

Rajasthan Project

THE Rajasthan desert which covers parts of four States is no doubt a tremendous challenge to planners and a great hurdle in India's effort to grow more food.

Inspired by the success of the experiment carried out at Abingdon, in Lybia and Tunisia, Esso-India felt that it could be tried in Rajasthan.

The Arid Zone Research Institute at Jodhpur was already engaged in the tremendous task of arresting the inroads of the desert. The Birla Education Trust, founded by the well-known industrial magnate and philanthropist, Mr. G.D. Birla, was also interested in the project. Esso got in touch with them and sought their co-operation in launching trials of the Esso methods.

The equipment for the project was fabricated locally under the supervision of Esso technicians.

Chosen Sites

Two sites—one at Pilani and the other at Bikaner—were chosen for the experiment after an extensive survey.

Seedlings, mostly quick-growing and economically valuable varieties like eucalyptus and casuarina, were planted by local labour on these plots and stabilising oil was sprayed over the entire area. For comparative study, seedlings were also planted on unsprayed plots.

Both these sites are under constant observation, and according to latest reports the plants are doing well.

Solving Fuel Problem

The planting of fuel trees alone will help farmers solve their fuel problem, and save valuable cowdung from being burnt away, and thus saving it for manuring the fields.

A ten-year old Casuarina grove on an acre of land, for example,

can yield 40 tons of fuel, enough for 50 families for a whole year. The fuel needs of an entire village of 100 families or 500 persons can be met by planting 20 acres under Casuarina at the rate of 2 acres per year.

There are many trees which are not as fast growing as Casuarina, Eucalyptus or *Acaci millisima*, but still yield large quantities of good fuel. Some of these which a farmer can raise easily in his fields or on bunds and borders or in groves are *babool*, *neem*, mesquite, *karanj*, *haldu*, *sissoo*, *jamun* and some casias.

The rainy season is the most suitable time for planting fuel trees. Seeds or seedlings of these trees are available to farmers from either the District Forest Officers or N.E.S. Blocks.

Fertilizing Paddy

Split application of ammonium sulphate, half at puddling and the rest a month after transplanting, is found to give best yield in paddy.

This was proved in experiments conducted at the Rice Breeding Station, Gurdaspur, Punjab, on the variety *Jhona-349* to find out the correct time and method of applying nitrogen. In these experiments, ammonium sulphate at the rate of 200 pounds per acre was applied in different doses at different times.

The best yield was obtained when half the fertilizer was applied at the time of puddling and the other half a month after transplanting.

Fruit Fly Attack on Snake Gourd

Recent researches show that by adopting a simple schedule of spray treatment, the damage of the fruit fly on the snake gourd can be controlled.

According to the trials conducted at the Agricultural College and Research Institute, Coimbatore, the crop has to be sprayed four times at intervals of 10 days each, with Parathion 0.025 per cent or endrin 0.02 per cent, commencing from the time the plants start flowering and stopping sufficiently in advance of the bulk harvest.

Any fruits that have reached the stage of edible maturity should be picked up before taking up the spraying.

Leaf Spot in Turmeric

The leaf spot disease in turmeric can be easily controlled by spraying Bordeaux mixture or 'Dithane'.

Experiments conducted in Madras State show that two sprayings with one per cent Bordeaux mixture are enough to control the disease. 'Dithane' was also found to be equally effective. 'Dithane' should be applied as spray by diluting one pound of the chemical in 60 gallons of water, which is enough for spraying an acre.

The leaf spot disease appears in the form of extensive spotting on the leaves. The affected leaves dry and die off. This badly affects the formation of turmeric and reduces the yield.

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Fertilizer Campaign In M. P.

With a view to popularising the use of fertilizers among the cultivators a fertilizer campaign was launched in Gwalior district from June 24 to June 30. The week-long programme comprised of giving practical demonstrations in the use of fertilizers and acquainting the cultivators with the importance of fertilizers to the agricultural production.

A district-level-Committee headed by Collector was formed to conduct the campaign. Tahsil and sub-divisional Committees were also set up. It was decided to distribute fertilizers on *taqavi* through Central Cooperative Bank. Service societies also helped. The services of Gram Sevaks, Gram Panchayats, Patwaris, Dalpatis and Updalpatis were also utilised in the campaign.