

IMPROVEMENTS IN PHYSICAL PLANT OF THE NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION

During the past year, in spite of some handicaps created by the war, the Station made a considerable number of additions to important scientific equipment and improvements in its physical plant.

Equipment for Research on the Quality of North Dakota Wheat:

A walk-in cooler, 8 feet deep, 7½ feet high, and 6 feet wide, has been installed in the Cereal Technology building to provide refrigeration for samples of flours, starches, and glutens so so that they can be kept under constant conditions without becoming rancid or going out of condition.

A vacuum oven, which is being used for drying easily decomposed substances at low air pressures so as to avoid the danger of their decomposition during the drying process.

A small dehydrating oven.

An Ohaus scale for rapid and accurate determination of test weight per bushel.

Equipment for Research on the Quality of North Dakota Dairy Products:

A 100-gallon spray type pasteurizer with recording temperature device.

A Wilmot-Castle 37° C. incubator for culture of micro-organisms.

Equipment and Building Improvements for Research on Farm Crops:

A brick addition to the seedhouse, 18' x 32', providing facilities for drying and storing hybrid seed corn. This structure is equipped with two Aerofin Flexitube radiators, and an American Sirocco fan with necessary motor.

A 26' x 28' frame addition to the machine shed, providing additional housing for machinery and equipment used by the Department of Agronomy.

Equipment and Building Improvements for Research on Poultry and Livestock:

Rebuilding of a 5-unit experimental poultry house, 18' x 90'. Different types of insulation have been installed for experimental testing, one unit with shavings treated with hydrated lime, a second unit with chopped wheat straw treated with hydrated lime, and a third unit with chopped flax straw treated with lime. Both walls and roof are insulated in these three units. All houses face the south and are provided with small basement-size windows at the floor level on the north side.

Other Building Improvements:

New shingle roof on beef barn, and its silo and building painted white with green trim.

New roof on dairy barn, and new shingle roof on south side of horse barn and repairs on north side roof.

Painting of farm house.

New roofs on four experimental silos attached to Animal Nutrition barn.

H. L. WALSTER, Director.