Agro-Tech, Inc. Public Research Trials

2007

AGRO-TECH
RESEARCH FARM

AGRO-TECH RESEARCH FARM

Public Barley Yield Trial
Mohall, ND 2007

RENVILLE-BOTTINEAU AG IMPROVEMENT ASSOCIATION

		Yield		Agronomics													
				Moisture		Test Weight		Protein		Plump		Thin		Stem Breakage		Height	
Variety	Row	bu/ac	Rank	%	Rank	lb	Rank	%	Rank	%	Rank	%	Rank	*1-9	Rank	Inch	Rank
Lacey	6	112.5	**1**	13.0	**6**	48.5	**2**	13.8	**5**	87.4	**3**	1.3	**1**	3.3	**5**	37.3	**3**
Legacy	6	111.5	**2**	12.6	**2**	46.7	**8**	13.6	**3**	81.5	**10**	2.1	**6**	3.3	**6**	38.5	**6**
Drummond	6	109.4	**3**	12.9	**4**	47.7	**5**	13.9	**6**	82.7	**8**	1.7	**4**	4.0	**9**	39.3	**9**
Stellar-ND	6	106.7	**4**	12.3	**1**	46.3	**9**	13.5	**2**	86.7	**4**	1.4	**2**	4.0	**8**	36.8	**2**
Tradition	6	106.6	**5**	12.9	**5**	47.9	**3**	13.6	**4**	85.5	**5**	1.5	**3**	2.3	**4**	38.8	**8**
Robust	6	103.4	**6**	13.2	**7**	47.8	**4**	14.1	**9**	84.7	**6**	1.7	**5**	4.7	**10**	39.3	**10**
Rawson	2	99.2	**7**	14.8	**10**	47.0	**7**	13.1	**1**	93.3	**1**	3.3	**8**	1.0	**1**	38.5	**7**
CDC Copeland	2	96.6	**8**	12.7	**3**	45.3	**10**	14.0	**7**	82.3	**9**	8.3	**10**	2.0	**3**	37.8	**5**
Conlon	2	95.4	**9**	13.8	**9**	49.9	**1**	14.0	**8**	92.7	**2**	3.2	**7**	4.0	**7**	36.5	**1**
AC Metcalfe	2	93.9	**10**	13.6	**8**	47.2	**6**	14.3	**10**	83.8	**7**	6.8	**9**	2.0	**2**	37.3	**4**
LSD (P=.05)		6.28		0.37		0.96		0.33		3.72		1.44		1.39		1.76	
Standard Deviation		4.33		0.26		0.66		0.23		2.56		0.99		0.81		1.21	
CV		4.18		2.51		1.39		1.67		2.98		31.95		26.40		3.20	
Grand Mean		103.52		13.16		47.42		13.77		86.04		3.11		3.07		37.98	

***** 1 = best & 9 = worst

Seeding Type	Zero-Till
Location	Mohall, ND - Renville County
Plot size	5 ft x 25 ft - 4 replicates
Planting Date	May 3rd, 2007
Harvest Date	August 8th, 2007
Fertility	25 lbs P and 100 lbs N
Herbicides	Axial + Widematch + MCPA
Fungicide	Headline at 4-5 leaf

Comments

Plots were seeded with a Great Plains No-till drill and straight combined. Yields are converted to 14.5% moisture. Proteins, which are above the recommended levels, are high due to an excess of residual soil nitrogen in the trial area. Plump and thins are within the recommended quidelines. All varieties fell below the 0.5 ppm maximum guideline for DON.

AGRO-TECH RESEARCH FARM

ADM Public Canola Yield Trial Velva, ND 2007

ADM

Planted: May 2, 2007		Herb.	Moisture		Height		Maturity*		Yield		Past Yield	
Variety	**Company**	**System**	**%**	**Rank**	**Inch**	**Rank**	**Days**	**Rank**	**lb/ac**	**Rank**	**2006**	**2005**
Invigor 8440	Bayer	LL	9.6	**25**	32.5	**16**	86	**23**	1668	**1**		
IS7145 RR	Monsanto	RR	8.3	**2**	35.0	**25**	84	**2**	1570	**2**	1053	1897
DKL52-10	Monsanto	RR	8.9	**15**	37.0	**31**	85	**18**	1518	**3**	954	
CG HyClass 906	Croplan	RR	8.5	**5**	40.3	**34**	85	**21**	1429	**4**		
CG HyClass 410	Croplan	RR	9.3	**21**	33.3	**20**	86	**27**	1377	**5**		
DKL52-41	Monsanto	RR	8.5	**4**	32.0	**13**	85	**11**	1324	**6**		
Nexera 845 CL	Dow Ag	CL	10.5	**32**	31.8	**12**	86	**29**	1323	**7**		
Invigor 5440	Bayer	LL	10.0	**29**	36.3	**30**	86	**24**	1318	**8**		
CG HyClass 905	Croplan	RR	8.9	**12**	36.0	**28**	86	**28**	1312	**9**	840	1789
DKL38-25	Monsanto	RR	9.4	**23**	31.5	**10**	85	**17**	1282	**10**	1062	1830
InVigor 5550	Bayer	LL	9.3	**20**	37.3	**32**	85	**19**	1210	**11**	1292	1547
CG HyClass 924	Croplan	RR	9.2	**17**	32.8	**17**	85	**12**	1192	**12**	915	
1852H	Meridian Seed	RR	8.4	**3**	35.3	**27**	84	**1**	1177	**13**		
30 Caliber	Proseed	RR	10.3	**31**	34.5	**23**	86	**30**	1172	**14**		
CNX 11	Dow Ag	CL	9.3	**19**	32.0	**14**	86	**26**	1170	**15**		
CG HyClass 712	Croplan	RR	9.7	**28**	37.5	**33**	87	**34**	1158	**16**	880	1759
Invigor 5630	Bayer	LL	8.7	**7**	33.3	**18**	84	**3**	1134	**17**	1090	1858
1818	Meridian Seed	RR	8.8	**9**	29.8	**8**	87	**32**	1111	**18**	782	1552
1671H	Meridian Seed	CL	9.6	**26**	36.3	**29**	85	**16**	1107	**19**		
50 Caliber	Proseed	RR	8.5	**6**	33.8	**22**	85	**7**	1083	**20**		
SW H5263RR	Meridian Seed	RR	8.9	**14**	33.5	**21**	87	**33**	1078	**21**		
CG Freedom 8450	Croplan	LL	8.7	**8**	35.0	**26**	85	**8**	1065	**22**		
Nexera 830 CL	Dow Ag	CL	12.7	**33**	29.8	**7**	85	**20**	1001	**23**		1298
1759S	Meridian Seed	RR	9.4	**22**	28.3	**4**	85	**15**	945	**24**		
2066	Proseed	RR	9.2	**18**	31.0	**9**	84	**5**	943	**25**	836	1508
357 Magnum	Monsanto	RR	9.6	**27**	28.3	**3**	85	**14**	939	**26**	1164	1760
1768S	Meridian Seed	RR	8.8	**10**	32.3	**15**	86	**22**	911	**27**		
Nexera 828 CL	Dow Ag	CL	13.5	**34**	34.5	**24**	87	**31**	864	**28**	717	
CNX 06	Dow Ag	CL	9.5	**24**	29.3	**6**	85	**13**	804	**29**	784	
RangeRR	Integra Seed	RR	9.2	**16**	27.5	**2**	85	**10**	757	**30**		
Int.3789	Integra Seed	RR	8.9	**11**	31.8	**11**	84	**6**	723	**31**		
IS3057 RR	Monsanto	RR	8.0	**1**	29.3	**5**	84	**4**	690	**32**		
CG Rugby	Croplan	RR	8.9	**13**	25.5	**1**	85	**9**	610	**33**		
Roper	Cibus	Conv	10.2	**30**	33.3	**19**	86	**25**	606	**34**		
LSD (P=.05)			1.31		5.59		1.07		288.01			
Standard Deviation			0.93		3.99		0.76		205.71			
CV			9.97		12.15		0.89		18.62			
Grand Mean			9.37		32.85		85.22		1104.94		951	1680
*Maturity in days from planting												

