SUGAR BEETS FOR WESTERN OREGON

Advantages and Obstacles Considered by Expert Agronomist

MADE - IN - OREGON SUGAR

Sugar Beets Good Money Crop, Fit in Rotation, Improve soil Conditions and Keep Money at Home.

Some of the principal advantages, difficulties and conditions of sugar-beet growing in Western Oregon are explained for the benefit of Oregon agricultural and consuming interests, by G. R. Hyslop, associate professor of soils and crops at the Agricultural College, somewhat as follows:

One of the chief advantages of establishing a successful sugar beet industry in Oregon is that the use of another made-in-Oregon product would be achieved. Sugar is an article that is used by everyone and not produced in the state. On the basis of the per capita consumption of 82 pounds annually by Oregonians the total yearly consumption is 55,166,750 pounds, for which money is sent out of Oregon. Keeping this money at home would be a big advantage to the entire state as well as to the locality in which factories were located. This fund would be redistributed among farmers and other producers and again used in the various industries and professions.

Another advantage of sugar beet production would be the addition of another cultivated crop for Western Oregon farms, which need an intertillage crop when long farmed to grain, as many have been. Successful sugar beet culture means tillage and that the crops must be rotated because sugar beets grown alone rapidly decline in yield, while on the other hand, various crops grown in rotation with sugar beets, are usually greatly benefited by the careful culture which must be given a paying crop of beets. The fact that the land is carefully hoed and cultivated throughout the summer, that it is occupied by a very deep rooted plant, and that the soil is deeply stirred in the fall in harvesting the beets makes the crop a particularly desirable one to include in a rotation.

Sugar beets fit into rotations very well. Systems may be used, usually consisting of sugar beets one year, followed by a fall-sown cereal, such as wheat, oats, or barley on which clover is seeded in February. The clover may be left one or, in some cases, two years and then plowed up and the field again put into sugar beets. We need, in the Willamette Valley, cultivated crops for our rotations; yet there are but few cultivated crops that can be grown on an extensive basis that will yield cash and give desirable results. We have a few crops which are ordinarily cultivated and these include corn, kale, mangels and potatoes. There is only a limited use for each of these products, with the possible exception of the potatos. It is, therefore, desirable to introduce some deep root crop capable of improving the physical condition of the soil and at the same time giving a valuable cash return. About the best crop that presents itself under these circumstances is the sugar beet.

As a plant, it is adapted to rather warm, sunny sections that are well supplied with moisture. It has long been known that the success of sugar beet culture depends to a considerable extent upon the sunlight of the locality and it is therefore usually a good plan to grow sugar beets in sections where there is a large amount of summer sunshine.

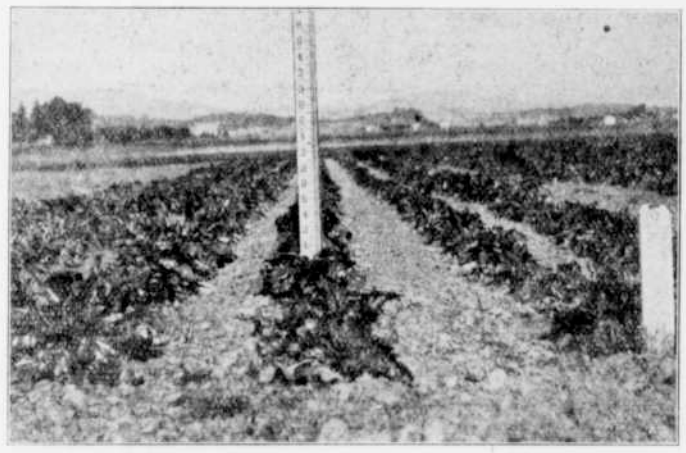
It is true that considerable amounts of nitrogen and potash are taken away by sugar beets, but with the sugar beet pulp brought back from the factory and fed to the stock there is practically none of this fertility lost. If sugar beets are grown in a good rotation with clover, it is very likely that the fertility conditions of the soil will improve rather than run down as a result of the culture of this crop.

The other and most desirable feature of the sugar beet crop, aside from its being a cultivated one, is that it means a considerable cash return for each acre in beets if that acre is properly handled. The yield of beets varies from ten tons per acre up to, in some cases, as much as 16 to 20 or more tons, when grown under very favorable conditions and if yields of 12 tons or better are secured there is money in the culture of sugar beets.

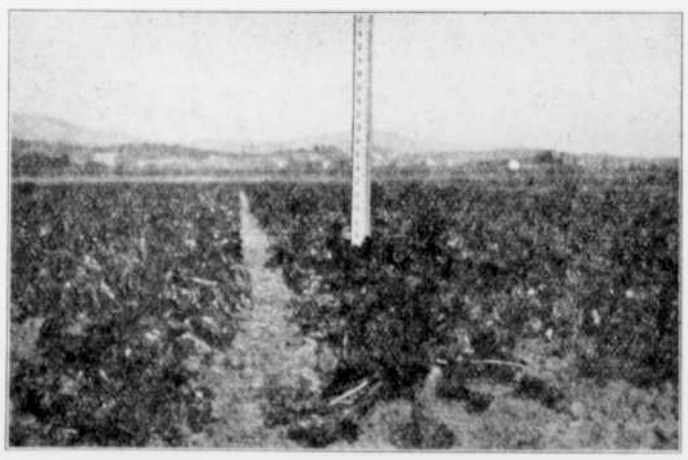
On the other hand, there are certain obstacles to overcome and certain factors which may appear to be disadvantageous to this industry. In the first place, it requires a considerable amount of capital to build and to operate the factory and to provide working capital for growers of the sugar beets. This large amount of capital is in active use only for a relatively short season as the sugar making campaign does not normally extend over from ninety to one hundred and twenty days. However, numerous factories at places where beets are produced successfully, have amply demonstrated that the investment is a paying one so the principal obstacle to be overcome is that of securing a sufficient acreage of beets for a long enough period of time that the plant may be assured of raw material on which to work. The difficulty is to secure enough farmers interested in the culture of beets on a small scale who will bring up the total acreage to about five thousand or more acres for the factory. It is not advisable to have a few with extremely large acreages for the reason that the crop is one with which most farmers are not familiar and one who has had no experience with the crop is in great danger of failure if a large acreage is undertaken. Five to ten acres the first year is enough while one is gaining experience. After having learned the ins and out of sugar beet culture the larger acreages may be safely tried.

