

## FIELD EXPERIMENT HISTORY

**Title:** 08 Valent Early Planting Product Field Trial  
**Experiment:** 08Valent **Trial ID:** 3284 **Year:** 2010  
**Personnel:** J.G. Lauer, K.D. Kohn and T.H. Diallo  
**Location:** Arlington **County:** Columbia  
**Supported By:** Valent BioSciences

### Site Information

**Field:** ARS406 **Previous Crop:** Corn **Soil Type:** Plano Silt Loam  
**Soil Test:** **Date:** 10/21/10 **pH:** 6.6 **OM (%)** 3.5 **P (ppm)** 47 **K (ppm)** 165

### Plot Management

**Tillage Operations:** Disk Ripper    Disk    Chisel Plow    Field Cultivator  
**Fertilizer:**    **Preplant Analysis:** 46-0-0    **Rate lbs/A:** 260    **Date:** 4/30/10  
                   **Starter Analysis:** 10-34-0    **Rate lbs/A:** 3.0 gal/A    **Date:** Each Planting  
                   **Post plant Analysis:** N/A    **Rate lbs/A:** N/A    **Date:** N/A  
                   **Manure:** N/A  
**Herbicide:** Dual II Mag 24 oz/A    **Insecticide:** Force 3G 4.4 b/A  
                   Hornet 4 oz/A    **Hybrid:** See Factors  
**Irrigation:** None  
**Planting Date:** See Factors    **Planting Depth:** 1.5"    **Row Width** 30"  
**Target Plant Density:** 32000 plants per acre    **Planting Method:** Almaco Precision Planter  
**Harvest Date:** 10/19/10    **Harvest Method:** Massey Ferguson 8XP  
**Notes:** Vigor Rating: 1= Poor; 3= Moderate; 5= Best

### Experimental Design

**Design:** Split-Split plot    **Replications:** 4  
**Plot Size Seeded:** 25' x 10'    **Experiment Size:** 2.6 A  
**Harvest Plot Size:** 23' x 5'    **Harvest Plant Density:** 29930 plants per acre

### Factors/Treatments:

<u>Planting Dates:</u>	<u>Hybrids:</u>	<u>VBC-40009 Dosage:</u> <u>(ugai/kernel)</u>	<u>Additive @ Dosage:</u> <u>(ugai/kernel)</u>
March 31	164	0	None
April 14	175	15	V10190 @ 025
May 18			V10190 @ 125
			VBC_30134 @ 025
			VBC_30134 @ 125
			VBC_40015 @ 025
			VBC_40015 @ 125