AGRO-TECH RESEARCH FARM

Public Canola Yield Trial
Mohall, ND 2007

RENVILLE- BOTTINEAU AG IMPROVEMENT ASSOCIATION

		Herbicide	Yield		Height		Maturity		Lodging		Test Weight		Moisture	
Variety	**Company**	**System**	**lb/ac**	**Rank**	**Inch**	**Rank**	**DAP***	**Rank**	**1-9***	**Rank**	**lb**	**Rank**	**%**	**Rank**
IS7145 RR	Monsanto	RR	1818	**1**	48.3	**7**	88	**3**	3	**3**	51.6	**4**	8.1	**3**
CG HyClass 906	Croplan	RR	1747	**2**	50.3	**11**	88	**3**	2	**2**	50.1	**9**	8.2	**4**
Invigor 8440	Bayer	LL	1714	**3**	46.0	**5**	87	**2**	2	**2**	51.3	**5**	8.4	**10**
CG HyClass 924	Croplan	RR	1682	**4**	46.3	**6**	87	**2**	2	**2**	50.4	**7**	8.2	**6**
CG HyClass 778	Croplan	RR	1682	**5**	45.3	**3**	90	**5**	2	**2**	49.9	**10**	8.1	**2**
DKL52-41	Monsanto	RR	1669	**6**	49.3	**10**	90	**5**	4	**4**	51.0	**6**	8.2	**5**
InVigor 5550	Bayer	LL	1637	**7**	49.0	**8**	87	**2**	2	**2**	53.7	**1**	8.3	**7**
Invigor 5630	Bayer	LL	1530	**8**	45.0	**1**	86	**1**	1	**1**	53.1	**2**	8.3	**8**
CG HyClass 712	Croplan	RR	1492	**9**	49.3	**9**	91	**6**	1	**1**	49.5	**11**	8.6	**11**
IS3057 RR	Monsanto	RR	1439	**10**	45.5	**4**	86	**1**	2	**2**	51.9	**3**	7.9	**1**
CG Freedom 84S01 LL	Croplan	LL	1206	**11**	45.0	**2**	89	**4**	1	**1**	50.4	**8**	8.4	**9**
LSD (P=.05)			168.88		3.43						2.56		0.40	
Standard Deviation			116.96		2.38						1.77		0.28	
CV			7.30		5.04						3.47		3.40	
Grand Mean			1601.54		47.18		88.1		2.0		51.17		8.24	

*DAP = days after planting

***1 = best & 9 = worst**

Seeding Type	Zero-Till
Location	Mohall, ND - Renville County
Plot size	5 ft x 25 ft - 4 replicates
Planting Date	May 3rd, 2007
Harvest Date	August 8th, 2007
Fertility	25 lbs P and 100 lbs N
Herbicide	Roundup WeatherMax ***or*** Liberty

Comments

Plots were seeded with a Great Plains No-till drill and pushed before combining. Yields converted to 8.5% moisture.

