

Table 6. Individual Trial Information - 2016 Trials.

Location	Previous Crop / Row Width (in)	Harvest	Av. Final Stand	Tillage	Soil Test			Nitrogen Fertilizer			Insect Control	Weed Control	
					pH	P	K	actual N (lbs/A)	form	time			
Soil Series	Cooperators	Planting Date	Dates	(plants/A)	Operations	--(ppm)--			(lbs/A)				
Arlington	M. Bertram	Alfalfa / 30	Oct-10	G: 33207	Disk Chisel	6.2	26	79	10456 gal	Manure	pre	Force 3G	Medal II EC 24 oz/A
Plano Silt Loam		May-3		R: 35795	Field Cultivator				18	9-23-30	plant	4.4 lbs/A	Hornet 4.0 oz/A
			Sep-6	S: 34564									Cultivated
Chippewa Falls	J. Clark	Corn / 30	Oct-3	G: 32726	Spring Chisel	5.9	58	73	10000 gal	Manure	pre	Force 3G	Acuron 3.0 qt/A
Sattre Silt Loam	J. Jensen	May-4		O: 28567	Field Cultivator				217	46-0-0	pre	4.4 lbs/A	
Irrigated			Sep-13	S: 31055					18	9-23-30	plant		
Coleman	T. Kuchta	Corn / 30	Oct-13	G: 34342	Fall Chisel	7.6	54	202	16	21-0-0-24S	pre	Force 3G	Acuron 3.00 qt/A
Oconto Sandy Loam		May-6	Sep-14	S: 34267	Field Cultivator				3	11-52-0	pre	4.4 lbs/A	
									88	44-0-0	pre		
									200	9-23-30	plant		
Fond du Lac	E. Montsma	Soybean / 30	Oct-11	G: 32499	Fall Chisel	6.6	21	111	180	46-0-0	pre	Force 3G	Acuron 3.0 qt/A
Virgil Silt Loam		May-6		O: 30366	Field Cultivator				18	9-23-30	plant	4.4 lbs/A	
			Sep-14	S: 32767									
Galesville	K. Congdon	Soybean / 30	Oct-3	G: 31134	Field Cultivator	5.8	65	124	30 gal	32-0-0	pre	Force 3G	Harness 3.0 oz/A
Downs Silt Loam		April-27		O: 28086					21	21-0-0-24S	pre	4.4 lbs/A	Callisto 3.0 oz/A
			Sep-8	S: 32256					18	18-46-0	pre		
									18	9-23-30	plant		
Hancock	P. Sytsma	Corn / 30	Oct-7	G: 32128	Spring Disk	6.9	31	65	120	0-0-60	pre	Force 3G	Prowl 2.0 pt/A
Plainfield Sand		April-25		O: 27146					28	9-23-30	plant	4.4 lbs/A	Laudis 3.0 oz/A
Irrigated									32	21-0-0-24S	post		
									53	32-0-0	post		
									115	46-0-0	post		
Janesville	N. Baker	Corn / 30	Oct-5	G: 31699	Spring Chisel	6.0	50	138	200	46-0-0	pre	Force 3G	Lumax 3.25 qt/A
Plano Silt Loam		April-26		R: 32481	Field Cultivator				18	9-23-30	plant	4.4 lbs/A	Accent Q 0.9 oz/A
Marshfield	J. Cavadini	Soybean / 30	Oct-19	G: 32128	Field Cultivator	6.3	45	85	18	9-23-30	plant	Force 3G	Roundup 32 oz/A
Withee Silt Loam		May-5		O: 22838					30 gal	32-0-0	post	4.4 lbs/A	Parallel 1.7 pt/A
			Sep-20	S: 32179									Hornet WDG 3.0 oz/A
Montfort	E. Faull	Soybean / 30	Oct-11	G: 32317	Fall Chisel	5.8	52	153	115	46-0-0	pre	Force 3G	Acuron 1.75 qt/A
Dodgeville Silt Loam		May-5		R: 31628	Soil Finisher				18	9-23-30	plant	4.4 lbs/A	
			Sep-12	S: 33849					20 gal	32-0-0	post		
Seymour	M. Maass	Soybean / 30	Oct-13	G: 31324	Chisel Plow	6.5	29	149	150	46-0-0	pre	Force 3G	Capreno 3.0 oz/A
Onaway Silt Loam		May-2			Field Cultivator				18	9-23-30	plant	4.4 lbs/A	Atrazine 0.75 lb/A
									15 gal	32-0-0	post		Roundup 32 oz/A
Spooner	P. Holman	Alfalfa / 30	Oct-18	G: 35223	Spring Chisel	6.1	32	99	18	9-23-30	pre	None	Dual II Mag 1.0 pt/A
Irrigated		May-5	Sep-14	S: 35020	Disk				26	13-13-17-9S	plant		Hornet 4.0 oz/A
Cress Sandy Loam									115	46-0-0	post		
Silt Loam		Soybean / 30	Oct-18	G: 35077	Spring Chisel	6.8	13	120	18	9-23-30	pre	None	Dual II Mag 1.0 pt/A
Antigo Silt Loam		May-6	Sep-21	S: 35512	Disk				26	13-13-17-9S	plant		Hornet 4.0 oz/A
									115	46-0-0	post		
Dryland		Soybean / 30	Oct-18	G: 31160	Spring Chisel	6.8	56	91	26	13-13-17-9S	plant	None	Dual II Mag 1.0 pt/A
Cress Sandy Loam		May-3			Disk				150	46-0-0	post		Hornet 4.0 oz/A
Valders	D. Wagner	Soybean / 30	Oct-19	G: 31991	Chisel Plow	7.1	206	104	9000 gal	Manure	pre	Force 3G	Steadfast 1.0 oz/A
Kewaunee Clay Loam		May-9		O: 29480	Turbo till				18	9-23-30	plant	4.4 lbs/A	Keystone 1.5 pt
			Sep-15	S: 31081					30 gal	28-0-0	post		Callisto 3.0 oz/A
													Atrazine 0.25 lb/A

