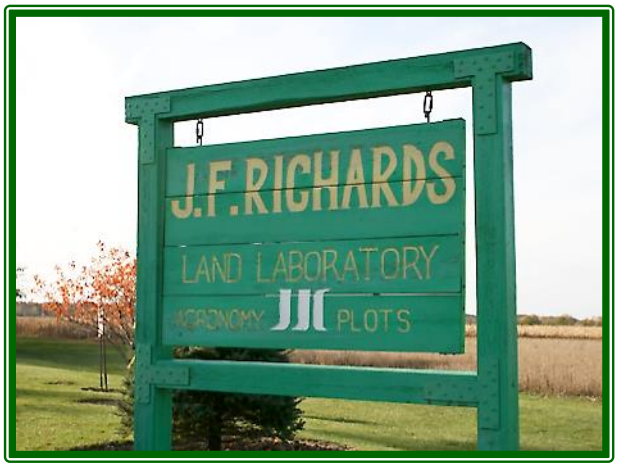
JOLIET JUNIOR COLLEGE
1901

J.F. Richards Land Laboratory
Demonstration & Research Guide
2015



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ACKNOWLEDGMENTS

Many people have contributed numerous resources to the J.F. Richards Land Lab Demonstration and Research Farm during the 2015 growing season. A few of those resources included equipment, seed, expertise and chemicals to help the farm throughout the year. These people are listed on page 4. On behalf of Joliet Junior College, I would like to thank these people and their companies for supporting the Joliet Junior College Agricultural and Horticultural Sciences Department through their generous donations.

I would like to give extra thanks to Dr. Debra Daniels, president of the College, Dr. Judy Mitchell, vice president of administrative services, Janice Reedus, director of business and auxiliary services, Dr. Peter Linden, dean of Career and Technical education, and of course the entire Agriculture department staff for their input and continued support of the research conducted at Joliet Junior College for the benefit of the students. The knowledge gained from the “hands on” experience provided by the research farm is a huge asset to both the College and the community.

INTRODUCTION

J.F. Richards Land Lab

The Joliet Junior College Demonstration and Research Farm began its operations in 1983 thanks to a generous land donation by the Richards family. The Richards family previously owned the land that is now Joliet Junior College's Main Campus. The main objectives of the farm is to provide an instructional setting for students to use during their research and classes, to demonstrate crop response to various farming practices giving students a first-hand observation of crop growth and development, and to provide unbiased, sound agronomic research information to crop producers and contributors.

Both faculty and students use the land lab for educational purposes. Students experience all aspects of production farming and apply it to their classroom settings. The students also work with their instructors to assist in management decisions of the farm. All agriculture classes use different aspects of the farm to enhance their studies in the classroom. Students enrolled in Joliet Junior College's soil and fertility class will study soil types and fertility levels. Crops classes look at cropping systems, yield calculations and plant growth development. Crop Protection classes look at disease, insect and weed pressure. Marketing students will use crop yields and prices to market grain. Mechanics students will learn the proper operation and adjustment of machinery to maximize equipment use and efficiency.

In 2015, the Demonstration and Research Farm consists of 98 acres on the Main Campus and 14 acres at the Weitendorf Agricultural Education Center (WAEC), with 55 acres of corn and 57 acres of soybeans. The deer population caused a massive amount of damage to the farm, resulting in a $20,000 loss conservatively. The small wheat demonstration averaged just over 70 bushels/acre and all of the straw from that plot was baled for some additional sales. Another $2,000 in revenue was earned from the acceptance of leaves on the farm.

