Distribution of Improved Seed-Corn and Improved Seed of Other Standard Crops by the Kansas Experiment Station

The publication of Press Bulletin No. 172 on "The Distribution of Improved Seed Wheat" has called the attention of the writer to the fact that the recent work of this Experiment Station in improving and distributing improved seed of the several farm crops has not been as well advertised as it should be. The present work of the Agronomy Department in testing, breeding and distributing seed-grain was really begun in 1903 by the testing of a large number of varieties of corn, wheat, oats, barley, and other standard crops, and these tests have been continued each year. (See Bulletins 144 and 147.) In 1904 and 1905 pure seed of the better producing varieties of several crops was planted in larger area, and the seed-grain was distributed among the farmers of Kansas who made inquiry for such seeds.

The farmers were made acquainted with the fact that this seed was being produced at the Agricultural College through the bulletins of the Experiment Station and also through the replies to inquiries, many of which have been published through the farm papers, and the demand for the seed has, each year, far exceeded the supply. During the past four years the Agronomy Department of this Experiment Station has distributed nearly 4000 bushels of good seed of the best producing varieties of winter wheat, 1500 bushels of seed-corn, 800 bushels of seed oats, 550 bushels of seed barley, and smaller quantities of emmer, rye, flax, millet, cow-peas, soy-beans, Kafir-corn, broom-corn, sorghum, etc., or a total of about 7500 bushels. This does not include the seed distributed by the Ft. Hays Branch Experiment Station, located at Hays, Kan., which station during the same interval has distributed nearly as much seed wheat and several hundred bushels of seed-corn, Kafir-corn, and other seed-grains. Most of the seed which has been distributed was simply purified samples of some

For sale this spring the following selected and bred seeds of standard farm crops as follows:

**CORN (about 400 bushels),**
- Yellow Dent Varieties—Hildreth, Kansas Sunflower, Reid, Hogue, Learning, and Legal Tender; White Dent Varieties—Boone County White, McAuley, Roseland White. Price—Choice ears in crates $4 per bushel of 70 pounds; choice shelled and graded tips and butts discarded, $3 per bushel of 56 pounds.

**OATS (about 350 bushels),**
- Varieties — Red Texas, Kherson, and Sixty-Day. Price—$1.50 per bushel for graded seed, or $1.25 per bushel in ten-bushel lots.

**BARLEY (about 50 bushels),**
- Varieties — Mansury, Bonanza, Common Six Row and Success Beardless. Price—Same as for oats.

**EMMER (about 30 bushels),**
- Variety — Common. Price—Same as for oats.

**FLAX (about 30 bushels),**
- Varieties — Experiment Station Number 46. Price—$2 per bushel.

**MILLEL (about 25 bushels),**
- Varieties — U. S., German, Siberian, Hungarian. Price—$1.50 per bushel.

**SORGHUM (about 75 bushels),**
- Varieties — Kansas Orange, Early Amber, and Black Dwarf. Price—Selected head seed $3 per bushel; choice heads from shock $2 per bushel of 56 pounds.

**KAFIR-CORN (about 400 bushels),**
- Varieties — Blackbull White and Red. Price—Selected heads $3 per bushel; choice second selection of heads $1.50 per bushel of 56 pounds. Note.—All seed threshed and cleaned and contains no smut.
of the best producing varieties as shown by the experimental tests. This is true of wheat and other small grains, but even this seed is far superior to the average seed grown in the State, as shown by our comparative tests at the Station and by the reports of farmers. For instance, as reported in Bulletin 144, one of our improved varieties of winter wheat on the College farm actually produced a net profit of over twenty dollars ($20) per acre in three years above that produced by common "scrub" wheat, of the same type, and similar results have been secured with oats, barley, etc.

With corn, Kafir-corn and sorghum, greater improvement has been accomplished than with small grains, since with these crops careful selection and breeding of seed has been practiced with certain varieties which had proven most worthy, as shown by the variety test. The Agronomy Department of this Station is now breeding by the "head-row" method ten varieties of corn, two varieties of Kafir-corn, four varieties of sorghum, and one variety of milo maize, and much of the seed of certain varieties of these crops which we are offering for sale and distribution this spring is really pedigreed seed, or the product of selected ears or heads taken from the highest producing ear-test rows. (See Bulletin 147 on Corn Breeding.)

The Agronomy Department is offer-

MILO MAIZE (about 60 bushels).
Variety—Dwarf milo maize. Price—Same as for Kafir-corn.

BROOM-CORN (about 25 bushels).
Varieties—Oklahoma Dwarf and Genuine Dwarf. Prices—Same as for cane.
Note.—Bred to eliminate center stem.

COW-PEAS (about 30 bushels).

SOY-BEANS (about 25 bushels),
Varieties—Early Yellow, Early Brown, Itto San, and Green Samarrow. Price—Same as for cow-peas.

Through the efforts of the writer in 1906, all of the railroads in the State granted a one-half tariff freight-rate on shipments of seed-grains from the Agricultural Experiment Station at Manhattan, and also from the substation at Hays and the Cooperative Station at McPherson, to points in Kansas. Since that time, however, most of the railroads have canceled the tariff. The Union Pacific Railroad Company, which goes through each of these places, allows the one-half freight-rate.

With the consent of the party ordering, we will refer orders which we cannot fill to reliable growers.

Approved:
E. D. H. Webster,
Director.
Manhattan, Kan., March 2, 1909.