and 10 varieties included in the test.
Variance analyses taken from complete data with 10 varieties.

Variety Tests With Regard To Bolting, 1937

Variety	Granger, Utah	Salinas, Calif.	Davis Calif.	Riverside, Calif. April 22	Riverside, Calif. May 18
U. S. 12 (618)	0.06	21.50	70.23	34.5	64.1
U. S. 33[1] (3407)	---	11.50	56.05	11.2	41.0
do (5642)	0.40	25.00	62.60	41.0	72.8
U. S. 14[2] (515)	---	6.00	27.36	0.3	4.3
do (617)	---	10.50	64.64	1.7	16.1
U. S. 15 (5651)	---	1.00	13.72	0.0	0.6
Old Type (5638)	---	4.08	24.43	0.4	3.6
610	0.40	23.50	50.55	8.1	34.9
611	0.00	5.50	44.39	5.1	24.3
612	0.32	16.50	50.45	22.0	52.5
622	0.06	10.00	43.75	2.7	18.3
623	0.06	---	---	4.5	22.7
Date of Planting	April 13 1937	Dec. 22 1936	Dec. 20 1936	October 23, 1936	
Date of Record	Aug. 1	May 27	June 10	April 22	May 18

1/ No. 3407 is the original U. S. 33 while No. 5642 is a second increase.
2/ No. 515 is the original U. S. 14 while No. 617 is the next increase.

VARIETY TRIALS OF MONITOR SUGAR COMPANY

G. W. Bradford
Monitor Sugar, Bay City, Michigan

Our work on the varietal tests which we conducted in the season of 1937 was divided into two parts. First, in our experimental field we made comparative tests of 3 American and 12 European varieties of seed. Four replications of each variety were made in plots 8 rows wide and 100 feet long. The stand of beets was somewhat reduced by the presence of black root, although a fairly even stand was secured.

A moderately severe infestation of leaf spot set in about August 1. Under such conditions as these the variety U.S.D.A. #217 was superior to all other varieties in this field in sugar per acre produced, in sugar content of beets and average weight of the individual beets. Two other varieties in this field yielded only slightly higher tonnage but their sugar content was significantly lower. Yields of the fifteen varieties ranged from 7.6 to 10.6 tons per acre. Sugar content varied from 12.91 to 15.33 percent. From 2167 to 3206 pounds of sugar per acre was produced by these different varieties.

The second part of our variety tests consisted of field trials of No. 217 in different parts of the territory served by the Monitor Sugar. These plots occupied from 1/2 acre to 2 acres in commercial fields of our beet growers and were under the direct supervision of our fieldmen. We obtained complete data on 14 fields on which these comparisons were made.

The average yield per acre for these comparisons were as follows:

#217 - 9.612 Tons	Commercial - 8.199 Tons	1.4 Tons in favor #217
Sugar Content:		
#217 - 15.40%	Commercial - 14.66%	.74% in favor #217
Sugar per Acre		
#217 - 2959 Lbs.	Commercial - 2431 Lbs.	528 lbs. in favor #217

Leaf spot infestation was from medium to severe throughout our territory last season. Number 217 proved to be just what the name implies, blight resistant, but not immune to this disease of sugar beets. It showed resistant qualities when the disease became prevalent and made a quicker recovery than other varieties where the crop was hard hit. These field trials aroused considerable interest among our beet growers and we already have many requests for this seed for the next crop. We plan on planting about 200 acres of this variety for 1938 and now we are interested in seeing how #217 yields in comparison with other varieties in a season when there is no leaf blight.

THE MINNESOTA SYSTEM FOR TESTING AND RECOMMENDING VARIETIES*

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Testing of varieties of grain or of corn hybrids is carried on at the central experiment station located at University Farm, St. Paul, and in cooperation with the branch experiment stations in southeast, west central, northwest, north central, and northeast Minnesota. In some cases, particularly with corn, tests are arranged on farmers' fields located in strategic regions of the state. The plan is to test over as wide an area of the state as the varieties would seem to be adapted to.

A uniform yield test of promising new strains of spring wheat and standard varieties, entered by the different states in the hard red spring wheat area, is conducted in 20 places in the 7 states cooperating in spring wheat improvement. Such tests furnish advance information on new strains which seem most promising in adjoining states as well as information on regional adaptation both between and within states. A representative of the U.S. Dept. of Agriculture acts as the coordinator in these uniform yield trials of spring wheat.

The decision to recommend a new variety for distribution to the farmers rests with the annual conference of workers from the Divisions of Agronomy & Plant Genetics and of Plant Pathology & Botany, the cereal technologists (in the case of wheat), and the agronomists of the branch experiment

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