



## A Progress Report for 1955 and 1956

By Mark Jendro<sup>1</sup> and T. E. Stoa<sup>2</sup>

**T**HE Agronomy Seed Farm was established in 1950. The Bi-monthly Bulletin, Vol. XVII, No. 4 (1955) summarized the results and accomplishments of the Agronomy Seed Farm for the first 5 years. This report covers the 2 crop years since 1955.

Since the farm was established it has continued to serve in the capacity for which it was intended—a place where new or special lots of seed can be increased, making possible an earlier and larger supply of good seed for release to farmers, and permitting more growers to share in the early distribution.

To gain important time in the release and early production of a new variety, the North Dakota Agricultural Experiment Station begins the increase of one or more selections believed to be promising, even before these lines are adequately tested. If in the tests the new line continues to show favorably, this policy and practice of early increase will have been distinctly advantageous. However, if during the more extensive tests, some of the lines prove disappointing and are not approved for release, then the seed already

increased is not sold as seed but is disposed of by grinding for feed.

In this stepped-up breeding, testing and seed increase program, the facilities of the Agronomy Seed Farm, also the seed farm in connection with the North Central Experiment Station at Minot, and to a lesser extent the other branch stations, are used to aid in this early increase in so far as their acreage and facilities permit.

### Production and Farm Income

Seasonal conditions greatly influence the crop yields in any year. The crops and varieties grown, the yields produced and the price at which the seed sells, determine the income for the Agronomy Seed Farm.

In this respect, the results since 1950 have been generally good. Least satisfactory were the crop years 1953 and 1955. Excessive rains with considerable flood damage accounted for some of the low yields in 1953. In 1955 a severe early drouth resulted in much uneven emergence, thin stands and poor stooling. June and July rainfall was adequate, and on occasions exces-

<sup>1</sup>Farm manager.

<sup>2</sup>Agronomist.

sive. However, ripening temperatures through much of July and August were above normal. This did not allow for good filling and as a result yields of wheat and late sown flax were relatively low. Septoria, a leaf disease, caused considerable injury to barley and did not allow that crop to yield up to what the field stands promised.

Early drouth was a factor again in 1956, although less severe than in 1955. This situation was further aggravated by some high June temperatures, resulting in a loss of stools and early heading in some fields. Temperatures through much of July and early August, however, were below normal and, with fairly adequate rainfall and no serious plant diseases to contend with, the conditions were favorable for maximum filling. As a result the 1956 crop yields greatly exceeded the expectations in June.

In table I are shown the crops grown and the number of bushels produced, sold or available for sowing for the years 1954 to 1956. Crops grown one year are usually sold for seed after Jan. 1, the following year. Omitted from these tabulations is the production and preliminary increase of some experimental lines. These were lines which subsequent tests showed would not be satisfactory as a variety and the seed was disposed of by grinding.

In common with other farms where small grains are grown extensively, the Agronomy Seed Farm has the problem of weeds. Wild oats continue to be number one weed problem. While considerable progress has been made in eliminating many of the seeds buried in the soil, reinfestation from shattered new seed is a constant threat. Sow-thistle is an increasing hazard—the seed comes in from adjacent or far

TABLE I.—Crops Grown and Production, Agronomy Seed Farm, 1954 to 1956.

Crop and variety grown	Production <sup>1</sup> net bushels of seed		
	1954	1955	1956
<b>Wheat</b>			
Conley.....	174	810	1,480
Selkirk.....	5,905	1,200	.....
Langdon.....	.....	610	3,128
<b>Barley</b>			
Traill.....	1,498	2,900	400
Parkland.....	.....	.....	3,280
Kindred.....	.....	.....	140
<b>Flax</b>			
Norland.....	1,500	520	.....
B-5128.....	150	110	948
Bolley (C.I. 1478).....	.....	330	1,380
<b>Oats</b>			
Ransom.....	.....	.....	450
<b>Crested wheatgrass</b>			
Nordan.....	7,420	3,100	2,000 lbs.
<b>Soybeans</b>			
Grant.....	.....	.....	668

<sup>1</sup>In addition to the above there were preliminary increases of some experimental lines, since rejected. Ns 3880,127 in 1954, 400 bushels; in 1955, ND22, 70 bushels.

away fields and once established spreads rapidly.

Summerfallow, is used extensively to cope with these and other weeds. Deferred sowing, allowing the wild oats and other early starting weed seeds to germinate and the plants to be destroyed before sowing to flax, has been helpful in cleaning up some of the fields. While late sowing does not assure the best growing season and large flax yields, it does permit the field to be cropped and a fairly satisfactory return to be obtained. At the same time, the elimination of wild oats and other annual weeds is possible. In other fields the timely use of chemical sprays has resulted in satisfactory control of wild mustard and other broadleaved weeds.

### Farm Income

The gross and net income from the farm for the two fiscal years beginning July 1, 1954, is shown in table II. The balance on hand July 1, 1954, was \$22,757.30. After the sale of the 1954 crop, this reserve was built up to \$50,947.60 by July 1, 1955. Allowing for the cost of some necessary improvements, the income from the 1955 crop did not allow for any further increase in the balance for the year ending July 1, 1956.