CONTRIBUTORS 2015

Alyssa Abbott, Wayne Walz	Dupont/Pioneer, Corn, Soybeans
Ben Adolph	Bio-Ag, Gypsum
Fred Beane	Simplex Seed, Corn, Soybeans, Expertise
Larry Coldwater	Coldwater Seed Farm, Soybeans
Todd Condit	Great Lakes Hybrids, Corn, Soybeans
John Cronin	Right-Hand Man, Transportation, Advice
John Eckley	Pfister Seed, Corn, Soybeans
Keith Gehm	Renk Seed Co., Corn, Soybeans
Matt Kellogg, Mike Shane	NK, Golden Harvest, Corn, Soybeans, Chemicals
Scott Lagger	Elburn Coop, Fertilizer, Chemicals, Expertise
Justin Laramie, Kevin Faivre	Channel Bio LLC, Corn, Soybeans
Jerry Longman	Agri-Gold, Corn
Bradley Hammes, Pat Volk	Helena Corporation, Chemicals, Expertise, Seed
Dennis Mueller	Dairyland Hybrids, Corn, Soybeans, Alfalfa
Tom O'Connor	O'Connor Farms, Custom Tillage, Truck, Advice
Merrill Orns	Sun Prairie, Corn, Soybeans
Mike Phil	Wyffels Hybrids, Corn
Dan Schneider	LG Seed Co., Corn, Soybeans
Greg Seitz	DeKalb/Asgrow, Corn, Soybeans, Chemicals
David Stipp/Jim Muhlstadt	Stroller Implement, Precision Farming
Dan Stobbione	Wheat Seed, Advise, Baling
Randy Timm/Jake Ralph	Becks Hybrids Corn, Soybeans, Cover Crops
Greg Wolf, Alissa Benish	Stone Seed, Corn, Soybeans

AGRICULTURAL AND HORTICULTURAL SCIENCES

A complete list of faculty and staff in the Agriculture and Horticulture Sciences Department at Joliet Junior College

Brad Angus	Animal Science/Business, Department Chair
David Bartz	Landscape Design
Caryn Genens	Greenhouse Manager
Bill Johnson	Agriculture Economics/Marketing
Jeff Landers	Agronomy
Patrick Kelly	Agriculture Mechanics/Technology
Dr. Fredric Miller	Nursery Management
Tammy Miller	Soils/Fertilizers/Agriculture Business
Lisa Perkins	Turf Management/Greenhouse Production
Nathan Ray	Animal Science
Dorothy Rosier	Farmers Market Manager
Diane Vlna	Department Secretary

Steve Brockman is the JJC Demonstration and Research Manager and can be contacted at (815) 280-6636 or sbrockma@jjc.edu. To contact any staff member, call (815) 280-2320.

2015 WEATHER AT JOLIET JUNIOR COLLEGE

The growing season started off very wet in the Joliet area. Due to the soil type we have at the J.F. Richards Land Lab, we applied most of the chemicals and some of the nitrogen on April 18, and started planting corn on April 23.

A lot of the no-till ground was very wet and cold with all the trash from the year before. We had a lot of trouble planting and getting the trench to close after the planter. Luckily, we had plenty of moisture after planting and used the "Pro-Stich" trench closers instead of the standard wheels to close it up and get good stands of both corn and soybeans on the farm.

There was a total of 17 days that exceeded 90 degrees this year. A total of 26 inches of rain occurred during the growing season, with a total of over 39 inches for the year. Needless to say, very little, if any stress, was observed in 2015 except by the operator. As seen by the moisture at harvest, we had several growing degree days this year to dry the crop down before harvest.

Monthly Moisture Recorded for 2015

January	1.4	July	3.8
February	1.7	August	2.4
March	.8	September	3.7
April	3.5	October	1.8
May	5.3	November	3.9
June	7.8	December	3.5[est.]
Normal Year	**36"**	**Total 2014**	**46.8"**
		Total 2015	**39.6"**

