rusts which usually is most severe on the later ripening susceptible varieties. Good cultural practices and a wise selection of

the variety to grow will go a long way towards insuring a satisfactory crop.

Seed of New Rust Resistant Durums Available

Ву

T. E. STOA, Agronomist

'WO DURUM WHEATS, CARLETON AND STEWART, were released by the North Dakota Agricultural Experiment Station in the spring of 1943. These new durums are products of the durum wheat improvement program carried on cooperatively with the Division of Cereal Crops and Diseases, Agricultural Research Administration U.S. Department of Agriculture. Both varieties are from Mindum x Emmer ("speltz") crosses, made to obtain the high rust resistance of the emmer parent and backcrossed twice with Mindum to recover the more desirable characteristics of Mindum, particularly kernel type, color and semolina quality. Carleton and Stewart are highly resistant to the durum "races" of stem rust commonly found in this area on Mindum and Kubanka, and in tests to date have appeared to be very satisfactory in semolina quality.

About 395 bushels of Carleton were released in lots up to 10 bushels each to 40 farmers who cooperated in its increase in 1943. From this initial distribution about 6000 bushels are now available for sowing in 1944. Farmers report an average yield of about 20 bushels per acre. Carleton is slightly later in ripening than Mindum, has a stronger, coarser straw and carries its head more erect. The kernel is shorter and more plump than Mindum and like Mindum is without brush. Its outstanding merits over Mindum are higher rust resistance and stronger straw.

A total of 1160 bushels of Stewart was available for distribution last spring. This was released in lots up to 20 bushels each to 61 cooperating farmers. Reports on hand indicate that from this distribution about 18,000 bushels will be available for sowing in 1944. The average farm yield reported for 1943, including several fields partially hailed or drowned out, was about 20 bushels per acre. Stewart is slightly later in ripening than Mindum, is less subject to

¹Bimonthly Bulletin, March 1943.

shattering, has about the same strength of straw, a kernel of good amber color and no brush. The merit which Stewart has over Mindum is distinctly higher rust resistance.

In line with the Experiment Station's policy respecting re-lease of new varieties, these durums were grown in 1943 in the principal durum producing area under an optional contract with cooperating farmers. Under the option the Experiment Station retains the right to direct the distribution of 75 percent of the increase obtained, in that way keeping itself in position to aid other growers in obtaining seed, if they desire it, and at the earliest opportunity. Any one, therefore, who desires to obtain seed of one of these more rust resistant durums should get in touch with the Experiment Station soon. Applications for seed received by the Experiment Station are directed to one of the nearest cooperating growers with instructions to fill such requests from that portion of the cooperator's increase covered by the option. When the seed under this option is sold, the cooperating grower sells at a price, based on the local market plus an amount above this, intended to cover the extra cost in handling, cleaning and caring for pure seed.

These new rust resistant varieties should help considerably to insure a durum crop against rust losses in years of severe rust epidemics.

Dairy Products Income In North Dakota

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H. L. WALSTER, Director

AIRY PRODUCTS account for a steadily growing amount of farm cash income in North Dakota. The Bureau of Agricultural Economics of the United States Department of Agriculture has recently summed up the whole story in a mimeographed publication.¹

The changes in cash income from 1909 to 1942 are shown in Figure 1, which is a chart based upon the data contained in Table 3 of the federal publication noted in the footnote below. The designation (000) means "thousands of dollars," thus the cash income from dairy products was five thousand thousand, or five

million dollars in 1909 but had reached over 28 thousand thousand, or over 28 million dollars in 1942.

The income from butter made on the farm has steadily declined since 1924 whereas the income from butter-fat sold as cream has steadily increased since 1924. These facts are strik-

Income Parity for Agriculture—Part I Farm Income. Section 17—Income from Dairy Products. Calendar years 1909-1942 (Preliminary), September, 1943 a mimeographed publication of the Bureau of Agricultural Economics, United States Department of Agriculture.