**Results: Table C-38, C-39 and C-40.**

**Table C-38. Valent BioSciences Early Plant Field Trial - March 31 planting.  
Arlington, WI - 2010.**

Hybrid	Dosage	Additive	Yield	Moisture	Test			Grower	Harvest			V2	Vigor		Si k	
					weight	Total	Stalk		Root	return	pop		ears	Seeded		pop
164			238	12.9	58	0	0	0	1069	30742	30979	35572	30161	3.5	4.2	192
175			216	13.1	55	0	0	0	971	28165	28206	36505	29964	3.3	4.0	196
	VBC_40009_00		227	12.9	57	0	0	0	1020	29356	29491	35978	30032	3.3	4.0	193
	VBC_40009_15		227	13.1	57	1	0	0	1020	29552	29694	36099	30093	3.5	4.2	194
164	VBC_40009_00		235	12.8	58	0	0	0	1055	30492	30722	35551	29978	3.3	4.1	192
164	VBC_40009_15		241	12.9	58	0	0	0	1083	30993	31236	35592	30343	3.6	4.3	192
175	VBC_40009_00		219	13.1	55	0	0	0	985	28219	28260	36404	30086	3.2	3.9	195
175	VBC_40009_15		213	13.2	55	1	0	1	957	28111	28152	36607	29843	3.3	4.1	196
		None	225	13.0	57	1	0	1	1010	29521	29663	36624	29166	3.0	3.9	193
		V10190_025	229	13.0	57	0	0	0	1029	29616	29640	36316	29971	3.4	4.1	194
		V10190_125	224	12.9	57	1	0	1	1004	29214	29521	35819	30042	3.3	4.1	194
		VBC_30134_025	228	13.0	57	1	0	1	1022	30232	30397	36268	30303	3.8	4.3	193
		VBC_30134_125	227	13.0	57	0	0	0	1018	28503	28598	34990	30374	3.4	3.9	193
		VBC_40015_025	228	13.0	57	0	0	0	1025	29356	29498	36576	30042	3.2	4.1	194
		VBC_40015_125	230	13.0	57	0	0	0	1034	29734	29829	35677	30539	3.6	4.3	194
164		None	235	12.8	58	0	0	0	1054	31202	31344	36884	29166	3.1	3.9	192
164		V10190_025	242	12.9	58	1	0	0	1088	30587	30634	35842	30539	3.4	4.3	192
164		V10190_125	235	12.8	58	0	0	0	1054	30681	31297	35085	29924	3.5	4.3	192
164		VBC_30134_025	239	12.8	58	1	0	1	1074	31770	32054	35369	30113	3.9	4.5	191
164		VBC_30134_125	238	12.9	58	0	0	0	1068	29924	30066	34848	30539	3.8	3.9	191
164		VBC_40015_025	238	12.9	58	0	0	0	1067	30539	30776	35937	29971	3.1	4.3	192
164		VBC_40015_125	241	12.9	58	0	0	0	1082	30492	30681	35037	30871	3.5	4.4	193
175		None	215	13.2	55	1	0	1	966	27841	27983	36363	29166	2.9	3.9	195
175		V10190_025	216	13.1	55	0	0	0	971	28645	28645	36789	29403	3.4	3.9	196
175		V10190_125	213	13.0	55	1	0	1	955	27746	27746	36553	30161	3.0	3.9	196
175		VBC_30134_025	216	13.1	55	0	0	0	970	28693	28740	37168	30492	3.6	4.1	195
175		VBC_30134_125	215	13.2	55	0	0	0	967	27083	27130	35132	30208	3.1	3.9	195
175		VBC_40015_025	219	13.2	55	0	0	0	983	28172	28219	37215	30113	3.3	4.0	196
175		VBC_40015_125	220	13.1	56	1	0	1	986	28977	28977	36316	30208	3.6	4.1	196
	VBC_40009_00	None	223	12.9	56	1	0	1	1002	29072	29214	36695	28787	2.6	3.6	193
	VBC_40009_00	V10190_025	230	13.0	57	0	0	0	1035	29829	29876	37736	30255	3.3	3.8	193
	VBC_40009_00	V10190_125	224	12.8	56	0	0	0	1007	29166	29356	35795	29640	3.0	3.9	194
	VBC_40009_00	VBC_30134_025	225	13.0	57	1	0	1	1010	29403	29592	35416	29640	3.8	4.4	193
	VBC_40009_00	VBC_30134_125	224	12.9	56	0	0	0	1005	28645	28787	35132	30539	3.4	3.9	193
	VBC_40009_00	VBC_40015_025	231	12.9	56	0	0	0	1037	29545	29687	36316	31155	3.3	4.1	194
	VBC_40009_00	VBC_40015_125	233	13.0	57	0	0	0	1047	29829	29924	34753	30208	3.5	4.1	194
	VBC_40009_15	None	227	13.1	57	1	0	1	1018	29971	30113	36553	29545	3.4	4.1	194
	VBC_40009_15	V10190_025	228	13.1	57	1	0	0	1024	29403	29403	34895	29687	3.5	4.4	194
	VBC_40009_15	V10190_125	223	13.1	57	1	0	1	1001	29261	29687	35842	30445	3.5	4.3	194
	VBC_40009_15	VBC_30134_025	230	13.0	57	0	0	0	1034	31060	31202	37121	30965	3.8	4.3	193
	VBC_40009_15	VBC_30134_125	229	13.1	57	0	0	0	1030	28361	28409	34848	30208	3.5	3.9	193
	VBC_40009_15	VBC_40015_025	226	13.1	57	0	0	0	1013	29166	29308	36837	28930	3.1	4.1	194
	VBC_40009_15	VBC_40015_125	227	13.0	57	0	0	0	1020	29640	29734	36600	30871	3.6	4.4	194

continued.