CONTINUOUS CORN PRODUCTION AND LEAF APPLICATION

This is the second year the continuous corn plot received a fall application of leaves in different tonnages. The experiment looks at the carbon effect of leaves in relation to nitrogen and the increase in organic matter of the soil, and the total amount of nitrogen applied to the land to demonstrate the carbon effect on the corn plant. The plot received 30-80-80 fertilizer in the fall of 2014. Different tonnages of leaves were applied and left untouched by any tillage. The plot had 100# of nitrogen with Harness applied pre-plant. Planting no-till took place on April 23 with a 103 day corn variety G03W95-3000GT from Golden Harvest at 35,000 seeds/acre. Half the plot received 10 tons of leaves/acre, the other half received five tons the fall of 2014 and was left untouched. In 2013 they received 30 tons and 20 tons respectively and were chisel plowed. This was the first year using the Pro-Stich seed trench closers and in my opinion the reason we had such good stands in all that trash. There was 40# of nitrogen applied with the planter and 75# applied as a side dress in the first week of June. Organic matter had risen from 2.7 to 3.4 in most areas. The plot was weed free at harvest. A small area between the two different tonnages was cultivated to see any differences as well. The area was planted with a short season corn to get a jump on planting cover crops in the fall of 2015, which was accomplished and had a very good stand in 15" rows of radish and rye. The field was harvested on September 24 with most of the corn at 17.5% moisture. The deer population ate both headlands off and a small portion of the 30 ton area that was not recorded for this test. A total of two out of seven acres were destroyed in my opinion.

Tons/acre/2014	Total Pounds of N 2015	Tons/acre/2015	Bushels/acre
20 tons	215# nitrogen	5 tons	183.48
30 tons	215# nitrogen	10 tons	184.02
Small area that was row cultivated second week of June:			
20/30 tons	215# nitrogen	5/10 tons	198.67

CORN HYBRIDS VARIETY PLOTS-2015

We had 67 entries and checks in the Joliet Junior College demonstration plot in 2015. The corn was planted at the rate of 34,500 seeds per acre with No-Till planter into Soybean stubble on April 29 and 30. The total nitrogen applied at pre-plant was 100#, 40# applied with the planter, and 75# pounds was applied in early June. Seven tons of leaves were applied in the winter of 2014. The high was 283 bu.ac and the low was 222 bu./ac. The check used was Mycogin 2Y669A.

VARIETY	MOISTURE	YIELD	VARIETY	MOISTURE	YIELD
CHECK	18.5	262.92	Stone 5628	19.0	259.27
Becks 5825	20.5	281.41	Stone 6148	24.1	266.97
Becks 5939	20.6	265.86	Wyffels 4968	18.5	259.43
Becks EX1432	18.1	276.70	Wyffels 5138	19.5	261.53
Pioneer P0157	18.1	266.85	Wyffels 7158	20.5	256.99
Pioneer P0760	19.5	266.08	Renk 791	20.0	241.58
Check	20.2	275.70	Check	20.1	248.68
Great L. 6068	20.5	273.64	Renk 860	19.1	250.69
Great L. 5918	19.0	252.06	LG 5622	22.2	262.49
Stone 5828	18.1	249.48	LG 2549	17.4	222.15
Stone 5518	17.1	250.45	LG 5548	20.2	274.99
Wyffels 7108	18.0	269.44	Agrigold 6441	20.9	268.35
Wyffels 7888	21.2	267.08	Agrigold 6472	22.0	264.42
Renk 935	21.0	276.91	Agrigold 6416	18.4	255.89
Check	19.0	261.35	Agrigold 6462	19.1	255.42
Renk 834	19.5	251.99	Check	19.8	257.32
LG 5618	20.6	255.48	Dekalb 61-54	20.7	261.09
LG 2636	19.9	247.45	Dekalb 64-87	21.1	275.01
Becks 6365	22.1	264.91	Channel202-52	17.5	234.63
Pioneer P0496	19.1	247.05	Channel204-12	19.0	270.43
Pioneer P0419	21.0	256.19	Channel207-27	21.6	266.27
Check	20.9	266.31	Channel205-19	19.1	261.69
Great L. 5688	20.1	259.27	Channel209-53	20.5	283.26