Note: G=Grain, R=Refuge, S=Silage, O=Organic.

**Table: 1601- 07. Performance of Hybrid Seed Mixtures - Corn
Arlington, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
DKC54-38RIB	257	23.8	51.6	0.0	0.0	0.0	783
DKC54-38(Base)	265	23.6	52.5	0.0	0.0	0.0	808
DKC54-38(Refuge)	246	22.5	51.3	0.4	0.4	0.0	755
P0157AMX	280	23.1	52.3	0.4	0.0	0.4	856
P0157AMX(Base)	268	23.2	52.8	0.0	0.0	0.0	819
P0157AMX(Refuge)	247	23.0	52.0	0.0	0.0	0.0	757
Mean	261	23.2	52.1	0.1	0.1	0.1	796
<u>Probability(%)</u>							
Hybrid(H)	3.6	4.9	13.8	57.4	46.5	46.5	3.8
<u>LSD(0.10)</u>							
Hybrid(H)	17	0.6	NS	NS	NS	NS	52

*AGI - Adjusted Gross Income

**Table: 1601- 08. Performance of Hybrid Seed Mixtures - Corn
Chippewa, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
5L-198	222	22.9	49.7	0.4	0.4	--	680
5L-198(Base)	221	22.7	49.4	0.4	0.4	--	677
5L-198(Refuge)	258	25.7	53.3	0.0	0.0	--	775
FS 36TV4RIB	153	20.3	48.1	0.4	0.4	--	477
FS 36TV4RIB (Base)	158	20.4	48.4	0.0	0.0	--	491
FS 36TV4RIB (Refuge)	186	20.1	52.8	0.0	0.0	--	581
Mean	200	22.0	50.3	0.2	0.2	--	613
<u>Probability(%)</u>							
Hybrid(H)	0.0	0.5	3.1	70.2	70.2	--	0.0
<u>LSD(0.10)</u>							
Hybrid(H)	20	2.1	2.9	NS	NS	--	61

*AGI - Adjusted Gross Income

-- No Lodging.

**Table: 1601- 09. Performance of Hybrid Seed Mixtures - Corn
Fond Du Lac, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
DKC54-38RIB	250	22.9	53.9	0.4	0.4	--	767
DKC54-38(Base)	248	23.2	55.0	0.0	0.0	--	758
DKC54-38(Refuge)	247	23.5	54.0	0.0	0.0	--	752
P0157AMX	240	24.1	54.6	0.0	0.0	--	728
P0157AMX(Base)	231	23.5	53.9	0.8	0.8	--	706
P0157AMX(Refuge)	214	22.4	53.9	0.8	0.8	--	658
Mean	238	23.3	54.2	0.3	0.3	--	728
<u>Probability(%)</u>							
Hybrid(H)	3.8	53.5	86.7	67.2	67.2	--	5.4
<u>LSD(0.10)</u>							
Hybrid(H)	18	NS	NS	NS	NS	--	58

*AGI - Adjusted Gross Income

-- No Lodging.

