

15. The varieties which produced the largest grains, or kernels, in 1896 are Rudy, Longberry Red, Deitz Longberry, Early Red Clawson, Kentucky Giant and Tuscan Island.

16. Dawson's Golden Chaff, Egyptian Amber, Imperial Amber, Poole and Giant Square Head varieties all came through the winter exceptionally well, and made a fine appearance in the spring of 1896.

EXPERIMENTS IN THE METHODS OF WINTER WHEAT GROWING.

The following concise reports are made upon the different wheat experiments conducted in the same portion of the experimental grounds that was used for the variety test. Some of these experiments extend over a period of three, and some over a period of four years.

Different Dates of Seeding. Two or more varieties of winter wheat have been sown at three different dates, in the month of September, in each of the past four years, and at four different dates in 1896.

The following table gives the average results for each date of seeding in 1896, and also for four years in which these experiments have been conducted:

Dates of seeding.	General appearance of plot in 1896.	Height of crop in 1896.	Straw per acre.		Weight per measured bushel.		Yield of grain per acre.	
			1896.	Average 4 years.	1896.	Average 4 years.	1896.	Average 4 years.
Sept. 2-3	Good	ins. 51	tons. 3.4	tons. 2.8	lbs. 61.2	lbs. 58.7	bush. 61.9	bush. 39.3
Sept. 7-9	Good	50	3.3	2.8	60.9	58.7	58.4	38.1
Sept. 17-20	Medium...	45	2.5	1.9	59.0	56.9	44.9	30.1
Sept. 26	Poor	41	1.7		57.1		27.3	

It will be observed from the foregoing table that, in 1896, the best yield of both grain and straw per acre, and the heaviest weight of grain per measured bushel, were produced from the first seeding, which took place on the 3rd of September. The seeding of September 26th produced less than that of September 3rd by 34.6 bushels of grain and 1.7 tons of straw per acre, and by 4.1 pounds of grain per measured bushel. In the average results for four years, it will be seen that there is an average result of over 9 bushels of grain per acre, and a weight of nearly 2 pounds per measured bushel in favor of the seedings on September 2nd and 3rd, as compared with those of September 17th and 20th.

Methods of Seeding. An experiment in sowing winter wheat broadcast, and with a grain drill, has been conducted in duplicate in each of the past three years. The average results from sowing the same qualities of grain by the two methods are very similar, there being a very slight advantage in favor of the drilled crop in both yield of grain and straw per acre, and in weight per measured bushel.

Different Quantities of Seed per Acre. In 1894, 1895 and 1896, two varieties of winter wheat were sown broadcast on small plots, at the rates of 1, 1½ and 2 bushels per acre. The best yields of both grain and straw were obtained from the thickest seeding, and the smallest yields from the thinnest seeding, in each of the three years. It must be remembered that this experiment was conducted on small plots.