

# Growing String Beans In the Willamette Valley

BY R. W. GILL

One of the apparent needs of the whole Willamette valley section is that of a greater rotation of crops. At the present time there is a tendency to grow grain crops year after year on the same land. A great many farmers realize the importance of crop rotation and rotate from grain to clover and then back from clover to grain. Practically all authorities are agreed that a vegetable crop is necessary to bring about the proper rotation and to a great many cases potatoes and corn have been the crops used. A good rotation to follow is from clover to vegetable crop and then to grain. However, one of the great difficulties in the way of following out this rotation has been the fact that there was no market for the vegetable crop on such a large extent. This condition is now largely overcome by the fact that it is now known there will be an increase in the demand for a large acreage of various kinds of vegetables. These vegetable crops are not only a source of profit, but offer a fine opportunity to build up soil fertility and this is especially true where legume crops are grown. The bean is a legume crop and will add greatly to the soil fertility. Much has been said about the high quality of Oregon fruit, but there is just as much to be said about the quality of the Oregon vegetable. Our climatic and soil conditions produce a bean of the highest quality and I doubt if there is any section of the whole country which can produce a bean of any more nutritive value than that grown here.

It is only in recent years that much attention has been paid to Oregon string beans by the food factories, but once the quality of this product becomes known there will be an increasing demand for the Oregon bean.

**MARKETS**—There are two markets for string beans, that of the dehydrating plants and the canneries and also that of the city market trade. Regarding this city trade there is no staple price, in fact the supply and demand are the factors that set the price and while at times this is profitable to the grower, at other times it does not justify marketing the product. In growing beans for the city trade the grower cannot plan on selling a large acreage, but must limit his output in accordance with the size of his market. While in the market and canneries, contracts can be entered into and the crop be sold before the seed is planted, so in this case the grower is not taking any chances on the sale of his product. The prices offered may not seem so attract-

## RECUPERATION

of the vital forces of the body, depleted in the struggle with acute disease, depends not upon superficial stimulation but upon adequate nourishment. The body needs to be nourished back to strength and power.

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purpose vegetable fertilizer, for the results of this fertilizer will be apparent in the soil for several seasons. The use of green cover crops are always very valuable in supplying humus to the soil and will prove of great value as a fertilizer to the vegetable crop.

**PLANTING**—The distance apart at which beans should be planted will depend largely upon the condition and fertility of the soil and in writing this article I shall try to deal more with the average condition of soils that are suitable for bean crops. The distance apart at which the seed should be planted also depends considerably upon the moisture of the soil and its propensity for retaining that moisture. The bean can hardly be considered a heavy feeder upon the soil. Generally speaking, the rows should be planted about 2 1/2 to 3 feet apart and ordinarily the best results are obtained by planting the seed in continuous drill. The amount of seed to be used will vary according to the soil, usually requiring about 25 to 40 pounds per acre, and seeding an average of about one seed to each three inches in the row would give a nice stand. Many prefer to plant their beans in hills and while this method has some advantages, especially in hoeing, it does not give an opportunity for each individual plant to develop. When planted in hills, usually three or four plants are left to grow, while in the drill method, each plant is usually separated with only one in a place. The hill method will probably result in a longer season of picking, but it is my judgment that the first picking of the bean is by far the best, both as regards quantity and quality. Regarding the depth at which the seed should be planted, this is entirely dependent upon weather conditions, but generally speaking, those which are planted in early May should not be over two inches in depth, but those which are planted after that time should be planted even as deep as three and a half inches. Regarding the time of planting, this will depend somewhat upon the acreage to be planted, for it is not desirable to have too large a tract coming on at one time, as it might be difficult for the pickers to keep up with the maturing crop. Therefore, in planting a ten acre tract it would be well to make plantings approximately as follows: 2 1/2 acres respectively about May 10th, June 1st, June 25th, July 20th. This will give a harvesting season beginning about July 15th and extending up until time of frost in the fall. We are generally safe from frost up to about the middle of October, which would make a ninety day season. Where it is desired to plant two acres or more in beans, it will pay the grower to purchase a good seed drill and, while I have no preference for one make over another, I have found the Columbia and Aeme drills the best suited for planting beans. These machines are not expensive and they save much labor and plant the beans just right as regards depth and distance and make the facilities for proper cultivation.

**CULTIVATION**—As I have already stated, the main portion of the work in producing a crop of beans has already been done in the proper preparation of the soil. However, it is of great importance that the proper attention is given to cultivation of the crop. The manner of cultivation is also dependent upon weather conditions. In the case of the early plantings when the weather is cold and backward, deep cultivation is essential, for such cultivation has a tendency to warm up the soil. During warm, dry weather it then becomes necessary to conserve the moisture and shallow methods of cultivation give the best results. If it should be necessary to resort to deep cultivation to loosen the

## MAJOR PARTIES EACH HAS CANDIDATE WHO STANDS FOR LEAGUE

Washington, March 12.—Presidential candidates, past, present and future, have so lined up on the league of nations that no matter what American public opinion decides, the major parties will have a candidate who stood for that very thing. Among the dem-

## Progressives Have Borah And Republicans Have Lodge And Taft.

ocratic Bryan favors ratification of his league of nations plans without amendment. Bryan favors a league of nations which safeguards the Monroe Doctrine, gives the United States more votes and each nation the right to reject the council's decrees. While Champ Clark has not made public his opinion, his opponents credit him with intimating that the present league of nations plan has little chance of adoption. Among the republicans: Former President Taft favors adoption of the present covenant unamended if necessary, amended slightly if possible. Republican Senatorial Leader Lodge favors a league which would preserve the Monroe Doctrine and maintain the sovereignty of the United States. Senator Knox has offered a substitute which would declare war an international crime and establish a court to administer an international code. Senator Hardin signed the "round robin" as opposed to the "Wilson covenant."