In the 6 months report for 1956 it should be noted that the 1956 crop sales have not yet been made but will come in during the last half of the fiscal year, or after Jan. 1, 1957. With excellent production in 1956, the balance on July 1, 1957, is expected to show a substantial increase.

When the balance or reserve

funds permit, it is the plan to construct a suitable seed house for storing, processing and handling good seed. A seed house is greatly needed and it is hoped that construction can get under way in 1957. The Agronomy Seed Farm is a self-supporting unit and has no funds for operating or making improvements other than the income from the farm through sales of seed.

### Improvements

The purchase of some additional equipment and farm machinery, to permit a more efficient operating program, has been made since the last report. New equipment includes another steel grain bin purchased in 1954. New machinery includes another tractor, also a rotary hoe, a bag sewer, grain bag elevator and a power lawn mower. To have and maintain farm machinery at a high standard for operating, some of the

TABLE II.—Agronomy Seed Farm Account.  
(July 1, 1954 to Dec. 31, 1956)

	July 1, 1954- July 1, 1955	July 1, 1955- July 1, 1956	July 1, 1956- Dec. 31, 1956
<b>Assets:</b>			
Balance on hand July 1	\$22,757.30	\$50,947.60	\$49,599.74
Income from farm:			
Seed and misc. grain...	\$48,583.59	\$18,921.18	\$ 2,098.03
Other, miscellaneous...	523.18	873.98	728.79
	\$49,106.77	\$19,795.16	\$ 2,826.82 <sup>a</sup>
Total.....	\$71,864.07	\$70,742.76	\$52,426.56
<b>Expenditures:</b>			
Farm operations.....	\$15,754.77	\$16,895.90	\$ 8,192.63
Machinery and equip....	4,673.40	2,029.54	1,800.00
All farm operations.....	\$20,428.17	\$18,925.44	\$ 9,992.63
<b>Permanent improvements:</b>			
Grain bin.....	\$ 488.30		
New well.....		\$ 1,932.50	
Water facilities <sup>1</sup> .....		285.08	\$ 820.02
Total improvements.....	\$ 488.30	\$ 2,217.58	\$ 820.02 (6 months)
Total expenditures.....	\$20,916.47	\$21,143.02	\$10,812.65 (Dec. 31)
Balance on hand July 1.....	\$50,947.60	\$49,599.74	\$41,613.91

<sup>1</sup>Employees residence—north farmstead.

<sup>a</sup>1956 sales to come after Jan. 1, 1957 (See table I).

older implements have been traded in for new and more suitable ones. Included among the new machines thus obtained is a self propelled swather, a new combine and a and a larger field cultivator.

Some permanent improvements already made include a new well, dug in 1955 to make possible a more adequate water supply and repainting of the buildings in the summer of 1956. On the north farmstead, where the employee and his family are housed, the improvements include a water system for the house, installation of a water heater and some built-in kitchen cabinets.

#### **Advisory Council**

The Agronomy Seed Farm is supervised by the department of agronomy of the North Dakota Agricultural Experiment Station. Sharing in outlining the general policies of the farm, its place and

relation to farmers and their seed needs, is an advisory council. The farmer members of this council, appointed by the director of the experiment station, represent those who by their interest and contributions made the farm a reality. Also serving on the council are representatives of organizations having an interest in better seed, either as seed producers, seed processors, or seed certification officers.

The advisory council meets at the call of the chairman, usually every other year, to hear progress reports and to discuss policies and plans for the farm. At other times the suggestions and recommendations from council members on some specific questions may be solicited by mail. Council members are appointed for 3-year terms and serve without compensation. The last meeting of the advisory council was held Feb. 18, 1957.

Members serving on the council through 1956 were:

#### **Terms expiring 1956**

Clyde Barks, Egeland  
E. A. Madsen, Minot  
Wm. S. Melvin, Beach  
John W. Scott, Gilby

#### **Terms expiring 1957**

Fred Farrow, Cavalier  
Ralph Diehl, Hillsboro  
Edd Goerger, Barney  
Erwin Bourgois, Bismarck

#### **Terms expiring 1958**

Edward Manthei, Leonard  
Grimsi Goodman, Milton  
Clarence Bruns, Oriska  
Orris Nordhogen, Leeds

#### **New Members, terms expiring 1959**

Albert P. Johnson, Osnabrock  
Frederick Wolhowe, Verendrye  
Henry Biel, Lefor  
Chris Midgarden, Hoople

Also serving on the council, as representatives of seed organizations or by virtue of their official positions, are:

Representing the North Dakota Crop Improvement Association:  
Wesley Vix, Minot and Clyde Barks, Egeland, President (Ex-officio)

Representing the North Dakota Seed Trade Association:  
Stan Mickelson, Agsco Seeds, Inc., Moorhead, Minnesota

Commissioner of Agriculture and Labor—Math Dahl  
State Seed commissioner,  
R. C. Hastings

Extension Agronomist,  
L. A. Jensen

A local farmer, Albert Sinner

Chairman, Department of Agronomy, T. E. Stoa