**Table: 1601- 10. Performance of Hybrid Seed Mixtures - Corn
Galesville, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
DKC54-38RIB	252	25.0	53.3	1.6	1.6	0.0	760
DKC54-38(Base)	253	24.6	54.4	0.4	0.4	0.0	765
DKC54-38(Refuge)	215	23.7	52.9	1.2	0.8	0.4	653
P0157AMX	241	24.5	53.4	0.8	0.8	0.0	731
P0157AMX(Base)	248	24.5	54.6	0.4	0.4	0.0	751
P0157AMX(Refuge)	209	23.2	51.6	0.4	0.4	0.0	638
Mean	236	24.3	53.4	0.8	0.8	0.1	716
<u>Probability(%)</u>							
Hybrid(H)	0.3	13.0	15.0	59.7	53.2	46.5	0.7
<u>LSD(0.10)</u>							
Hybrid(H)	18	NS	NS	NS	NS	NS	57

*AGI - Adjusted Gross Income

**Table: 1601- 11. Performance of Hybrid Seed Mixtures - Corn
Hancock, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
DKC54-38RIB	237	24.5	52.7	0.0	--	0.0	717
DKC54-38(Base)	232	24.2	53.4	0.0	--	0.0	705
DKC54-38(Refuge)	228	24.2	53.5	0.0	--	0.0	692
P0157AMX	248	25.0	54.9	0.4	--	0.4	749
P0157AMX(Base)	251	24.9	54.1	0.0	--	0.0	759
P0157AMX(Refuge)	222	24.3	53.6	0.0	--	0.0	674
Mean	236	24.5	53.7	0.1	--	0.1	716
<u>Probability(%)</u>							
Hybrid(H)	20.9	76.9	17.1	46.5	--	46.5	25.2
<u>LSD(0.10)</u>							
Hybrid(H)	NS	NS	NS	NS	--	NS	NS

*AGI - Adjusted Gross Income

-- No Lodging.

**Table: 1601- 12. Performance of Hybrid Seed Mixtures - Corn
Janesville, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
DKC54-38RIB	222	22.8	51.8	0.0	0.0	--	682
DKC54-38(Base)	234	22.8	53.0	0.8	0.8	--	717
DKC54-38(Refuge)	215	22.2	53.2	1.2	1.2	--	660
P0157AMX	242	22.4	54.9	0.0	0.0	--	743
P0157AMX(Base)	245	21.4	54.7	0.0	0.0	--	758
P0157AMX(Refuge)	221	21.8	52.9	0.0	0.0	--	681
Mean	230	22.2	53.4	0.3	0.3	--	707
<u>Probability(%)</u>							
Hybrid(H)	8.6	27.0	12.8	8.9	8.9	--	9.1
<u>LSD(0.10)</u>							
Hybrid(H)	19	NS	NS	0.8	0.8	--	61

*AGI - Adjusted Gross Income

-- No Lodging.

**Table: 1601- 13. Performance of Hybrid Seed Mixtures - Corn
Marshfield, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
5L-198	223	24.9	49.3	3.1	3.1	--	675
5L-198(Base)	222	24.8	49.0	0.0	0.0	--	670
5L-198(Refuge)	251	27.2	51.4	0.4	0.4	--	747
FS 36TV4RIB	197	20.3	52.6	0.4	0.4	--	615
FS 36TV4RIB (Base)	201	20.0	53.9	0.4	0.4	--	627
FS 36TV4RIB (Refuge)	156	19.8	54.0	0.8	0.8	--	488
Mean	208	22.8	51.7	0.8	0.8	--	637
<u>Probability(%)</u>							
Hybrid(H)	0.0	0.0	0.0	60.3	60.3	--	0.0
<u>LSD(0.10)</u>							
Hybrid(H)	15	1.9	0.9	NS	NS	--	47

*AGI - Adjusted Gross Income

-- No Lodging.

**Table: 1601- 14. Performance of Hybrid Seed Mixtures - Corn
Montfort, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
DKC54-38RIB	240	20.0	54.5	--	--	--	750
DKC54-38(Base)	254	20.0	54.1	--	--	--	794
DKC54-38(Refuge)	225	19.8	54.1	--	--	--	703
P0157AMX	255	20.0	54.8	--	--	--	797
P0157AMX(Base)	248	20.0	55.2	--	--	--	774
P0157AMX(Refuge)	243	20.4	54.0	--	--	--	757
Mean	244	20.0	54.5	--	--	--	763
<u>Probability(%)</u>							
Hybrid(H)	4.4	84.7	65.5	--	--	--	5.2
<u>LSD(0.10)</u>							
Hybrid(H)	15	NS	NS	--	--	--	49

*AGI - Adjusted Gross Income

-- No Lodging.