Continued on next page

Corn varieties continued

VARIETY	MOISTURE	YIELD		
Dekalb 60-67	19.0	266.33		
Dekalb 62-77	22.2	271.16	CHECK AVERAGE	259.8BPA
DSR 9212	23.1	260.03	PLOT AVERAGE	260.33BPA
DSR 9713	24.2	264.97	TOP HYBRID	283.26BPA
DSR 9307	19.9	271.18	LOW HYBRID	222.15BPA
DSR 9409	20.5	253.05		
Pfister 2565	19.7	255.85		
Pfister 2385	18.1	244.29		
Check	19 .0	262.78		
Pfister 2447	20.0	247.69		
Pfister 2574	22.1	258.29		
Sun Prairie 2412	19.6	250.69		
Sun Prairie 2445	19.1	257.15		
Sun Prairie 2718	20.6	283.07		
Check	19.5	256.69		
Sun Prairie 2488	18.8	238.07		
Golden Harvest G12J11	19.8	271.11		
Golden Harvest G10S30	19.5	266.91		
Golden Harvest G07F23	20.4	257.14		
Golden Harvest G06N80	21.1	274.08		
Check	19.6	252.97		

The combine monitor was calibrated prior to harvest with weigh wagon and David Step, precision tech from Stoller IH in Herscher. The weights off the combine monitor showed less than a two bushel difference when crossing scales at Delong with a 550 bushel load.

All corn was planted no-till on April 29 and April 30. Fall application was 35-80-80, 34,500 seeds/acre. Four conventional varieties were sent in Roundup ready bags and were

planted/sprayed on June 1. Those 16 rows were replanted on June 3. Harvest moisture was 32% and yielded less than 200BPA.

Nitrogen application: 100 pounds pre-plant, 40 pounds applied with the planter, 75 pounds side-dressed on June 8. Seven tons of leaves were applied in winter of 2014.

The plot consisted of 8 rows at 30" spacing at 410'-450' long. Harness extra, Roundup, 2, 4-D were applied at pre-plant. It was sprayed once on June 1 with Roundup and AMS. The entire plot was weed-free. Zero lodged stalks and zero dropped ears were observed.

Harvest was on September 28 – 30. Pro-stich seed firmers were used on all of the rows, and in my opinion, is the only reason we had such a great stand.

Deer did not affect any part of the corn plot in my estimation and I feel the results are true and unbiased. This year, with all of the extra rain we received, the population could have been pushed to 36,000 without much of a problem.

CORN ROOTWORM

Corn rootworms are one of the biggest pests to corn producers in the Midwest today and will be in the foreseeable future. The following results were seen.

Treatments and Trials

Previous Crop:	Corn
Hybrid:	Renk791 RR {control}
	Renk791SSTX {crw}
Tillage:	No-till, chopped stalks
Insecticide:	Varies
Herbicide:	Harness/Roundup
Planted:	5/2/15
Harvest:	10/19/15
Nitrogen:	100# pre-plant with Harness/
	Roundup, 75# Side-Dressed
Insecticides:	Force, Lorsban

Results

Treatment:	Yield Bu./Ac.
Renk791RR No Insect.	209.31
Renk791RR Lorsban	227.11
Renk791RR Force	231.97
Renk791SSTX No Insect.	229.60
Renk791SSTX Lorsban	241.82
Renk791SSTX Force	244.58

Summary

There was very little rootworm damage observed with the crop this year, but there was extensive deer damage to the west half of the plot. Results from the east 250 feet of the 700 foot plot were recorded for comparison purposes this year. Thank you to Renk Seed for their donation and we will try again next year.

VARIOUS TILLAGE AND VARIOUS PLANTING DATES: SOYBEANS AND FERTILITY PLOTS

The Fertility Plot was planted on May 18 with Dairyland soybean variety 2995 at 140,000 seeds/acre. The no-till stand emerged very nicely but never got over 4 inches tall the entire year and needless to say, I was unable to harvest anything off this plot for results purposes in 2015. This plot will be corn in 2016.

The Tillage and Planting Dates Plot had three different tillage practices used; chisel plow, disking and no-till, and three different planting dates, April 28, May 18 and June 3 this year. Northrup King donated soybean variety S28-A2 for the trial. A small portion of the field on the very east side did get over 1 foot tall by harvest, but only yielded 3-4 bu. per acre. This plot will be corn in 2016.

These two very important plots incurred the greatest amount of deer devastation on the entire farm totaling over $9,000 in conservative damages.

After six months of meetings and communications with the college, the Board of Trustees has made a decision at their December meeting to start culling the herd at the College on a one-year trial.

