

Report of the Agronomy Farm, Season of 1912  
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Report of Superintendent Agronomy Farm for 1912.

The following is a record of the work done on the Agronomy Farm during 1912, including the results and cost of the work. None of the experimental work is included, excepting such as was under the direct supervision of the farm foreman and such work as was done on the different projects by the regular farm labor.

The moisture conditions during the year were favorable for the growth of field crops. The corn and alfalfa suffered during August from hot winds. The summer was very mild, the hottest day being August 28 when the maximum temperature was 104 degrees. The heaviest rainfall was in March when 6.40 inches fell. The last snow fell March 23. The fall was exceptionally warm, although the first killing frost was September 30. This frost badly damaged the kafirs and sorghums.

Corn

Fields E, F, and G were in corn in 1912. All of field E and 6.12 acres in field F were planted to Boone County White corn and field G was planted to Kansas Sunflower. Accurate records of the yields were not kept. The following is the cost of production of the corn:-

Field E

Plowing-----	\$ 4.68
Discing-----	13.91
Harrowing-----	6.24
Planting-----	11.29
Cultivating-----	17.35
Binding and shocking-----	23.12
Husking-----	<u>41.11</u>

Total cost-----\$ 117.70

Field F

Discing-----	\$ 1.30
Harrowing-----	2.28
Harrowing (acme)-----	.76
Planting-----	.96
Cultivating-----	18.55
Harvesting-----	<u>12.86</u>

Total cost-----\$36.71

## Field G

Discing-----	\$ 6.87
Harrowing-----	9.19
Rolling-----	1.59
Planting-----	3.77
Cultivating-----	12.89
Binding and shocking-----	23.35
Husking-----	<u>43.42</u>
Total cost-----	\$101.08

## Kafir

Black hulled white kafir was grown on the Old Farm. The east side of the field was badly damaged by chinch bugs and all of the crop was damaged by frost before it was cut. It was cut and shocked between October 9 and October 14. It was left in the shocks until about November 7 when it was headed with a heading machine. The heads were then placed in portable corn cribs in the field, so arranged that the threshing machine could be set between them. The heads were threshed November 9. There was a total yield of 268.44 bushels, exclusive of the head test. The area in kafir was 8.7 acres and the yield per acre was 30.86 bushels. The following is the cost of production: -

Manuring-----	\$ 54.85
Plowing-----	26.31
Discing-----	7.74
Harrowing-----	3.83
Planting-----	4.02
Cultivating-----	20.34
Cutting and shocking-----	19.69
Heading and Threshing-----	<u>\$ 45.72</u>
Total cost-----	\$182.50

## Kansas Orange Sorghum

Kansas Orange Sorghum was grown on field D in 1912. It was badly damaged by frost before it was cut. It was cut between October 5 and October 10. After shocking, it was left in the field until about November 8 when part of it was headed and placed in portable cornercribs. The remainder was headed about November 12 and hauled direct to the threshing machine. The area in Kansas Orange Sorghum was 8 acres, and the yield 156.11 bushels or 19.51 bushels per acre. The following is the cost of production:-

Manuring-----	\$ 24.32
Discing-----	6.73
Planting-----	8.12
Cultivating-----	18.70
Harvesting-----	19.00
Heading and threshing-----	<u>32.01</u>
Total cost-----	\$108.88

The fodder from the kafir and sorghum was sold for \$2.00 a ton. The kafir produced twenty-five and the sorghum thirty tons of fodder.

### Wheat

Kharkof, Turkey, Bearded Fife and Ghirka wheats were grown in general fields in 1912.

Kharkof wheat was grown on the west part of field H, north and east of the Fertility Plots. It was seeded October 7 and 8 and harvested July 6. There were 17 acres of this wheat and it yielded 204 bushels, or 12 bushels per acre.

Turkey wheat was grown in field C, north of the road. It was drilled October 7 and 8 and harvested July 6. The area in this field in wheat was 21.5 acres and it yielded 215 bushels or 10 bushels per acre.

Bearded Fife wheat was grown in field C south of the road. It was seeded October 6 and harvested July 5. The area in wheat was 2.4 acres and the yield was 48 bushels or 20 bushels per acre.

Ghirka wheat was grown on the east side of field H along the hedge, but no records were kept of the yields.

### Oats

Red Texas oats were grown on the east part of field A. They were drilled April 4 and harvested July 8. The area in Red Texas oats was 5.19 acres and the yield was 307 bushels or 59 bushels per acre.

Kherson oats were grown in field A north of the grove. They were drilled April 2 and harvested July 9. The area was 6.4 acres and the yield 285 bushels or 44.5 bushels to the acre.

### Barley

Barley was grown in field A south of the pasture and on the east side of north A. It was drilled April 2 and harvested June 29. The area on west A was 2.55 acres and the yield 107.31 bushels or 42 bushels per acre.

### Improvements

A shop was built on the north end of the seed house. The following is the cost of the shop:-

Lumber-----\$ 91.00  
 Labor----- 103.31  
 Total cost-----\$194.31

The horse barn was built during the year, at the following cost:

Lumber-----\$1115.00  
 Labor----- 874.63  
 Total cost-----\$1989.63

A water system was put in the barn at the following cost:-

Materials-----\$ 53.00  
 Labor----- 15.21  
 Total cost-----\$ 68.21

Fence was built along the south, west and north sides of the farm. The material had been on hand for some time and no record of the cost could be obtained. The cost of the labor required was \$134.62.

Field F was tile drained at a cost of \$238.98.

#### Experiments under the Supervision of the Farm Foreman

Most of the experiments directly under the supervision of the Farm Foreman were the running of tests of different implements. The following implements were tested during the year. Nelson Grain Saver, Spalding Deep Tillage Machine, Western Land Roller, Ohio Double Disc, Buckeye Alfalfa Drill, Buckeye Grain Drill, with fertilizer attachment, and the Steel Wheat Belt lister.

The Nelson Grain Saver attachment was attached to the McCormick binder and used in harvesting 6.4 acres of Kherson oats which yielded 285 bushels. 53 1/4 pounds of cleaned oats were taken from the grain saver after harvesting these oats.

The Spalding Deep Tillage Machine was used on 2.76 acres at a cost of \$11.75 or \$4.25 an acre. This area was seeded to wheat and the effects of the deep tillage will be given in next years report.

The test with the Western Land Roller was carried on in connection with methods of treating wheat in the spring. Three plots were used, one being rolled with the Western Land Roller, one was harrowed and the other received no treatment whatever. The following are the yields of each of the plots:-

Rolled plot -----	22.5 bushels per acre
Harrowed plot-----	20.2 “ ” “
Untreated-----	15.0 “ ” “

The Ohio Double Disc was used quite extensively during the fall and did exceptionally good work on plowed ground, leaving the ground nearly as level as a spike tooth harrow, and not ridging the soil as the ordinary disc harrow does. The draft was no greater than that of an

ordinary disc of the same size.

The Buckeye Alfalfa Drill and the Buckeye Grain Drill were both tested. The alfalfa drill did good work with little draft. It was used to advantage in replanting thin spots in old alfalfa as it was not necessary to disc the places before planting. The grain drill was used to seed oats and worked well with Kherson oats but would not drill Red Texas oats because of the lack of an agitator. It also did good work in spreading fertilizer.

The Steel Wheat Belt Lister Attachment was used on about one acre which had been listed after harvest. The ridges were split with the attachment and the furrow leveled back of the implement at the same time. The ground was about as level as if it had been worked with a six shovel cultivator. These ridges were split in September.

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