

Five New Bulletins by North Dakota Station

The "Comparative Effects of Season, Location, and Variety on the Yield and Quality of North Dakota Hard Red Spring Wheat" is the title of Bulletin 342 just released by the North Dakota Agricultural Experiment Station. R. H. Harris, Cereal Technologist; L. D. Sibbitt, Assistant Cereal Technologist; L. R. Waldron, Plant Breeder and T. E. Stoa, Agronomist, are the authors of this report. Five hard red spring wheats, Regent, Thatcher, Rival, Mida and Pilot, grown at five locations; namely, Langdon, Williston, Edgeley, Fargo and Dickinson, have been tested as to quality and yield each of the five years 1941 to 1945.

The wheat properties investigated included yield per acre, test weight per bushel, protein content of grain, flour yield, and ash content of the grain. Flour was tested as to water absorption of the dough made from it and the volume and crumb color of the loaf of bread made from it.

The doughs were also examined as to their mixing properties. Typical "mixograms" curves finger-print the differences. Bulletin 342 will be sent free as long as the supply lasts. Address inquiries to Information Department, State College Station, Fargo, N. Dak.

"The Growth and Development in Three Types of Turkeys" is the title of Bulletin 343 just released by the North Dakota Agricultural Experiment Station. The bulletin was partly prepared by the late Geo. P. Goodcarl, formerly Poultry Husbandman to the Station, and was completed by other staff members. Bulletin 343 considers the growth rate; feed use; market quality; and skeletal development of three types of turkeys, namely standard Bronze; broadbreasted; and the Beltsville small white. Data are presented at 4 week intervals over a period of 28 weeks. All data are the averages of three years of trials. Bulletin 343 will be sent free as long as the supply lasts. Address inquiries to Information Department, State College Station, Fargo, North Dakota.

"Some Effects of Types of Shelter Upon Dairy Cattle" is the title of Bulletin 344 being published by the North Dakota Agricultural Experiment Station. The experiments reported were conducted by the late J. R. Dice, Dairy Husbandman of the Station. They were partly summarized before his death and have now been put in final form by Mr. Peder A. Nystuen, Assistant to the Director.

This study reports upon the performance record of dairy cows kept in open shelters, as compared to dairy cows kept in closed or warmer shelters. The data indicate that North Dakota milch cows can stand considerable exposure to low temperatures. Similar studies made upon dairy heifers indicated that heifers did not do so well in open sheds. Further more completely controlled experiments will be conducted as soon as facilities are provided. Copies of Bulletin 344 may be obtained free from the Information Department, State College Station, Fargo, North Dakota.

"Free Choice Feeding of Laying Hens" is the title of Bulletin 345 just released by the North Dakota Agricultural Experiment Station under the authorship of Jesse E. Parker, Poultry Husbandman (resigned), and O. A. Barton, Part-time Poultry Husbandman. Bulletin 345 considers the influence of the protein level of the protein supplement used and the feeding of grains separately and as a mixture. Two years of data are reported. The experiments were conducted with Rhode Island Reds. Data are reported on egg production and egg weight as influenced by 6 different types of rations; on feed consumption and efficiency of feed use as influenced by type of ration; on the relative amount of supplement eaten and the percentage of crude protein in the ration as influenced by the type of

ration; on the relative consumption of corn, wheat, and oats when fed separately as influenced by the protein level of the supplement; on the hatchability of fertile eggs from the pullets fed the 6 different types of rations and on the influence of the different types of rations on egg quality.

Bulletin 345 may be obtained free as long as the supply lasts by addressing Information Department, State College Station, Fargo, North Dakota.

"Studies on Wild Buckwheat" is the title of Bulletin 346 just released by the North Dakota Agricultural Experiment Station. Bulletin 346 is by O. A. Stevens, a Station botanist, and is one of a series of studies on different weeds by the same author. Bulletin 346 in describing the wild buckwheat plant tells how to distinguish it from field bindweed; downy bindweed; and the large bindweed. The seeds and flowers of the wild buckwheat are carefully described.

The bulletin reports especially upon the effect of different crop rotations upon the persistence of wild buckwheat. Numerous germination studies upon wild buckwheat are all reported. No evidence of fall germination of seeds of this annual has been found; but seeds covered with soil in the fall quite uniformly germinate in the spring.

Bulletin 346 may be obtained free as long as the supply lasts by addressing the Information Department, State College Station, Fargo, North Dakota.

A New Regional Bulletin

"Dairy Cattle Housing in the North Central States" is a bulletin issued cooperatively by the Agricultural Experiment Stations of Arkansas; Illinois; Indiana; Iowa; Kansas; Michigan; Minnesota; Missouri; Nebraska; North Dakota; Ohio; Oklahoma; South Dakota; Wisconsin; and the Bureau of Plant Industry, Soils and Agricultural Engineering, U.S.D.A. The bulletin was prepared by a committee representing the Stations and the U. S. Department of Agriculture. This bulletin discusses such topics as size of the dairy barn; locating the dairy housing unit on the farmstead; saving labor by good planning; sanitary requirements of the dairy unit; the milk house; the stanchion barn; the loose housing barn; ventilation; preventing damage from condensation; building and maintaining the barn and the cost of housing dairy cattle.

Copies of this bulletin may be obtained free by North Dakota residents by applying to the Information Service, State College Station, Fargo, North Dakota. Residents of other states listed above should apply to their respective experiment stations.