AGRO-TECH RESEARCH FARM

Public Corn Yield Trial
Velva, ND 2007

Planted: April 27, 2007

Harvested: October 2, 2007

Hybrid	Company	Traits	RM	Comment	Vigor	Moisture		Test Weight		Yield: Combined		Yield: Conventional		Yield: No-till	
					1-9*	%	Rank	lbs	Rank	bu/ac	Rank	bu/ac	Rank	bu/ac	Rank
582Bt11	Proseed	LL/Bt	82	SEMI-FLEX	2.2	15.3	6	55.1	6	79.6	1	87.4	1	71.7	15
Int.6683	Integra Seed	RR	83	SEMI-FLEX	1.7	15.8	7	54.4	13	77.4	2	74.9	3	79.9	1
NT-5383	Nu-Tech	RR/YGCB	84	SEMI-FLEX	2.0	16.8	15	53.0	25	77.4	3	77.5	2	77.2	3
Int.6385	Integra Seed	RR	85	SEMI-FLEX	1.0	14.7	3	54.7	9	75.8	4	71.9	6	79.8	2
51P15	Dyna-Gro	RR/BT	85	FIXED	1.0	14.7	2	55.3	5	74.5	5	73.2	4	75.7	4
51B27	Dyna-Gro	RR/BT/CRW	84	FLEX	3.0	17.1	18	53.8	21	73.1	6	71.4	8	74.8	6
NT-5882	Nu-Tech	RR/YCGB	81	SEMI-FLEX	1.7	16.4	11	53.8	20	72.2	8	71.5	7	72.9	8
2821 RRBT	Seeds 2000	RR/BT	82	SEMI-FLEX	2.0	16.5	12	54.2	14	72.2	7	72.6	5	71.7	14
2P174	Mycogen Seeds	RR/YG	85	SEMI-FLEX	1.3	17.2	22	54.1	15	71.3	9	67.3	15	75.3	5
DKC 35-51	Monsanto	RR/YGCB	85	SEMI-FLEX	1.3	16.6	14	53.6	22	71.2	10	70.7	10	71.8	13
2K154	Mycogen Seeds	RR/HX	83	SEMI-FLEX	2.3	15.0	4	54.9	7	70.7	11	70.9	9	70.4	16
2810 RR	Seeds 2000	RR	81		3.0	14.5	1	50.7	27	70.2	12	68.1	14	72.4	11
LR 9483 RRYG+	Legend	RR/BT/CRW	83	FLEX	3.3	16.9	17	53.8	19	69.4	13	65.4	16	73.3	7
581 RRBtCRW	Proseed	RR/Bt/CRW	83	SEMI-FLEX	1.7	17.5	23	53.4	24	69.4	14	70.7	11	68.1	20
DKC 29-98	Monsanto	RR/YGCB	79	SEMI-FLEX	1.7	15.2	5	56.2	2	68.7	15	69.5	12	68.0	21
83-02 CBRCRW	Gold Country	RR/BT/CRW	83	SEMI-FLEX	1.3	17.1	19	54.1	16	68.2	16	63.6	19	72.8	9
NT-5883	Nu-Tech	RR/YGCB	83	SEMI-FIX	1.7	16.9	16	53.5	23	68.1	18	63.6	20	72.6	10
LR9779 RR	Legend	RR/BT	79	SEMI-FLEX	2.0	17.1	21	55.6	4	68.1	17	63.8	18	72.3	12
2J086	Mycogen Seeds	RR	80	SEMI-FLEX	1.3	15.9	9	53.8	18	67.9	19	68.6	13	67.1	23
Int.6780	Integra Seed	RR	80	SEMI-FLEX	1.7	16.6	13	55.6	3	65.9	20	64.8	17	67.1	22
LR9584 RB	Legend	RR/BT	84	SEMI-FLEX	1.0	18.3	26	53.9	17	65.0	21	61.7	22	68.4	19
781 RR	Proseed	RR	81	SEMI-FLEX	2.0	17.1	20	50.3	28	63.9	22	59.0	24	68.8	17
84-02 R	Gold Country	RR/BT	84	SEMI-FLEX	2.7	17.5	24	54.4	12	63.1	23	57.5	25	68.7	18
Int.6378	Integra Seed	RR	78	SEMI-FLEX	3.7	15.9	8	58.2	1	61.8	24	63.1	21	60.5	27
DKC 33-11	Monsanto	RR/YGCB	83	FIXED	1.7	18.6	27	54.9	8	61.6	25	59.9	23	63.2	25
678 RR	Proseed	RR	78	SEMI-FLEX	3.0	16.0	10	51.3	26	59.6	26	57.1	27	62.1	26
51P97	Dyna-Gro	RR/BT	81	FLEX	1.7	21.1	28	54.6	11	58.1	27	52.7	28	63.6	24
T 81RRBt	Proseed	RR/Bt	80	SEMI-FLEX	1.7	18.3	25	54.7	10	55.7	28	57.4	26	53.9	29
LR9780 RB	Legend	RR/BT	80	FIXED	3.0	22.8	29	49.7	29	52.7	29	48.8	29	56.7	28
LSD (P=.05)					1.13	1.45		1.19		6.57		9.40		8.35	
Standard Deviation					0.98	1.27		1.04		5.75		5.75		5.11	
CV					49.72	7.54		1.93		8.44		8.67		7.34	
Grand Mean					1.99	16.86		53.99		68.03		66.36		69.69	

* 1 = best & 9 = worst

Comments:

Six reps were planted, three reps no-till and three reps conventional till. Soil temperature and moisture were above normal at planting so no significant emergence differences were found between hybrids or tillage method. Relative maturities (RM) are based upon company information.

AGRO-TECH RESEARCH FARM

Public Durum Yield Trial
Mohall, ND 2007

RENVILLE-BOTTINEAU AG IMPROVEMENT ASSOCIATION

	Yield		Agronomics							
			Moisture		Test Weight		Protein		Height	
Variety	**bu/ac**	**Rank**	**%**	**Rank**	**lb**	**Rank**	**%**	**Rank**	**Inch**	**Rank**
Grande D' Oro	56.0	**1**	12.2	**10**	61.8	**2**	15.5	**3**	39.5	**9**
Grenora	53.9	**2**	11.3	**2**	60.0	**7**	14.6	**10**	37.8	**2**
Primo D' Oro	53.3	**3**	12.0	**8**	61.7	**3**	15.4	**5**	44.8	**10**
Lebsock	53.2	**4**	11.9	**7**	62.0	**1**	14.7	**9**	38.5	**5**
Maier	52.9	**5**	11.7	**4**	61.6	**4**	15.7	**2**	38.0	**4**
Alkabo	51.5	**6**	12.0	**9**	61.6	**5**	15.1	**6**	38.5	**6**
Dilse	51.4	**7**	11.2	**1**	59.0	**10**	16.3	**1**	38.0	**3**
Divide	51.4	**8**	11.4	**3**	59.9	**8**	15.5	**4**	39.5	**8**
Pierce	50.2	**9**	11.7	**5**	60.7	**6**	14.9	**8**	38.8	**7**
Alzada	47.4	**10**	11.8	**6**	59.6	**9**	15.0	**7**	35.3	**1**
LSD (P=.05)	4.42		0.50		1.72		0.38		1.95	
Standard Deviation	3.04		0.35		1.18		0.26		1.35	
CV	5.84		3.99		2.05		1.73		3.46	
Grand Mean	52.12		11.70		60.80		15.26		38.85	

Seeding Type	Zero-Till
Location	Mohall, ND - Renville County
Plot size	5 ft x 25 ft - 4 replicates
Planting Date	May 3rd, 2007
Harvest Date	August 16th, 2007
Fertility	25 lbs P and 100 lbs N
Herbicides	Puma + Widematch + MCPA
Fungicide	Headline at 4-5 leaf

Comments

Plots were seeded with a Great Plains No-till drill and were straight combined. Yields converted to 13.5% moisture.

