

**SUGAR-BEET Seed in New Mexico Grown by Rapid Method** The United States sugar-beet industry has always been almost entirely dependent upon European producers for its seed supply. This has been due primarily to the fact that American sugar-beet growers have not been able to produce the seed as cheaply as they could buy the imported seed. The production of sugar-beet seed, therefore, has not been established as an industry in this country. As a result of dependence upon European seed, the sugar-beet industry was seriously handicapped during the World War. At that time the quality of European seed deteriorated, and much of it was also found to be adulterated with stock-beet seed. This situation resulted in attempts being made by some of the American sugar-beet companies to produce their own seed, but in recent years the industry has again become almost entirely dependent upon European seed. The advantages of a domestic production of beet seed are obvious.

The New Mexico Agricultural Experiment Station, in cooperation with the Office of Sugar Plants, Bureau of Plant Industry, United States Department of Agriculture, has conducted experiments with sugar-beet seed production from fall plantings by which the beets are overwintered in the field. The beets make considerable growth in the fall, and when the warm spring weather opens practically all of them produce seed stalks. The tests have extended over a 6-year period, and the results have been the same every year in that the beets produced a good seed crop the following season. The crop in southern New Mexico is harvested about July 1, and the time required for seed production is reduced by about one-half over the time required by ordinary methods.

#### Average Yields 1,500 Pounds an Acre

Average yields of approximately 1,500 pounds of seed to the acre can be obtained, and in one instance a yield of 3,400 pounds was obtained. The crop that was harvested in 1927 indicated that the highest yields were obtained when the beets were planted at the rate of 18 pounds of seed to the acre and left unthinned. The 1928 results have been even more encouraging, and it was shown that the highest yield of seed was obtained when the seed was planted broadcast with a grain drill at the rate of 60 pounds to the acre. By planting in this manner a yield of 2,186 pounds per acre was obtained. Tests have shown that unthinned planting yields much more seed than when the beets are spaced 12 or 24 inches apart. When the beets were planted in 22-inch rows and spaced 12 inches apart the yield was 912 pounds to the acre, but when unthinned the yield was 2,025 pounds. The germination of the 1927 crop was low, but it is believed that this difficulty has been overcome by proper irrigation during the pollination period. The seed produced in 1928 is apparently of good quality.

The great saving that can be made in time and labor indicates that the production of sugar-beet seed in southern New Mexico may have important commercial advantages.

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