**Table: 1601- 15. Performance of Hybrid Seed Mixtures - Corn
Seymour, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
5L-198	219	20.2	54.3	0.8	0.8	--	684
5L-198(Base)	214	21.6	53.2	1.2	1.2	--	661
5L-198(Refuge)	213	20.2	53.7	0.4	0.4	--	663
FS 36TV4RIB	178	17.2	57.5	1.2	1.2	--	567
FS 36TV4RIB (Base)	191	17.1	58.4	0.4	0.4	--	608
FS 36TV4RIB (Refuge)	163	18.6	58.7	2.8	2.8	--	514
Mean	197	19.2	56.0	1.1	1.1	--	616
<u>Probability(%)</u>							
Hybrid(H)	0.1	0.0	0.0	39.9	39.9	--	0.2
<u>LSD(0.10)</u>							
Hybrid(H)	19	1.1	1.5	--	--	--	58

*AGI - Adjusted Gross Income

-- No Lodging.

**Table: 1601- 16. Performance of Hybrid Seed Mixtures - Corn
Valders, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			*AGI \$3.44/bu \$/A
				Total %	Stalk %	Root %	
5L-198	226	22.5	51.3	0.0	0.0	--	694
5L-198(Base)	222	22.9	50.5	0.0	0.0	--	680
5L-198(Refuge)	265	23.5	52.1	0.0	0.0	--	808
FS 36TV4RIB	197	18.9	56.1	1.6	1.6	--	619
FS 36TV4RIB (Base)	199	18.5	56.4	0.4	0.4	--	628
FS 36TV4RIB (Refuge)	173	18.8	56.6	1.2	1.2	--	543
Mean	214	20.9	53.8	0.5	0.5		662
<u>Probability(%)</u>							
Hybrid(H)	0.2	0.0	0.0	12.3	12.3	--	0.4
<u>LSD(0.10)</u>							
Hybrid(H)	27	0.7	1.3	NS	NS	--	83

*AGI - Adjusted Gross Income

-- No Lodging.

FIELD EXPERIMENT HISTORY

Title: Performance of Hybrid Seed Mixtures - Corn
Experiment: 01MixTHD **Trial** 6156 **Year:** 2016
Personnel: ID: Joe Lauer, Thierno Diallo, Kent Kohn,
Location: Arlington, WI **County:** Columbia
Supported By: HATCH

Site Information

Field: ARS 406 **Previous Crop:** Alfalfa **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 10/31/16 **pH** 6.2 **OM (%)** 3.3 **P (ppm)** 26 **K (ppm)** 79

Plot Management

Tillage Operations: Disk Chisel,

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
Fertilizer: Preplant :	N/A	N/A	N/A
Starter :	N/A	N/A	N/A
Post plant :	N/A	N/A	N/A
Manure:	Dairy	10500 gal / A	01/06/16

Herbicide: Medal II EC 24 oz/A 5/23/16 **Insecticide:** Force 4.4 lb/A
 Hornet 4 oz/A 5/28/16 **Hybrid:** See factors

Irrigation: None

Planting Date: 5/16/ 2016 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** JD1700 w RTK

Harvest Date: 10/24/16 **Harvest Method:** MF 8XP

Experimental Design

Design: RCB **Replications:** 6
Plot Size Seeded: 5' x 85' **Experiment Size:** 1.9 A
Harvest Plot Size: 5' x 85' **Harvest Plant Density:** 34611 plants per acre

Factors/Treatments:

Hybrid:

- 1) Dekalb DKC50-82
- 2) Pioneer 0448
- 3) P0448/DKC50-82

Results: Tables 1601-17

**Table: 1601- 17. Performance of Hybrid Seed Mixtures - Corn
Arlington, WI - 2016.**

Hybrid	Yield bu/A	Moisture %	Test weight lb/bu	Harvest density plants/A	*AGI \$3.44/bu \$/A
DKC50-82	243	18.8	55.9	34333	765
P0448	245	19.4	56.4	35167	768
P0448/DKC50-82	245	19.3	56.7	34333	769
Mean	245	19.2	56.3	34611	767
<u>Probability(%)</u>					
Hybrid(H)	94.0	32.3	43.1	48.6	97.3
<u>LSD(0.10)</u>					
Hybrid(H)	NS	NS	NS	NS	NS

*AGI - Adjusted Gross Income