

11. If you cannot get the castor cake.
Some groundnut, next best doth make.
12. Per acre this costs twelve rupees.
The rich can add bone-meal with ease.
13. Yet other ways for you to know,
The Government Farms will gladly show.
14. O'er the delta, the Government staff do go.
What else you want, they 'll let you know.

B. Pattabhiramayya, B. A., L. T.

Notes.

**Paddy experiments at Sabour by S. N. Sil, M. Sc., A. (Cornell).
Behar Agricultural Journal Volume V, No. 8.**

Extensive trials of manures, varieties and culture are described, and the results so far obtained are related. The article is freely illustrated by photographs. The results of cultural experiments so far obtained indicate :—

1. That transplanting is better than broad-casting.
2. That as the date of transplanting advances the yield goes down, and that 4 to 6 seedlings give better results than two seedlings.
3. That there is not much difference in the performance of seedlings from different seed-beds sown at different dates and treated differently.
4. That different grades of seedlings are obtained from the same seed-bed.
5. That the tillerings can be transplanted successfully.

6. That the uprooted paddy seedlings can be very well kept alive for 10 days or more if the roots are placed in water and that they can even be kept in iron bins for 10 days with only 20% damage, thus making it possible to transport seedlings to long distances by rail.

7. That the root pruning of seedlings does not do the paddy seedlings any harm, while on the other hand it appears to stimulate growth.

8. That cuttings may be very effectively made from very old seedlings provided they are considerably noded, otherwise the cuttings will die.

Some of the foregoing results are particularly valuable to us this year when the seasonal rains have failed and wetland cultivation is at a stand still. In many places the ryots have not yet been able to raise seedlings for want of water in the channels, while in others where there were facilities for raising seedlings in time, the seedlings have become too old for planting. Under such adverse circumstances, agriculturists might try to import seedlings from long distances, if available, and thus they can save a month's time. Where very old seedlings are available the pruning of the seedlings, and planting them may also be tried on a small scale. The cutting must evidently be made below the growing point, which will make the stumps only about an inch and a half high. Planting such seedlings will be a difficult task, and water should be regulated for some days after planting, and the land must also be quite level. All the same, this system is worth a trial.

About root pruning it will be interesting to note that there is a practice observed in South Malabar which brings about the same effect though in an indirect way. The uprooted seedlings are bundled with all the roots outside and the shoots inside, and the

bundles are kept exposed from about 3 to 7 days, with occasional sprinkling of water. The seedlings are then transplanted and the local opinion is that these seedlings come up more vigorously than those pulled out and transplanted on the same date. Probably while keeping, the old roots lose their vitality and fresh adventitious roots develop which bring about a vigorous growth.

It is also believed that these seedlings are less liable to insect pests. Probably the insects and their eggs get destroyed in the heating heap, and the seedlings get a good start.

K. Raghavachari.

We have received from "K. R. Sankar of Pudukotah" a short note on "Temple gardens." The maintenance of a small flower garden near to or inside each temple compound in this Presidency is an ancient institution and such gardens used to be looked after by a special class of people called the "Pandaram." These gardens though primarily maintained for the sake of the flowers used in worship served also as "beauty spots" in the place. They further helped to open up the air in crowded cities and to some extent served the purpose of parks now so frequently advocated by Health and Sanitary officers. The author deplors that such gardens are gradually dying out and pleads for a revival of these useful institutions. To big Devasthanams like Madura, Tirupathi and Trichinopoly he considers that small schools may be attached for teaching the elementary principles of Horticulture, the attached gardens being sufficient for any practical training that may be required.

(Ed.)

We hear that M. Krishnaswami, a short course student of the College who passed only in the year 1918, is now working in the Government Military Dairy Farm, Bangalore. (Ed.)

Calf rearing. To those who are accustomed to feed calves with their dams' milk till they are weaned, it will probably come as a surprise, to learn that it has been found in an experiment made at WOBURN in calf feeding (Report of the Royal Agricultural Society of England for 1917) that whole milk is not necessary for calves more than a fortnight old. After this period, other foods could be given. In separated milk a good substitute is found, and if this is supplemented by crushed oats, it forms an excellent substitute, and is as good as, and certainly cheaper than, whole milk fed throughout. If separated milk is not available, water could be substituted along with meals. This would certainly reduce the cost a good deal but the gains in live weight are naturally not so high. In such a case a mixture of foods like Beans, Maize, Palm oil is better than a single food like crushed oats. They are best given dry and gruels are generally considered undesirable. It is also found that Fish meal with maize makes a good and economical food for calves. Purchased calf meals are generally condemned because they are not generally economical and in many cases are not so good as they are said to be. In these days of milk scarcity, dairymen are well advised to think of suitable substitutes for calf feeding, so that they might strip the cows entirely,—a practice which is practically unknown in this country.

D. A. R.

Extracts.

Manurial value of cotton-seed meal.—Oil-pressing mills for the extraction of cotton seed exist in a number of the British West India Islands, notably in Barbados, St. Vincent and St. Kitts. The oil is mostly exported, but the residual meal or cake is almost entirely used locally either as a feeding stuff for cattle or as a manure. In the Agricultural News (1916, 15, 273) an account is given of the manurial value of the meal when applied directly to the land, and reference is made to experiments which have