SOYBEAN VARIETIES

Soybeans were planted no-till on May 14 into corn stubble and 10 tons of leaves applied in the fall of 2014 at 140,000 seeds/ acre in 30" rows. Authority XL/Roundup, 2,4-D were used pre-plant and Roundup was sprayed one time during mid-June. The entire field was walked for any escape weeds. Soybeans were harvested on October 3 and October 6 at 11.5-13.5% moisture. There was a small area of drowned out plants and row length was compensated properly to make all things equal. Pro-stich seed trench closers were used on the planter, and in my opinion, would not have had a very good stand without them. Fertilizer application was 35-80-80 in the fall of 2014. A total of 12 rows were used for each variety tested this year. I can only imagine what we could have had with 2-3" of rain in mid-August this year, as it was very dry. Two varieties were ran through a weigh wagon to make sure the combine monitor was working properly at harvest. Deer damage was extensively confined in the fill area of the field and did not appear to effect any of the varieties.

Results

Variety	Yield
Becks 335NR	65.16
Becks 278R4	64.30
Pioneer 25T51R	60.22
Pioneer P28T08R	67.43
NK S30-V6	63.46
NK S28-D3	61.75
LG C2441R2	63.29
LG C2744R2	67.43
Great Lakes GL2959NR2	66.32
Great Lakes GL2789R2	70.53
DSR 3232R2Y	77.12
DSR 2909R2Y	63.36
Renk RS241R2	53.36
Renk RS263NR2	48.21
Biogene BG7241RR2Y	48.40
Biogene BG7300RR2Y	57.43

Results

Variety	Yield
Sun Prairie 29R23	64.71
Sun Prairie 26R23	53.76
Asgrow AG3334RR2Y	60.07
Asgrow AG2933RR2Y	52.86
Stone 2R2915	63.46
Stone 2R22115	53.88
Pfister 30R25	56.40
Pfister 29R25	64.61
Renk S-284	54.85
Renk RS265NR2	58.25

CONTINUOUS SOYBEANS: CYST-NEMATODE STUDY

Mark Seed Company

Nematodes seem to be everywhere. This study is to determine if new varieties and new practices can reduce yield loss from the nematodes problem and grow continuous soybeans on the same ground year-after-year.

Planting date: 5/8/15
Harvest date: 10/15/15
Previous crop: Soybeans
Fungicide: Headline 7/4/15
Insecticide: Garlic
Herbicide: AuthorityXL pre-plant, Roundup post-emerge
Planting type: 30" Rows
First site of Glyphosate resistant weeds, in particular, Waterhemp and Marestail.

The field was cultivated and hand hoed to eliminate 100% of the weeds.

Results

Simplex Seed 1329CTA {Resistant}

68.01 Bushels/Acre

Pioneer Variety 93Y25 {Resistant}

67.82 Bushels/Acre

Susceptible Simplex Seed
57.49 Bushels/Acre

Simplex Seed 1329CTB

{Resistant}
68.26 Bushels/Acre

Soil samples indicated very high populations of nematodes present in this field. The University of Illinois suggested that soybeans not be planted in these areas for at least two years and then a rotation with corn. Will switch "A" variety with "B" variety next year to continue the study for the fifth year.

2015 WEITENDORF SOYBEAN VARIETY PLOT

This year Channel Bio LLC used the entire 14 acre farm for Soybean Variety trials. The plot was planted on May 25 in no-till style. The farm received one inch of rain shortly after planting and over 20 inches during the crop year. The plot was sprayed with AuthorityXL/Roundup and 2,4-D on May 8 and Roundup a second time on June 20. Not a single weed was observed at harvest, which occurred on October 22. Each trial contained 24 rows, 350' long in 30" spacing, or about half an acre, with the following results recorded:

Variety	Yield
Channel 2108 RR	55.53BPA
Channel 2306 RR	58.15BPA
Channel 2309 RR	58.05BPA
Pioneer 24T05 RR	54.91BPA
Channel 2508 RR	65.52BPA
Channel 2609 RR	57.18BPA
Channel 2800 RR	65.88BPA

I want to thank Channel Bio LLC and Justin Laramie for their continued support of Joliet Junior College and the Weitendorf Agriculture Education Center. All proceeds from the farm go to the JJC Foundation for Agricultural Scholarships.