AGRO-TECH RESEARCH FARM

Public Dry Pea Yield Trial
Velva, ND 2007

		Yield						Agronomics			
		Combined		Seed Treatment		No Seed Treatment		Test Weight		Moisture	
Variety	Company	bu/ac	Rank	bu/ac	Rank	bu/ac	Rank	lb	Rank	%	Rank
Golden		45.9	1	47.6	1	44.3	1	64.2	1	12.7	9
K2	Legume Logic	42.7	2	46.0	2	39.5	3	62.5	7	12.1	2
SW Midas	Legume Logic	40.9	3	40.9	4	40.8	2	63.6	3	12.4	6
Aragorn	Legume Logic	40.0	4	42.5	3	37.6	5	62.5	6	11.5	1
DS Admiral	Legume Logic	38.2	5	38.4	6	38.0	4	63.5	4	12.5	7
Fusion	Meridian Seeds	37.0	6	39.1	5	34.9	7	62.0	9	12.4	3
SW Capri	Meridian Seeds	36.5	7	37.1	7	35.9	6	63.1	5	12.4	5
Cooper	Meridian Seeds	33.5	8	32.1	8	34.8	8	62.4	8	12.5	8
Stirling		28.6	9	30.4	9	26.8	9	63.7	2	12.4	4
LSD (P=.05)		7.07		11.01		11.63		1.68		0.62	
Standard Deviation		6.06		6.36		6.72		1.44		0.53	
CV		15.87		16.17		18.17		2.28		4.30	
Grand Mean		38.15		39.34		36.96		63.06		12.31	

				Agronomics							
				Nodulation #		Nodulation Mass		Height		Lodging	
Variety	Company	Type	Maturity	1-9*	Rank	1-9*	Rank	Inches	Rank	1-9*	Rank
Golden		Yellow	Mid	5.8	9	6.5	9	18.8	8	4.8	7
K2	Legume Logic	Green	Mid	5.3	7	5.3	8	17.5	4	2.7	1
SW Midas	Legume Logic	Yellow	Early	5.5	8	4.5	6	18.7	7	4.0	4
Aragorn	Legume Logic	Green	Mid	3.8	3	3.5	2	16.8	3	5.0	8
DS Admiral	Legume Logic	Yellow	Early	3.5	2	3.8	3	19.0	9	3.7	3
Fusion	Meridian Seeds	Yellow	Mid	4.5	4	4.3	4	16.2	2	4.7	6
SW Capri	Meridian Seeds	Yellow	Early	3.5	1	3.3	1	18.3	6	2.8	2
Cooper	Meridian Seeds	Green	Late	4.8	6	4.5	5	17.8	5	4.5	5
Stirling		Green	Late	4.5	5	4.8	7	14.3	1	5.3	9
LSD (P=.05)				2.53		2.21		2.30		1.22	
Standard Deviation				1.73		1.51		1.97		1.05	
CV				38.02		33.85		11.25		21.67	
Grand Mean				4.56		4.47		17.50		4.83	
*1 = best & 9 = worst											

Site history	Loam soil (Spring Wheat 2006)
Seeding Type	Zero-Till
Location	Velva, ND - McHenry County
Plot size	5 ft x 25 ft - 6 replicates
Planting Date	April 28th, 2007
Harvest Date	July 31st, 2007
Inoculum	In furrow granule
Herbicides	Spartan + Prowl
Fungicide	Trilex seed treatment was applied to half the reps

Comments

Growing season was very wet early on and all varieties were effected by fusarium root rot. The month of July was very dry. Yields have been adjusted to 16% moisture. Replicates treated with Trilex seed treatment overall yielded an average of 2.39 bu/a higher.

AGRO-TECH RESEARCH FARM

Public Dry Pea Inoculum Trial
Velva, ND 2007

				Yield		Moisture		Nodulation #		Nodulation Mass		Lodging	
Inoculant	**Company**	**Rate**	**Formulation**	**bu/ac**	**Rank**	**%**	**Rank**	**1-5***	**Rank**	**1-5***	**Rank**	**1-5***	**Rank**
N-Row	INTX Microbials	6.5 lb/a	Granular	19.49	**1**	15.7	**3**	4.5	**2**	4.0	**2**	2.0	**5**
PROTEC + N-Charge	Pro-Coat Technologies	4.2 fl oz/cwt + 5.5 oz/cwt	Pre. inoc + Peat	18.35	**2**	15.8	**4**	4.0	**1**	2.5	**5**	2.0	**4**
PRIMO	INTX Microbials	4.2 fl oz/cwt	Dual Action Liquid	16.49	**3**	16.6	**5**	5.0	**1**	4.5	**1**	2.5	**3**
N-Take	INTX Microbials	3.5 fl oz/cwt	Liquid	16.37	**4**	15.6	**2**	5.0	**1**	3.0	**4**	2.8	**2**
Control				14.85	**5**	15.4	**1**	4.0	**3**	3.5	**3**	3.2	**1**
Trial was planted very late for the area due to arrival date of inoculants.		LSD (P=.05)		2.36		1.12		5.48		2.98		1.02	
		Standard Deviation		1.96		0.93		1.98		1.07		0.85	
		CV		11.45		5.89		42.02		30.64		34.02	
		Grand Mean		17.11		15.81		4.70		3.50		2.50	
		*1 = worst & 5 = best											

Site history	Loam soil (Spring Wheat 2006)
Seeding Type	Zero-Till
Location	Velva, ND - McHenry County
Plot size	5 ft x 25 ft - 6 replicates
Planting Date	June 4th, 2007
Harvest Date	August 13th, 2007
Pea Variety	Golden
Herbicides	Spartan + Prowl

Comments

Early season moisture was good to excessive but later turned dry and hot resulting in fewer pods and peas/pod. Yields have been adjusted to 16% moisture.