**Table C-38. Valent BioSciences Early Plant Field Trial - March 31 planting.**

(continued.) **Arlington, WI - 2010.**

Hybrid	Dosage	Additive	Yield	Moisture	Test			Grower	Harvest			V2	Vigor		Si k	
					weight	Total	Stalk		Root	return	pop		ears	Seeded		pop
			bu/A	%	lbs/bu	%	%	%	\$/A	plants/A	ears/A	seeds/A	plants/A	1-5		doy
164	VBC_40009_00	None	229	12.7	58	1	0	1	1030	30776	30965	37026	28693	2.8	3.5	192
164	VBC_40009_00	V10190_025	242	12.9	58	0	0	0	1085	31060	31155	37026	31250	3.0	4.0	192
164	VBC_40009_00	V10190_125	237	12.8	58	0	0	0	1064	30208	30587	34659	28787	3.5	4.3	192
164	VBC_40009_00	VBC_30134_025	228	12.8	58	1	0	1	1025	31060	31344	35132	29261	3.5	4.3	191
164	VBC_40009_00	VBC_30134_125	232	12.9	58	0	0	0	1041	29640	29829	34659	30019	3.8	4.0	192
164	VBC_40009_00	VBC_40015_025	236	12.8	58	0	0	0	1059	29829	30113	36079	30681	3.3	4.3	192
164	VBC_40009_00	VBC_40015_125	241	12.8	58	0	0	0	1083	30871	31060	34280	31155	3.3	4.3	193
164	VBC_40009_15	None	240	12.9	59	0	0	0	1077	31628	31723	36742	29640	3.5	4.3	192
164	VBC_40009_15	V10190_025	243	13.0	59	1	0	1	1090	30113	30113	34659	29829	3.8	4.5	193
164	VBC_40009_15	V10190_125	233	12.9	58	1	0	0	1044	31155	32007	35511	31060	3.5	4.3	192
164	VBC_40009_15	VBC_30134_025	250	12.9	58	1	0	1	1122	32481	32765	35606	30965	4.3	4.8	190
164	VBC_40009_15	VBC_30134_125	244	12.9	59	0	0	0	1095	30208	30303	35037	31060	3.8	3.8	191
164	VBC_40009_15	VBC_40015_025	239	13.0	58	1	0	1	1075	31250	31439	35795	29261	3.0	4.3	192
164	VBC_40009_15	VBC_40015_125	241	13.0	58	0	0	0	1080	30113	30303	35795	30587	3.8	4.5	192
175	VBC_40009_00	None	217	13.2	55	0	0	0	974	27367	27462	36363	28882	2.5	3.8	195
175	VBC_40009_00	V10190_025	219	13.0	55	0	0	0	984	28598	28598	38446	29261	3.5	3.5	195
175	VBC_40009_00	V10190_125	212	12.9	55	0	0	0	950	28125	28125	36931	30492	2.5	3.5	196
175	VBC_40009_00	VBC_30134_025	221	13.1	55	0	0	0	994	27746	27841	35700	30019	4.0	4.5	195
175	VBC_40009_00	VBC_30134_125	216	12.9	55	0	0	0	969	27651	27746	35606	31060	3.0	3.8	195
175	VBC_40009_00	VBC_40015_025	226	13.1	55	0	0	0	1014	29261	29261	36553	31628	3.3	4.0	195
175	VBC_40009_00	VBC_40015_125	225	13.2	56	1	0	1	1011	28787	28787	35227	29261	3.8	4.0	195
175	VBC_40009_15	None	214	13.2	55	1	0	1	959	28314	28503	36363	29450	3.3	4.0	196
175	VBC_40009_15	V10190_025	213	13.2	55	0	0	0	958	28693	28693	35132	29545	3.3	4.3	196
175	VBC_40009_15	V10190_125	214	13.2	55	1	0	1	959	27367	27367	36174	29829	3.5	4.3	196
175	VBC_40009_15	VBC_30134_025	211	13.1	55	0	0	0	946	29640	29640	38636	30965	3.3	3.8	196
175	VBC_40009_15	VBC_30134_125	215	13.4	55	0	0	0	966	26515	26515	34659	29356	3.3	4.0	196
175	VBC_40009_15	VBC_40015_025	212	13.2	55	0	0	0	951	27083	27178	37878	28598	3.3	4.0	196
175	VBC_40009_15	VBC_40015_125	214	13.1	55	1	0	1	960	29166	29166	37405	31155	3.5	4.3	196
Mean			227	13.0	57	0	0	0	1020	29454	29592	36038	30062	3.4	4.1	194
<b>Probability(%)</b>																
Hybrid (H)			0.7	2.3	0.0	75.5	21.4	44.1	0.7	0.4	0.3	15.3	61.1	48.8	15.4	0.1
Dosage (D)			99.8	6.2	20.9	16.5	16.7	24.4	99.8	55.6	54.2	81.2	86.6	27.5	10.7	31.1
H x D			11.0	98.4	35.5	69.1	16.7	36.8	11.0	37.1	36.0	87.4	41.3	54.1	88.9	16.1
Additive (A)			54.8	65.6	66.6	39.3	65.7	37.1	54.8	15.4	14.4	56.8	46.6	13.1	38.4	11.0
H x A			97.1	68.5	91.0	3.0	65.7	2.7	97.1	70.2	61.7	89.2	90.4	72.3	94.9	44.1
A x D			47.2	40.5	59.3	29.9	65.7	25.0	47.2	50.1	49.2	20.8	12.3	70.7	59.9	81.8
H x D x A			27.4	2.7	92.1	20.8	65.7	17.9	27.4	35.5	33.2	90.7	27.6	26.9	39.2	36.8
<b>LSD (0.10)</b>																
Hybrid (H)			8	0.1	0	NS	NS	NS	35	741	739	NS	NS	NS	NS	1
Dosage (D)			NS	0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
H x D			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Additive (A)			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
H x A			NS	NS	NS	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
A x D			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
H x D x A			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