## Renrepresentatives Of Packers Have Formed Organization

Chicago, March 12.—Formation of an organization representative of packers, livestock producers and commission men was announced here today. The purpose of the organization is said to be toward stabilization of receipts, adjustment of grievances and betterment of the livestock industry to the end that meat products may be offered the public at the lowest possible cost. The agreement, termed by packing house representatives as "epochal," was reached at a conference here attended by growers and packers from eight different states. The organization, to be called the "conference committee of the livestock industry," will comprise ten producers, ten packing representatives, one man from the bureau of markets and two commission men. Headquarters will be in Chicago. Local committees will operate in the various livestock centers.

## E. E. Smith Will Give His Address Friday Evening

To advance a harmonious condition in all industries, there will be an address Friday evening in the house of representatives by E. E. Smith, who was a member of the late legislature and who was elected in Portland by the labor vote. Commissioner Marshall of the state industrial insurance department will preside, and other state officials have been invited to attend. The meeting will be public. The address will be on the lines of labor problems and what the labor union want and incidentally a discussion of the industrial problems that presented themselves at Seattle which made Mayor Hanson famous.

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## Trading Turned Sluggish By Noon In Today's Market

New York, March 12.—The New York Evening Sun financial review today says: There were hectic moments in today's stock market, particularly in the early stages when buying was active in the extreme and price advances were broad. By mid-day, however, net changes were reduced materially and trading turned sluggish. The steel and equipment stocks were strong throughout and at intervals bought. The shipping shares, tractions and specialties had expansive periods. St. Paul, Texas and Pacific and New York Central were the leaders among the rails. The coppers were a bit heavy.

## Salem High Wins From Albany In Final Game

The Salem high school basketball season wound up last night with a whoop and bang, with Salem and Albany on the floor mixing like the first stages of an omelette. Heard from the street, the contest was a combination of Indian massacre and a Bolshevik riot. Viewed from the inside the game was a whirl of wild playing, with the first half, which ended tied up in the 10 to 9 in favor of Salem. In the second half the Salem bunch rapidly drew away from their opponents and finished up with a score of 30 to 13. The line up was as follows, with the points scored by each player: forwards, Shafer (6), Staley (4); center, Socolofsky; guards, Gill (10), Jones; spares, Latham (6), Ashby, Gregg (4).

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## CATARRH

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and following the culture outlined it is reasonably safe to figure on a crop of 2 1/2 tons per acre, in fact much larger crops have been grown. In making the estimate I have had to average conditions and I have placed the expenses relatively high and the crop relatively low. Expenses per acre: soil preparation, plowing etc \$9.00; seed, \$8.00; planting \$3.00; cultivating, \$6.00; hoeing, \$2.00; fertilizer, \$15.00; picking 2 1/2 tons at 25¢ per pound, \$50.00; hauling, \$5.00; wear and tear, \$2.00; total \$100.00. Value of crop: 2 1/2 tons beans at \$50 per ton, \$125.00; value of foliage for food \$15.00; value to soil on next crop, \$20.00; total \$160.00. This gives a net income of \$60.00 per acre on the crop of beans itself, or a total value of \$85.00 per acre including by-product and indirect profits. Regarding the expense of fertilizer mentioned above, I have made this on a basis of furnishing enough fertilizer to get reasonably good results but greater results and a better investment will be secured to the grower if he will use \$25.00 worth of fertilizer per acre. Intelligent fertilizing should be considered an asset rather than an expense. Regarding the item of "value to the soil on next crop," it should be borne in mind that the ground used in growing the bean crops is available for growing a crop of fall grain and the method of cultivation used; the after effects of the fertilizing and also the productive qualities of the bacteria placed in the soil by the bean crop will all be of great value. The soil will also be in the very best of condition to produce a crop of potatoes or other vegetables. It is a very conservative estimate to figure this value at \$20 because it is bound to make more than that much difference in the selling price of the next crop. The feed value of the foliage should not be overlooked as cattle relish it greatly and it makes a fine feed for them at the dry season of the year and is also of great value for using in silos. It is a very conservative estimate to place this value at \$15.00. With the end of the war there will not be the difficulty of securing labor to grow the crop and the difficulty in picking the beans will be overcome by the fact that an abundant supply of pickers will now be assured for the coming crop.

## HOME INDUSTRY FACTS

WORKERS in Oregon's industries should find especial pleasure and satisfaction in favoring Oregon products in their buying—for by so doing they are helping to support other Oregon workers on other Oregon payrolls in true brotherly fashion. USE HOME PRODUCTS. HOME INDUSTRY LEAGUE OF OREGON

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