AGRO-TECH RESEARCH FARM

Public Dry Pea Yield Trial
Mohall, ND 2007

RENVILLE- BOTTINEAU AG IMPROVEMENT ASSOCIATION

		Yield						Agronomics									
		Combined		Seed Treatment		No Seed Treatment		Test Weight		Moisture		Harvest Ease		Height		Lodging	
Variety	**Maturity**	**bu/ac**	**Rank**	**bu/ac**	**Rank**	**bu/ac**	**Rank**	**lb**	**Rank**	**%**	**Rank**	**1-9***	**Rank**	**Inch**	**Rank**	**1-9***	**Rank**
Miami	Early	57.9	**1**	59.6	**1**	56.2	**2**	62.8	**2**	14.5	**10**	3.0	**7**	31.3	**6**	5.0	**8**
Eclipse	Mid	57.5	**2**	59.6	**2**	55.5	**4**	60.7	**9**	14.1	**4**	3.0	**4**	29.5	**4**	2.5	**2**
Admiral	Early	57.1	**3**	57.8	**3**	56.4	**1**	61.1	**8**	14.2	**6**	1.3	**1**	33.3	**10**	1.5	**1**
Golden	Early	56.3	**4**	56.8	**5**	55.9	**3**	63.7	**1**	13.9	**3**	4.0	**8**	31.0	**5**	3.5	**6**
Mozart	Mid	53.7	**5**	56.9	**4**	50.5	**7**	62.3	**3**	14.2	**8**	6.5	**10**	27.0	**1**	7.8	**10**
Cruiser	Late	52.4	**6**	53.9	**6**	51.0	**6**	61.4	**7**	13.1	**1**	3.0	**5**	31.8	**7**	3.3	**5**
Tudor	Early	50.7	**7**	47.5	**10**	53.9	**5**	61.8	**6**	14.1	**5**	2.5	**3**	32.3	**9**	2.8	**3**
Stirling	Late	48.6	**8**	47.8	**9**	49.5	**8**	62.0	**4**	14.2	**7**	4.3	**9**	29.3	**2**	5.5	**9**
Nitouche	Late	47.9	**9**	48.6	**8**	47.3	**9**	60.1	**10**	13.8	**2**	3.0	**6**	32.0	**8**	3.8	**7**
Majoret	Late	47.4	**10**	50.2	**7**	44.6	**10**	61.8	5	14.3	**9**	1.5	**2**	29.5	**3**	3.3	4
LSD (P=.05)		5.31		8.02		8.35		1.31		0.35		1.26		3.81		1.59	
Standard Deviation		3.66		3.55		3.69		0.90		0.24		0.87		2.63		1.09	
CV		6.9		6.59		7.09		1.46		1.69		27.10		8.56		28.21	
Grand Mean		52.96		53.86		52.06		61.75		14.03		3.20		30.68		3.88	

*1 = best & 9 = worst

Seeding Type	Zero-Till
Location	Mohall, ND - Renville County
Plot size	5 ft x 25 ft - 4 replicates
Planting Date	May 3rd, 2007
Harvest Date	August 8th, 2007
Inoculum	In furrow granule
Herbicides	Spartan followed by Assure II
Fungicide	Trilex seed treatment was applied to half the reps

Comments

Plots were seeded with a Great Plains No-till drill and were straight combined. Yields converted to 16% moisture. Replicates treated with Trilex seed treatment overall yielded an average of 1.8 bu/a higher.

AGRO-TECH RESEARCH FARM

Public Soybean Yield Trial
Velva, ND 2007

Planted: May 10th, 2007		Herb	Mat.	Protein		Oil		Height		Moisture		Yield	
Variety	**Company**	**System**	**Group**	**%**	**Rank**	**%**	**Rank**	**Inch**	**Rank**	**%**	**Rank**	**bu/ac**	**Rank**
LS0057 RR	Legend Seed	RR	00.5	31.7	**18**	18.9	**13**	28.0	**6**	13.0	**14**	35.9	**1**
RR 60-06	Proseed	RR	00.6	31.8	**16**	19.2	**9**	26.7	**12**	13.5	**18**	34.5	**2**
S0090-64	Stine Seed	RR	00.8	32.7	**7**	19.4	**5**	28.3	**4**	11.7	**7**	33.5	**3**
LS0087 RR	Legend Seed	RR	00.8	31.8	**15**	19.2	**10**	24.7	**18**	12.2	**9**	31.5	**4**
SX07101	Dyna-Gro	RR	0.1	32.3	**12**	18.2	**20**	27.3	**9**	12.3	**10**	30.9	**5**
RR 50-07	Proseed	RR	00.7	31.3	**21**	19.7	**1**	27.3	**10**	12.8	**12**	30.3	**6**
RR 70-10	Proseed	RR	0.1	32.7	**8**	18.4	**19**	24.7	**19**	12.9	**13**	30.1	**7**
LS0065 RR	Legend Seed	RR	00.6	32.7	**9**	18.2	**21**	26.7	**13**	13.4	**17**	29.8	**8**
AG 0202	Monsanto	RR	0.2	31.3	**20**	18.1	**22**	30.3	**1**	9.7	**1**	29.2	**10**
Int.95009R	Integra Seed	RR	00.9	33.0	**5**	18.6	**17**	29.0	**2**	10.4	**2**	29.2	**9**
30B04	Dyna-Gro	RR	00.4	31.7	**17**	19.6	**2**	25.7	**15**	12.1	**8**	28.7	**11**
Int.96053RS	Integra Seed	RR/STS	0.3	33.0	**6**	17.3	**23**	28.3	**5**	10.4	**3**	28.3	**12**
Int.97001RS	Integra Seed	RR/STS	00.7	32.5	**10**	18.5	**18**	23.7	**22**	13.3	**16**	27.6	**13**
H0086R	Hefty Seed	RR	00.8	31.9	**14**	19.3	**6**	27.0	**11**	12.4	**11**	27.5	**14**
RR 50-00	Proseed	RR	0.00	33.8	**1**	18.8	**15**	24.0	**20**	11.0	**5**	27.4	**15**
AG 00603	Monsanto	RR	00.6	30.6	**23**	19.3	**7**	25.0	**17**	10.4	**4**	27.0	**16**
30M09	Dyna-Gro	RR	00.9	33.6	**2**	19.1	**11**	26.3	**14**	11.6	**6**	26.9	**17**
Int.97031R	Integra Seed	RR	0.3	33.3	**4**	18.7	**16**	27.7	**8**	14.8	**22**	26.9	**18**
RR 50-045	Proseed	RR	00.4	31.9	**13**	19.6	**4**	24.0	**21**	13.1	**15**	26.5	**19**
RR 50-04	Proseed	RR	00.4	33.3	**3**	18.9	**12**	29.0	**3**	15.2	**23**	25.9	**20**
H0046R	Hefty Seed	RR	00.8	32.4	**11**	19.3	**8**	28.0	**7**	14.4	**21**	25.3	**21**
RR 60-07	Proseed	RR/STS	00.7	31.3	**22**	18.8	**14**	25.3	**16**	13.5	**19**	24.7	**22**
S0070-64	Stine Seed	RR	00.7	31.6	**19**	19.6	**3**	22.3	**23**	13.5	**20**	23.9	**23**
LSD (P=.05)				1.34		1.10		3.73		1.24		6.35	
Standard Deviation				0.65		0.53		2.26		0.75		3.85	
CV				2.00		2.81		8.52		6.03		13.37	
Grand Mean				32.23		18.88		26.49		12.50		28.76	