VARIOUS TRIALS AT JOLIET JUNIOR COLLEGE IN 2015

300 Bushel/Acre Corn Trial:

Pioneer supplied variety P1197AMXT planted on April 24 at 37,000 seeds/acre. This particular plot had extensive deer feeding throughout the year and was unable to achieve anywhere near the desired outcome.

Northrup King Seed Coatings for Cyst-Nematode Study:

Planted no-till into corn residue on May 3 at 150,000 seeds/acre.

Variety: S28-A2 with Clariva Seed treatments = 74.86BPA

S28-A2 with CruiserMax seed treatment = 76.90BPA

Check non-resistant to cyst nematodes = 51.23BPA

Corn Planted into Radish and Oat Cover Crops:

Sun Prairie supplied corn variety 2718 at 34,000 seeds/acre and a total of 150# of nitrogen applied in 3 applications. Planted on May 1.

This plot did not appear to need more nitrogen throughout the year, but only produced 181BPA, so we will not be doing this trial in 2016.

Group Soybean Study:

Five groups of soybeans were planted, 1-5, on May 3 at 140,000/acre. It turned out to be very beneficial for the students to study. We were able to harvest groups 1-4 but unable to harvest group 5. Yields: 1 = 21BPA, 2 = 32 BPA, 3 = 40BPA, 4 = 47BPA. Thank you to Jeff Landers for securing the seeds for this experiment.

16 X 16 Corn/Soybean Plot with Results from the Corn

The plot was planted on May 8 with 34,500 seeds/acre. The corn was planted in the areas that had been soybeans the previous year and received 80# of nitrogen pre-plant, 40# of nitrogen with the planted and an additional 80# of nitrogen as side-dress the first week of June. The land was chisel plowed in the fall of 2014 after an application of 15 tons of leaves/acre were applied. No chemicals were applied before planting, but one application of Roundup was applied during the first week of June. An additional 35-80-80 was applied in the fall of 2014 as well. The land was field cultivated prior to planting. Two types of Gypsum were applied at 2000#/acre. The test was done to see any difference in "sun competion" in final yield and the value of the Gypsum applied in the spring of 2015.

Results:

8 rows next to the soybeans, Bio-Cal Gypsum	233.56
8 rows in the middle, Bio-Cal Gypsum	230.72
8 rows next to the soybeans, No Gypsum	238.54
8 rows in the middle, No Gypsum	232.24
8 rows next to the soybeans, Super-Cal Gypsum	291.40
8 rows in the middle, Super-Cal Gypsum	279.75
8 rows next to the soybeans, No Gypsum	232.19
8 rows in the middle, No Gypsum	230.41

There was a very good response to the Super-Cal Gypsum product in the corn crop, but very little response in the soybean crop.

Small Nitrogen Test:	80# TOTAL NITROGEN APPLIED	97.63
	120# " " "	238.83
	180# " " "	256.91
	240# " " "	248.11
	300# " " "	257.99

VARIOUS TRIALS AT JOLIET JUNIOR COLLEGE IN 2015 (CONTINUED)

16 X 16 Corn/Soybean Plot with Results from the Soybeans

The plot was planted on May 8 with 140,000 seeds/acre. The soybeans were planted in the areas that had been in corn the previous years, and all but 16 rows received 80# of nitrogen pre-plant. The land was chisel-plowed in the fall of 2014 after an application of 15 tons/acre of leaves were applied. No chemicals were applied before planting, with only one application of Roundup during the first week of June. An additional 35-80-80 was applied in the fall of 2014 as well. The land was field cultivated prior to planting. Two types of Gypsum were applied at 2000#/acre. The test was done to see any difference in "sun competion" in the final yield and the value of the Gypsum applied in the spring of 2015. Simplex Seed donated Variety 1329 CTB for the trial:

