marketing facilities are available.

Crop & Trade Reports.

Groundnut—1935—Fourth or Final Report. The average of the areas under groundnut in the Madras Presidency during the five years ending 1933-34 has represented 48.2 per cent of the total area under groundnut in India. The area sown with groundnut in the Presidency in 1935 is estimated at 2,492,500 acres. When compared with the corresponding estimate of 2,323,300 acres for the previous year and the actual area of 2,350,934 acres according to the season and crop report of the previous year, the present estimate reveals an increase of 7.3 and 6 per cent respectively. The estimated area for this year is less than the normal area of 3,317,650 acres by about 25 per cent. The increase in area is general outside Ganjam, Vizagapatam, East Godavari, Bellary, Anantapur, Coimbatore, the South (Tanjore excepted) and Malabar. The increase is marked in the Central districts (Coimbatore excepted). The area in Bellary and Anantapur has fallen from 412,600 acres to 292,000 acres due mainly to an increase in the area under cotton and other dry crops. The harvesting of the summer and early crop of groundnut was finished by October. The harvesting of the winter or main crop is proceeding. The crop is expected to be below normal in Vizagapatam, Guntur, Cuddapah, South Arcot, the Central districts, Tanjore, Tinnevely and Malabar. The seasonal factor for the Presidency works out to 92 per cent of the average as against 78 per cent in the previous year according to the season and crop report. On this basis, the yield is expected to be 1,143,400 tons of unshelled nuts as against 920,260 tons in the previous year, an increase of about 24 per cent. The yield in an average year is estimated at 1,660,990 tons.

The wholesale price of groundnut shelled per imperial maund of 82-2/7 lb. as reported from important markets towards the close of December 1935 was Rs. 5-14-0 in Tinnevely, Rs. 5-13-0 in Cuddalore, Rs. 5-8-0 in Vizagapatam Rs. 5-5-0 in Berhampore, Rs. 5-4-0 in Negapatam, Rs. 5-2-0 in Guntur, Rs. 5