AGRO-TECH RESEARCH FARM

Public Wheat Yield Trial
Velva, ND 2007

		Yield						Agronomics					
		Combined		Fungicide Treated		No Fungicide		Test Weight		Protein		Height	
Variety	Company	bu/ac	Rank	bu/ac	Rank	bu/ac	Rank	lb	Rank	%	Rank	Inch	Rank
Faller	NDSU	45.5	1	47.8	1	43.1	4	61.4	12	13.4	11	34	8
Kuntz	AgriPro	44.9	2	44.5	3	45.4	1	62.8	6	13.4	12	32	2
Freyr	AgriPro	44.9	3	45.5	2	44.3	2	62.0	8	13.6	10	34	9
Trooper	WestBred	44.0	4	44.2	4	43.9	3	63.2	3	12.8	14	32	4
Kelby	AgriPro	41.2	5	41.1	6	41.2	6	63.0	4	14.6	4	30	1
Howard	NDSU	40.8	6	38.8	9	42.8	5	61.8	9	14.2	6	34	11
Steele-ND	NDSU	40.2	7	43.7	5	36.7	9	61.8	10	14.2	7	34	12
Glenn	NDSU	38.5	8	40.2	8	36.8	8	64.1	1	13.9	8	36	13
Rush	WestBred	36.9	9	35.6	12	38.3	7	63.8	2	14.9	3	32	5
Granite	WestBred	36.7	10	38.0	10	35.4	10	62.7	7	15.3	1	34	10
Reeder	NDSU	35.7	11	40.8	7	30.7	13	61.1	13	13.3	13	33	6
Alsen	NDSU	34.2	12	36.9	11	31.6	12	61.5	11	14.4	5	32	3
Dapps	NDSU	32.6	13	32.5	14	32.7	11	60.6	14	15.2	2	37	14
Bigg Red	WestBred	31.8	14	33.5	13	30.1	14	62.9	5	13.6	9	34	7
LSD (P=.05)		4.71		6.7		6.4		0.86		0.48		2.47	
Standard Deviation		4.08		3.99		3.81		0.40		0.34		2.14	
CV		10.41		9.92		10.01		0.64		2.41		6.41	
Grand Mean		39.14		40.2		38.07		62.31		14.05		33.35	

Site history	Loam soil (Canola 2006)
Seeding Type	Zero-Till
Location	Velva, ND - McHenry County
Plot size	5 ft x 30 ft - 6 replicates
Planting Date	April 24th, 2007
Harvest Date	August 6th, 2007
Fertility	25 lbs P and 100 lbs N
Herbicides	Axial+Widematch
Fungicide	Fungicide was applied to half the trial - Headline at 4-5 lf and Prosaro at heading.

Comments

Growing season was very wet through June and then became dry for remainder of season. Yields have been adjusted to 13.5% moisture. Fungicide was applied to half the replicates. Replicates sprayed with fungicide overall yielded an average of 2.13 bu/a higher. Pest pressure was a limited amount of stem maggot, leaf rust and tan spot.

	Yield		
	2004	2005	2006
Variety	bu/ac	bu/ac	bu/ac
Alsen	36.8	48.2	26.7
Bigg Red			25.3
Dapp's		43.9	24.9
Freyr	47.6	52.5	23.5
Glenn			28.1
Granite	44.5	53.2	27.7
Hanna	39.4	48.2	
Howard			30.8
Kelby		51.7	28.5
Knudson	41.4	54.8	24.8
Norpro	42.9	45.4	
Reeder		34.3	
Rush			27.7
Steele-ND		44.6	29.6
Trooper	36.6		24.8

NDSU's ranking for disease response

Variety	Head Scab	Leaf Disease	Leaf Rust	Straw Strength
Alsen	MR	S	MR	strg
Bigg Red	MR	MS/S	MS	med
Dapp's	MS	S	R	med
Faller	?	?	?	?
Freyr	MR	MS/S	MR	strg
Glenn	MR	MS/S	R	strg
Granite	MS	S	MR	V strg
Howard	MS	MS/S	R	med
Kelby	MR	MR	MR	strg
Kuntz	?	?	?	?
Reeder	S	S	MS	strg
Rush	?	?	?	?
Steele-ND	MS	MS/S	R	med
Trooper	S	S	MS	strg

