There is however, considerable scope for improving the Crop and Plant Protection Service. The following are a few suggestions that would help in making the service more effective and more useful to the general public.

1. The strength of the plant protection staff has to be increased in districts like Krishna where extensive work is to be done.

2. The staff must be properly equipped with speedy transport vehicles, proper camping requistes, spraying and dusting appliance.

3. Adequate stocks of chemicals and insecticides have to be built up and kept in strategic centres where from they could be obtained at short notice whenever they are needed anywhere in a particular district.

4. A large amount of publicity is also very desirable to keep the activities and the service rendered by the Plant Protection staff always in the public eye. This would help in a better and greater use being made of the Plant Protection Staff, by farmers, to their better advantage.

Potato tops and sprouts as seed

By

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Under the stress of wartime and postwar food shortages, new methods of growing potatoes without impairing yields are being explored in various parts of the world, at the Nanjanad Potato Station too, attempts have been made to reduce the seed rate of potatoes by making use of tuber tips and sprouts as planting material. The sprouts were removed from uniform seed tubers and planted in a nursery under shade with 2" spacing. These sprouts were transferred from the nursery to the main field 3 weeks later. On the same day as these sprouts were planted in the nursery, seed tubers with sprouts intact and seed tubers with sprouts removed were planted in the main field. For tuber tips, uniform tubers weigning 2 ounces were taken and tips weighing half an ounce were cut from the crown ends. These were spread over moist gunnies for 48 hours for suberization after which fine sulphur was dusted

on the cut surfaces and the cut pieces kept on wooden racks for sprouting. These were compared with half ounce, one ounce and two ounce whole tubers (the variety used was Great Scot in all treatments).

The experiment was continued for nearly five years from 1944 to 1948 and the following are the conclusions from the data from these experiments:

The method of using sprouts for planting cannot be recommended in the Nilgiris, although Puskarnath* obtained "Good yields" from sprouts in Simla and even recommended this method for rapid multiplication of varieties. Under Nanjanad conditions constant attention and frequent irrigation were found essential. Under drought conditions sprouts are a failure. During the main crop and the irrigated crop seasons fair yields are obtained but they are uneconomical. Yields from tips were found to be always lower than those from whole tubers weighing two ounces. From a number of experiments extending over a period of five years, it is proved that 2 oz. tubers give the maximum economic yields.

It may therefore be concluded that neither sprouts nor tips are capable of being used in place of the usual method of using 2 oz. whole tubers in the Nilgiris. Fair yields can of course be secured, but for large scale planting by ryots, the methods are not suitable as the returns are uneconomical.

Some aspects of the fodder problem in the Madras Presidency†

By

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India is primarily an agricultural country, where cattle form the backbone of agriculture, both as prime movers for all farming operations and as suppliers of milk and manure. In recent years, the food problem in India has assumed serious proportions; but in fact the fodder problem is even more grave. Our deficit in fodder is over 100% and production must be more than doubled if our

* Pushkarnath 1945. Current Science, 14 : 236–237.

† Abstract of paper presented at the 32nd College Day and Conference.