

THE AGRONOMY SEED FARM

LeRoy Spilde, Superintendent

The Agronomy Seed Farm was established in 1950 through the efforts of the North Dakota Crop Improvement Association. Funds for the purchase of the 590-acre farm and the necessary machinery and capital to produce the first crop were accumulated through donations in money or machinery by individuals and companies that were vitally interested in the development of a facility that could rapidly produce seed. In line with the wishes of those providing money for the purchase of the Agronomy Seed Farm, it was specified that the station be used "for the increase, development, improvement, and production of seed of new and established varieties, all income from the Farm to be kept separate from other funds." It was also intended that the Agronomy Seed Farm should be self-supporting.

As new varieties are developed, a program of seed increase is necessary to provide adequate supplies of pure seed to farmers in the shortest possible time. Often, seed of the newly developed varieties is scarce and expensive and highly productive soil and good management are needed for further increase. The Agronomy Seed Farm has demonstrated it is well suited for the program. Approximately 369,000 bushels of small grains, 244,000 pounds of grass and legume seeds and 53,000 pounds of sunflower seeds have been produced and sold as Foundation or Registered grade seed. These seeds usually have represented the varieties most recently released. However, supplies of popular older varieties are maintained and increased when sufficient demand exists.

Initial increases of promising experimental genetic lines or newly released varieties are typically made at the Agronomy Seed Farm. Since its inception in 1950, 153 initial increases have been made at this station (Table 1). These seeds were retained for further increase by the North Dakota Agricultural Experiment Station or distributed as newly released varieties to seed producers through the Foundation Seedstocks Program.

The Agronomy Seed Farm staff became actively involved in research activities with the addition of the Dal-

rymple Experimental Plot (DEP) in 1963. The DEP is adjacent to the Agronomy Seed Farm and serves as a field laboratory for research projects under the leadership of experiment station staff on the Fargo campus. The Agronomy Seed Farm provides management, labor, and equipment for the maintenance of these research plots. The Agronomy Seed Farm staff has also conducted research studies on soybean production practices and snow retention. Current projects are evaluating seed increase techniques and no-till production practices.

Γable 1. The number of varieties within crops initially increased at the Agronomy Seed Farm during the period, 1950-1977.

Crop	Varieties
Hard Red Winter wheat	5
Hard Red Spring wheat	20
Durum	12
Barley	15
Oats	31
Rye	6
Flax	18
Soybeans	19
Birdsfoot Trefoil	3
Alfalfa	2
Red Clover	1
Sweet Clover	1
Pinto Beans	4
Sunflowers	4
Proso Millet	6
Triticale	1
Timothy	1
Crested Wheatgrass	1
Russian Wildrye	1
Green Needlegrass	1
Sudan Grass	1