AGRO-TECH RESEARCH FARM

Public Wheat Yield Trial
Mohall, ND 2007

RENVILLE- BOTTINEAU AG IMPROVEMENT ASSOCIATION

		Yield		Agronomics							
				Moisture		Test Weight		Protein		Height	
Variety	**Company**	**bu/ac**	**Rank**	**bu/ac**	**Rank**	**lb**	**Rank**	**%**	**Rank**	**Inch**	**Rank**
Faller	NDSU	62.5	**1**	11.9	**8**	59.3	**11**	14.6	**13**	35.8	**8**
Kuntz	AgriPro	62.5	**2**	12.1	**10**	60.2	**7**	14.5	**16**	32.8	**2**
AP604	AgriPro	60.1	**3**	12.1	**9**	61.7	**2**	14.6	**14**	36.3	**10**
Freyr	AgriPro	58.3	**4**	12.5	**12**	58.8	**14**	15.0	**11**	37.3	**11**
Glenn	NDSU	56.6	**5**	12.2	**11**	59.1	**12**	15.7	**6**	38.0	**16**
Trooper	WestBred	56.0	**6**	14.1	**15**	58.7	**16**	15.2	**10**	34.3	**4**
Reeder	NDSU	55.8	**7**	11.5	**2**	58.9	**13**	14.9	**12**	36.0	**9**
Dapps	NDSU	53.7	**8**	11.3	**1**	59.6	**10**	16.3	**2**	37.3	**12**
Bigg Red	WestBred	51.5	**9**	12.5	**13**	62.3	**1**	14.6	**15**	37.5	**15**
Kelby	AgriPro	51.5	**10**	11.5	**3**	60.6	**5**	15.7	**5**	31.8	**1**
Howard	NDSU	50.7	**11**	11.8	**6**	58.7	**15**	15.4	**8**	37.3	**14**
Steele-ND	NDSU	50.4	**12**	11.6	**5**	59.6	**9**	15.3	**9**	37.3	**13**
Rush	WestBred	50.2	**13**	11.5	**4**	61.5	**3**	15.8	**3**	34.5	**5**
Breaker	WestBred	48.8	**14**	14.3	**16**	60.5	**6**	15.7	**7**	35.0	**6**
Granite	WestBred	48.5	**15**	11.9	**7**	60.6	**4**	16.4	**1**	33.5	**3**
Alsen	NDSU	48.4	**16**	12.8	**14**	60.1	**8**	15.8	**4**	35.3	**7**
LSD (P=.05)		7.25		2.02		1.26		0.53		2.35	
Standard Deviation		5.07		1.41		0.88		0.37		1.64	
CV		9.38		11.56		1.47		2.40		4.62	
Grand Mean		54.09		12.22		60.00		15.33		35.59	

Seeding Type	Zero-Till
Location	Mohall, ND - Renville County
Plot size	5 ft x 25 ft - 4 replicates
Planting Date	May 3rd, 2007
Harvest Date	August 16th, 2007
Fertility	25 lbs P and 100 lbs N
Herbicides	Puma + Widematch + MCPA
Fungicide	Headline at 4-5 leaf

Comments

Plots were seeded with a Great Plains No-till drill and were straight combined. Yields converted to 13.5% moisture.