10 rows in the middle, Bio-Cal Gypsum, 80# nitrogen	71.94BPA
6 rows next to the corn, Bio-Cal Gypsum, 80# nitrogen	56.91BPA
10 rows in the middle, Bio-Cal Gypsum, 80# nitrogen	79.67BPA
6 rows next to the corn, Bio-Cal Gypsum, 80# nitrogen	63.65BPA
10 rows in the middle, no Gypsum, 80# nitrogen	76.80BPA
6 rows next to the corn, no Gypsum, 80# nitrogen	61.49BPA
10 rows in the middle, Super Cal Gypsum, 80# nitrogen	73.65BPA
6 rows next to the corn, Super Cal Gypsum, 80# nitrogen	58.19BPA
10 rows in the middle, Super Cal Gypsum, 80# nitrogen	78.30BPA
6 rows next to the corn, Super Cal Gypsum, 80# nitrogen	59.67BPA
10 rows in the middle, no Gypsum, no nitrogen	67.23BPA
6 rows next to the corn, no Gypsum, no nitrogen	59.21BPA

The plot did have a few resistant weed escapes that were hand hoed out of the plot. Otherwise, the field was very clean and had some of the tallest beans I have ever seen in this part of the state.

ALFALFA PLOT PROVIDED BY DAIRYLAND SEED

There has been alfalfa research conducted at JJC for a long time. This plot had been in alfalfa since 2009. It was sprayed at a very heavy rate of 2,4-D on September 10, 2012, then chisel plowed very deep two times on September 25, 2012. The ground was tilled and planted on April 1, 2013 with six different alfalfa varieties, duplicated two times and rolled two times. The stand was very good. Due to very wet weather, only two harvests occurred this year. The first harvest was on June 18, 2014, and the second occurred on July 28, 2014. A 30" X 35' strip was cut, harvested and weighed for each, and results are Dry Tons/Acre.

	2013	2014	2015	3 Year Average
Dairyland HybriForce 2400	3.33	2.62	3.21	3.05
WL 367 HQ RR	3.07	2.82	3.16	3.01
Dairyland HybriForce 3400	3.36	2.66	3.62	3.21
Pioneer 54Q32	2.89	2.93	3.55	3.12
Dekalb DK A41-18 RR	2.86	2.83	3.30	2.99
Dairyland HybriForce 3400	3.30	2.80	4.32	3.47
Croplan LegenDairy XHD	3.24	2.94	3.67	3.28
Dairyland HybriForce 2400	3.24	2.90	4.05	3.39
WL 367 HQ RR	3.17	2.83	3.68	3.22
Dairyland HybriForce 3400	3.05	2.97	3.91	3.31
Pioneer 54 Q 32	2.83	2.89	3.59	3.10
Dekalb DK A41-18 RR	2.93	2.90	3.62	3.15
Croplan LegenDairy XHD	2.84	2.84	3.29	2.99
Dairyland HybiForce 2400	2.83	2.84	2.91	2.86

SUMMARY: CROP YEAR 2015

J.F. Richards Land Lab

First, I want to say that it has been my privilege and honor to serve as the Farm Manager for another rewarding year at Joliet Junior College. The Land Lab has been set up in order to give the agriculture students at JJC all the hands-on experience they want and this year there has been a tremendous volume of students doing just that. My thanks to the ag staff, especially Jeff Landers, Tammy Miller, Patrick Kelly and Dr. Fredric Miller in helping with this accomplishment.

One of the most interesting highlights of the year, besides all of the different experiments in progress, was been the weekly corn planting that started on July 2 and continued for eight straight Wednesdays. The small plots would have been a great teaching tool, but unfortunately the deer ate everything as soon as it came up. We ended up with little to show the students for all the work involved. It worked well in 2014, so we will try it again in 2016.

I want to thank the agronomy instructor, Jeff Landers, who was able to acquire a set of Pro-Stich seed firmers and an abundance of Precision Planting equipment for the planter at a reduced cost to further the education of our students in the Ag. Mech. classes. The seed firmers certainly made a huge difference in our stand counts, as it becomes increasingly difficult to plant no-till into all the trash left over from prior years. The Precision equipment was installed by the Mech. class on the planter and these student planted the first week of November with the class to see the results first-hand in the field. We hope that all that seed does not come up next year.

