



Ben Hoag, Superintendent

NORTH CENTRAL EXPERIMENT STATION

Many changes have occurred through the years since this station was first established and in particular since Arlon Hazen became Director in 1956.

Probably the greatest change occurred in the area of research. The number of experiments have increased from 27 separate tests in 1956 to 96 separate tests in 1977. This was made possible primarily because of mechanization. The most important one piece of equipment was the self-propelled plot combine. Analysis of data changed from the longhand analysis of each trial to the computer analysis through the Agronomy Department and now to the use of Agnet for data analysis in 1978. Station research projects were entered in the Chris system in the 1975-77 budget period thereby showing how funds were used and amounts spent on various crops in North Dakota.

The major expansion in research was off-station. This area is reported on in another section of this issue. One additional off-station research project involved finding a way to control the troublesome false chamomile weed found in Renville, Bottineau, and northeastern counties of North Dakota. Trials began in the fall of 1972 and are still continuing. This plant with an attractive daisy type flower is a problem in cropland, especially in low lying areas. Support for this research has been supplied through funds from the Weed Control Levy in Renville County. Progress is being made in finding some means of controlling false chamomile in both cropland and non-cropland areas.

Major changes have also occurred in the production and processing of seed on the station. This seed is distributed to farmers either directly or through a county agricultural improvement association. The number of va-

rieties grown each year has increased from eleven varieties in 1956 to twenty separate varieties in 1978. Now seed is packaged in one-bushel paper bags compared to two-bushel burlap bags in 1956. Seed treatment equipment has improved along with more safety equipment to protect those handling the seed. Only foundation and registered seed are sold.

Through the years more fertilizer and herbicides have been used. Now fertilizer is applied for a desired yield goal, a method not used in 1956. Now herbicides are available for control of wild oats and foxtail in small grains. In this same area farm equipment has improved and increased in size. Continuous cropping is increasing in this area of North Dakota. It is made more possible through the use of herbicides, better tillage equipment to conserve residue on the surface, and even "no-till" is being evaluated as another method of farming continuously. This past year on the station three separate crops were grown under "no-till" conditions with good success.

With involvement in research under irrigation since 1974, the station staff have prepared a progress report of the research results obtained. In addition the staff prepares the popular Farm Report from research results at this station. Both are distributed to farmers in a 12-county area in north central North Dakota. The off-station variety research data is now included in this latter report.

This station and the staff are an important contributing part of the services NDSU has available to the people of North Dakota and especially to those in north central North Dakota. This has been allowed to happen by wise leadership and confidence shown to the staff and its needs over the past 22 years.