The crop is an intensive one requiring a considerable amount of careful hand labor and this is a type of work which many grain and hay growers are not accustomed to. It will mean the securing of a considerable amount of transient labor for such periods as the thinning and hoeing and the digging and topping of the beets. In order to grow the crop successfully and without friction and labor troubles, it is necessary to have a considerable amount of working capital so that help may be paid off promptly. It costs usually from $35 up to, in some cases, $45 per acre to produce the beets and about $6 to $12 of this must be paid out for thinning and hoeing some time before the harvest time for the crop.

Our climatic conditions in general are very favorable for the culture of sugar beets in that we may get them seeded rather early and we have excellent growing conditions for them during the summer. It is true that our long, dry periods on the unirrigated soils will limit to some extent the yield of beets unless very good cultural methods are practiced. However, in the fall, it will be necessary to get the beets dug moderately early in order to avoid serious second growth. The fall rains which come on are likely to start the second growth of the beets which will lower their sugar content and if this is carried on to too great an extent it will make them less valuable for manufacturing purposes. However, it will be distinctly to the advantage of the farmer, as well as the manufacturer, to have the beets dug reasonably early. Our season by the middle of September is cool enough that the beets will keep very satisfactorily and if we leave them in the ground until it gets muddy, it will add materially to the cost of harvest. Under ordinary conditions, the beets should be harvested by the first to the middle of October not only from the standpoint of avoiding serious second growth but also to avoid the expensive digging in the mud. As far as climatic and soil conditions are concerned, I believe various parts of the Willamette Valley and the Southern Oregon section will successfully produce them, provided proper cultural methods are used.



Mangels unirrigated yielded 10,192 tons per acre same season.



Mangels given 6.5 inches of water and yielded 16.648 tons per acre.

EVERYONE BOOST FOR NATIONAL APPLE DAY

OCTOBER 19 THE DAY

Everybody may help boost for National Apple Day, October 19, according to Professor C. I. Lewis, chief of the Oregon Agricultural College Horticultural department, either by eating, serving or donating apples for the occasion. Not merely individuals but associations as well may take part profitably in promoting apple interests on that day, benefiting both the industry and their own health. Public schools, commercial clubs, transportation companies, hotels and mercantile establishments, as well as growers and market associations, may contribute to the general purpose of stimulating the apple industry by making a fuller use of that king of fruits.

"High schools," said Professor Lewis, "may well devote assembly hour on the morning of apple day to a discussion of the apple and its history, propagation, production and use. Students having access to library information may prepare historical and scientific sketches of the apple, showing the leading facts in connections with its development and use, while others living in apple-growing communities may prepare lists of varieties grown in their localities and arange these varieties according to season and particular uses. In this connection they will find the O. A. C. bulletin on the cooking qualities of apples, prepared by Professor Milam, of the Home Economics School, a very convenient and reliable guide. They can secure copies by writing to the College. In other cases speakers may be secured for the occasion, and it would be especially appropriate to have physicians give addresses on the dietary value of the apple as a regulator of the system in the control of nervous disorders and similar difficulties.

"Commercial clubs may join in the activities of apple day by having apples, cooked and uncooked, served during the day. A supply of good eating apples, well colored and grouped invitingly on tables in the halls and lobbies of their club rooms, will result in many an apple being eaten. The clubs can also have apples served attractively at their luncheons. In some instances they must see that other socieites and individuals do not neglect their parts in the apple day program.

"Farmers and other growers may well donate apples to schools, churches and other institutions where some children may not have the apple to eat. There are millions of children in the United States that have never tasted an apple and as far as possible they should be provided. Every school child should have the opportunity of eating an apple on that day.

"Hotels and restaurants may give their guests a bountiful supply of good apples, both fresh and cooked. While there are many good recipes there are but few best, and one of these should be secured and made use of on apple day. It will mean the satisfaction and pleasure of the guest, valuable assets in the hostelry business.

"Merchants can afford to be especially active for apple day sales. They may make attractive box offerings with a view to encouraging the purchase of apples by box rather than by broken package. A good deal is said of dollar day bargains but apple day bargains would do better by building up a demand that would have to be supplied throughout the year. If consumers can be shown some of the advantages of buying by box or barrel they will consume more fruit and purchase it in form most convenient for the dealer.

"And I can say to the general apple eating public," concluded Professor Lewis, "that they may be doing themselves a greater favor than they think by buying a box and eating an apple on apple day. The apple crop is light this year in Oregon and when the local supply has been used up it is likely that pretty stiff prices will have to be paid for the imported article. It is quite certain that apples will be much higher before they are lower again, and the consumers may well secure not merely one box, but several, provided that they have satisfactory places for storing them for the winter."