The corn crop yielded from 284 bu./ac. to a low of zero. Most of the outside four rows on all the experimental plots were eaten off by the large deer population and yeilded little. Despite all the damage, the farm still produced about 220 bu./ac. this year, if you remove the acres destroyed by deer. The crop did not show one day of stress during the entire year with over 26 inches of rain during the growing season and over 38 inches of total moisture for the entire year. We had a total of 19 days at or above 90 degrees, in addition to the plentiful moisture. Without a doubt, the farm suffered some nitrogen loss because of the abundant rain.

The soybean crop went from the mid 80 bu./ac. to a low of zero. The actual soybean variety plot went from 77 bu./ac. down to about 52 bu./ac. We are very fortunate that the deer did not seem to interfere with the plot at all this year. There was a total of five groups of soybeans planted for demonstration purposes and we were able to harvest four out of the five groups. The fifth group will probably be ready in mid-December. Because of the extensive soybean damage on the farm, Federal Crop Insurance will be paying about $3,000 in proceeds in 2015.

The first Glyphosate resistant weeds, in particular Waterhemp and Marestail, showed up in the summer of 2014 in the continuous soybean plot. This year I sprayed a combination of Authority XL/Roundup/2,4-D prior to planting on all the soybean acres. I also field cultivated the continuous soybean plot prior to planting, as it showed the highest pressure for these weeds in 2014. I would have to say, it worked very well in all the soybean fields and we will be following that program again next year using Roundup herbicide again as well.

Before closing, I want to comment on the ever-increasing deer population on the farm. Over $20,000 in damage has occurred on this 98 acre farm in 2015 on a conservative basis. If we were enjoying the prices just three years ago, that number would have been $30,000. However, the JJC Board of Trustees have made a decision that comes after four meetings, a work study session and a public hearing about the problem. A pilot culling program will start this winter and will be evaluated as time goes on. This year I lost the entire fertility plot of soybeans, the entire planting and tillage plot of soybeans, about 75 percent of the insecticide plot and half of the corn in the fill area where no experiments are normally tried because of the proximity to the deer population. After a very concerted effort to get the students out on the farm the last three years, many of the experiments were eaten off and I end up showing the students a very sub prime looking crop in a lot of the areas.

I want to thank Emerson Nafziger, University of Illinois, Doug Maxwell, University of Illinois and Fred Beane, Simplex Seed Co. who all made this year's annual Fall Field Day successful by giving their individual talks. We had a lot of positive feedback about all of the speakers. Also, want to thank the JJC Culinary team for preparing a wonderful meal after the tour ended. No one left hungry! I also want to thank Friestad Farms for supplying two very large hay racks to assist in farm transportation to the demo sites and Andy Rousonelous Sr. and Andy Rousonelous Jr. for driving the tractor on our field day. Thanks also to John Cronin for assisting with traffic. We had over 130 students, staff and area farmers attend this year on a very beautiful day that Professor Bill Johnson predicted would be a good day some three months earlier. He may want to go into weather forecasting as his next career.

As 2015 comes to a close, we look forward to the 2016 crop year. Things can sure change in a hurry. Three years ago we were looking at $6-$7 corn, $15-$16 soybeans, and now we are trying to manage and farm with $3 corn and $8 soybeans, with most inputs having a blind eye to our bottom line. The extra yield this year makes the hurt a little less painful, but a lot of things in the business of farming will certainly have to be adjusted from the present situation. I will, God willing, try and meet the expectations of the college, the students and the farming community as a whole in providing unbiased results with the many different experiments going on here at Joliet Junior College for the crop year 2016. I have so many people interested in contributing that I wish I had another 100 acres to use.

Thank you again to all the students that I have had the pleasure of meeting, working with, and interacting with, the entire Ag. staff for all of their input throughout the year, and all the contributors that have been so kind and generous to make 2015 another success.

Steve Brockman '71 JJC

Farm Manager

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