AGRO-TECH RESEARCH FARM

Historic Wheat Trial - 2007
Velva, North Dakota

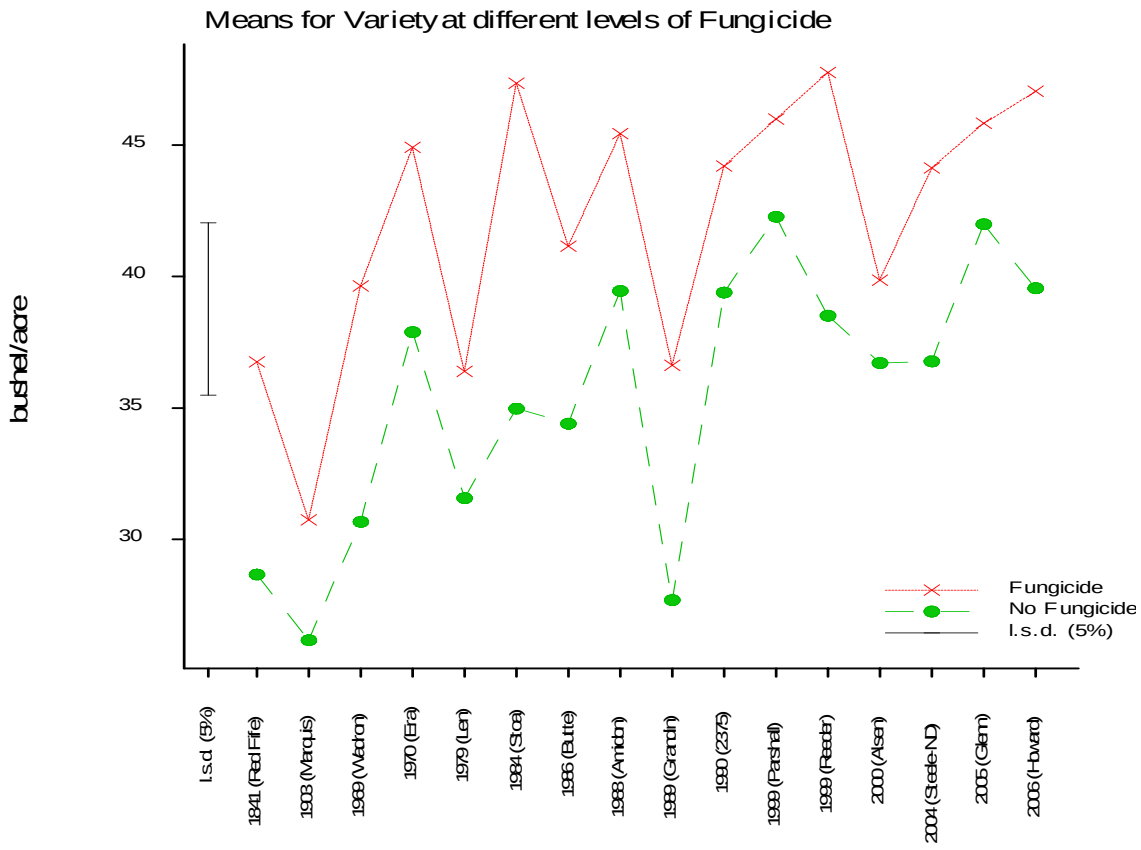
Split Plot with 3 Replications

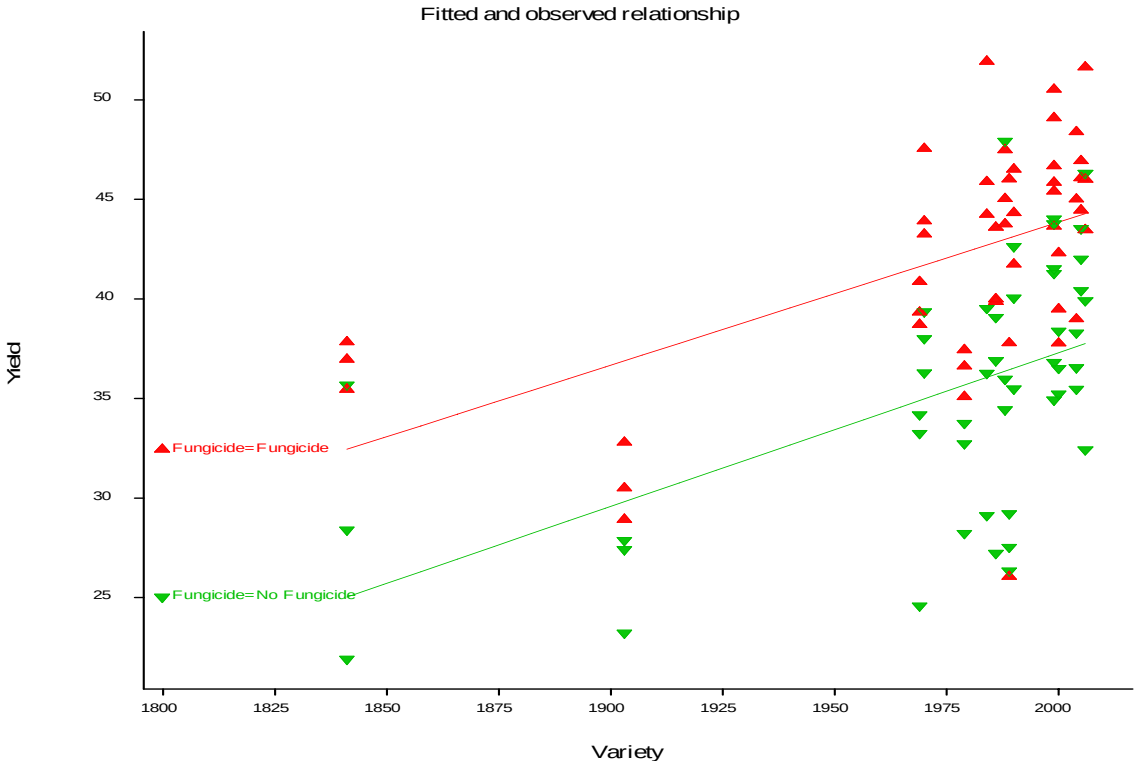
Variety	------- Yield bu/acre ------- Fungicide	No-fungicide	Gain bu/acre	Gross Gain from Fungicide $/acre	Net Gain from Fungicide $/acre	Gross Revenue Minus Fungicide Cost
1999 (Reeder)	47.8	38.5	9.2	52.69	37.69	257.19
1984 (Stoa)	47.4	35.0	12.4	70.55	55.55	254.90
2006 (Howard)	47.0	39.5	7.5	42.65	27.65	253.09
1999 (Parshall)	46.0	42.3	3.7	21.12	6.12	247.06
2005 (Glenn)	45.8	42.0	3.8	21.87	6.87	246.18
1988 (Amidon)	45.4	39.4	6.0	34.08	19.08	243.91
1970 (Era)	44.9	37.9	7.0	39.98	24.98	240.93
1990 (2375)	44.2	39.4	4.8	27.39	12.39	236.89
2004 (Steele-ND)	44.1	36.8	7.4	41.92	26.92	236.52
1986 (Butte)	41.2	34.4	6.7	38.46	23.46	219.56
2000 (Alsen)	39.9	36.7	3.1	17.91	2.91	212.16
1969 (Waldron)	39.6	30.7	9.0	51.08	36.08	210.91
1841 (Red Fife)	36.8	28.7	8.1	46.10	31.10	194.48
1989 (Grandin)	36.6	27.7	8.9	50.84	35.84	193.72
1979 (Len)	36.4	31.6	4.8	27.41	12.41	192.38
1903 (Marquis)	30.7	26.2	4.6	26.05	11.05	160.23
Mean	42.1	35.4	6.7	38.13	23.13	224.01
LSD (0.05)	3.7	3.7				

Based on $5.70/ bushel wheat, fungicide total cost of $15/acre (3 oz headline at 5 leaf + 4 oz tebuconazole at flowering)

Variety	---------- Yield bu/acre ---------- Fungicide	No-fungicide	Gain bu/acre	Gross Gain from Fungicide $/acre	Net Gain from Fungicide $/acre	Gross Revenue Minus Fungicide Cost
1999 (Reeder)	47.8	38.5	9.2	36.05	21.05	171.23
1984 (Stoa)	47.4	35.0	12.4	48.27	33.27	169.67
2006 (Howard)	47.0	39.5	7.5	29.18	14.18	168.43
1999 (Parshall)	46.0	42.3	3.7	14.45	**-0.55**	164.31
2005 (Glenn)	45.8	42.0	3.8	14.96	**-0.04**	163.70
1988 (Amidon)	45.4	39.4	6.0	23.32	8.32	162.15
1970 (Era)	44.9	37.9	7.0	27.36	12.36	160.11
1990 (2375)	44.2	39.4	4.8	18.74	3.74	157.35
2004 (Steele-ND)	44.1	36.8	7.4	28.68	13.68	157.09
1986 (Butte)	41.2	34.4	6.7	26.32	11.32	145.49
2000 (Alsen)	39.9	36.7	3.1	12.25	**-2.75**	140.42
1969 (Waldron)	39.6	30.7	9.0	34.95	19.95	139.57
1841 (Red Fife)	36.8	28.7	8.1	31.54	16.54	128.33
1989 (Grandin)	36.6	27.7	8.9	34.78	19.78	127.81
1979 (Len)	36.4	31.6	4.8	18.75	3.75	126.89
1903 (Marquis)	30.7	26.2	4.6	17.82	2.82	104.89
Mean	42.1	35.4	6.7	26.09	11.09	149.22
LSD (0.05)	3.7	3.7				

Based on $3.90/ bushel wheat, fungicide total cost of $15/acre (3 oz headline at 5 leaf + 4 oz tebuconazole at flowering)


Means for Variety at different levels of Fungicide
bushel/acre
45
40
35
30
Fungicide
No Fungicide
l.s.d. (5%)
l.s.d (5%)
1841 (Red Fife)
1908 (Marquis)
1909 (Marathon)
1970 (Era)
1979 (Len)
1984 (Stoa)
1986 (Butte)
1988 (Amidon)
1989 (Grandin)
1990 (2375)
1999 (Parshall)
1999 (Reeder)
2000 (Alsen)
2004 (Steele-ND)
2005 (Glenn)
2006 (Howard)


Fitted and observed relationship
Yield
50
45
40
35
30
25
Fungicide=Fungicide
Fungicide=No Fungicide
1800
1825
1850
1875
1900
1925
1950
1975
2000
Variety