

FOOD PRODUCTION SUGGESTIONS

STATE COLLEGE OF WASHINGTON

EXTENSION SERVICE

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State College of Washington, United States Department of Agriculture
co-operating.

Demonstrating the Tractor to the Farmer.

According to J. P. Fairbank of the Agricultural Engineering Department, Washington State College, farmers are much interested in tractors this year and many have bought. Many others see the possible advantage of tractors for increasing food production if the farm land is suitable for tractor farming. To determine the ability of tractors to operate successfully on the hills and in the loose soil in certain fields actual trials must be made. There has been considerable difficulty and misunderstanding between tractor dealers and the farmers in the way of this demonstration. Many times the farmer has been unreasonable and demanded that the tractor dealer must satisfactorily plow a large acreage of his farm before he will buy the machine. This has led some tractor manufacturers to refuse to make demonstrations. They virtually tell the farmer when he comes to buy the machine that they have it in the warehouse and if he wants it he must take it at his own risk. Unless the farmer knows absolutely that that particular type of tractor will do his work satisfactorily, he cannot be expected to buy the machine on any such basis, as he then is taking the entire risk.

On any piece of farm land which is in any way unusual from that on which tractors are already successfully operating the tractor dealers should agree to demonstrate the ability of their machine to work. In all fairness to them, however, the farmer should agree to pay the tractor company a fair rate for any work that may be done by the demonstrator in case he does not buy the machine. By friendly co-operation in this way more tractors that are of actual worth will be put out on farms and it will eliminate in many instances the purchase of machines which are unsuited for certain classes of work.

It is of considerable importance to our increased food production campaign that tractors do not go out on the farms and make absolute failures, for one tractor failure will offset the effect of many successful instances.

As a usual thing a farmer is justified in asking for a short demonstration on his fields, but he should not ask unreasonable performance and should be willing to pay the dealer a fair amount for the work he has done.

A. Floyd Heck of the Soils Department, Washington State College says that: Summer-fallow literally means clean cultivation throught the summer season; anything short of this is done by halves and the fullest measure of the fallow year is not realized.

In the regions of winter precipitation, such as eastern Washington, the fallow season should begin as early as possible. In the early part of the season, moisture is lost by direct evaporation from the soil, and a little later also even to a greater extent used by the weeds which spring up and grow on the non-cultivated lands. Early cultivation will aid conservation

in both places. Before the spring grain is seeded or even the seed bed prepared, the land to be fallowed should be disked. This operation creates a mulch and at the same time kills the early weeds saving at once the moisture that would otherwise be lost. This land will then hold its moisture well until the spring grain is seeded, when the fallow should be plowed, worked down and then clean cultivated thruout the remainder of the season. Some farmers prefer to fall plow where possible on account of the better distribution of labor. In that case the disk and the harrow will put the land in shape for the fallow very early in the season.

There are two very important points to be remembered in connection with the fallow year, first, that it must begin early in the season and, second, that it must be kept clean of weeds for the remainder of the season, for the weeds are as little pumps which very rapidly rob the soil of its moisture. These two factors are the ones which count for the most in the conservation of soil moisture during the summer season and the lengthening of the period during which available plant food materials are formed.

There have been a good many letters received lately by the Horticultural Department of the State College of Washington, says Professor O. M. Morris, asking as to the advisability of using thorough spraying as protection against plant diseases and insects that have not appeared this season; and which apparently may not appear this year as a heavy infection. The only safe plan for the fruit grower to follow is to use complete insurance in his spraying and tilling methods. It would be as unwise to neglect spraying, because the season up to a definite date does not promise a great many pests of any kind, as it would be to neglect tillage because we believe we are going to have plenty of rainfall and plenty of water. Thorough, complete spraying is the only process that should be practiced.

In the rainfall sections of the state where scab and similar diseases are bad, the best that can be done is to spray as a calyx spray completely, using the lead arsenate and the lime-sulphur combined as a calyx spray. If the owner of the orchard is prejudiced against combined spray then two applications, one immediately following the other, should be given.

The thoroughness of the application cannot be over-emphasized. In definite tests it has been proven that the top of the tree is the part most often neglected, and the part of the tree most commonly infested, particularly with diseases. This is not always true, in speaking of the wood of the tree only, but it is generally true, on the average, with the fruit produced. Thorough spraying of the tree-top is very important.

Those who have superintended spraying work on a large scale know very well that the greatest difficulty encountered in teaching a new man to handle a spray rod well, is to convince him that more thorough work is required in the top, and in inspection work, to find branches that have been missed by the spraying is not uncommon. We always look in the top first, and practically always find most of the missed parts there.

Thorough spraying is worth while if any spraying is worth while, and it is especially important to note that every bit of fruit saved from infection is that much net gain. All of the infected fruit at the time of harvesting requires just as much handling as the extra fancy up to the time of packing, and the greater the amount of infection of scab, scale, or worms, the greater the amount of attention which it is necessary to exercise in the sorting and grading work.