**Table C-39. Valent BioSciences Early Plant Field Trial - April 14 planting.  
Arlington, WI - 2010.**

Hybrid	Dosage	Additive	Yield	Moisture	Test			Lodged			Grower	Harvest			V2	Vigor		Si k
					weight	Total	Stalk	Root	return	pop		ears	Seeded	pop		V5	V10	
164			249	13.0	58	0	0	0	1116	31412	31912	34422	32623	3.4	1-5	4.3	194	
175			228	13.3	55	0	0	0	1024	28747	28760	35031	32136	3.6	4.2	196		
	VBC_40009_00		239	13.1	56	0	0	0	1074	30431	30661	34807	32474	3.7	4.2	195		
	VBC_40009_15		237	13.2	56	0	0	0	1065	29728	30012	34645	32284	3.4	4.2	195		
164	VBC_40009_00		251	13.0	58	0	0	0	1126	31899	32359	34510	32629	3.4	4.1	194		
164	VBC_40009_15		246	13.1	58	0	0	0	1107	30925	31466	34334	32616	3.5	4.4	194		
175	VBC_40009_00		228	13.2	55	1	0	0	1023	28963	28963	35105	32318	3.9	4.4	196		
175	VBC_40009_15		228	13.3	55	0	0	0	1024	28530	28558	34956	31953	3.4	4.0	197		
		None	236	13.2	56	0	0	0	1062	29616	29853	34824	32599	3.3	4.2	195		
		V10190_025	236	13.2	56	1	0	1	1062	30019	30303	34446	32315	3.7	4.3	195		
		V10190_125	240	13.1	56	0	0	0	1076	31321	31534	35108	32599	3.6	4.2	195		
		VBC_30134_025	240	13.1	56	0	0	0	1076	30255	30468	34682	32575	3.8	4.1	195		
		VBC_30134_125	240	13.1	56	0	0	0	1079	29805	29876	34635	32268	3.7	4.1	195		
		VBC_40015_025	239	13.1	56	0	0	0	1072	29734	30184	34682	31841	3.6	4.3	195		
		VBC_40015_125	237	13.1	56	0	0	0	1062	29805	30137	34706	32457	3.1	4.3	195		
164		None	247	13.0	58	0	0	0	1111	31108	31581	34517	32670	3.4	4.3	193		
164		V10190_025	245	13.0	58	1	0	1	1099	30871	31392	34280	33096	3.6	4.3	193		
164		V10190_125	249	13.0	58	0	0	0	1117	32433	32859	35037	32717	3.4	4.4	194		
164		VBC_30134_025	250	13.1	58	0	0	0	1120	31581	32007	34375	32812	3.4	3.9	194		
164		VBC_30134_125	253	13.1	58	0	0	0	1137	31202	31344	34280	32575	3.6	4.1	194		
164		VBC_40015_025	250	13.0	58	0	0	0	1123	31770	32623	34090	31534	3.5	4.4	194		
164		VBC_40015_125	246	13.0	58	0	0	0	1105	30918	31581	34375	32954	3.1	4.5	194		
175		None	226	13.4	55	0	0	0	1013	28125	28125	35132	32528	3.3	4.1	197		
175		V10190_025	228	13.3	55	1	0	1	1024	29166	29214	34611	31534	3.8	4.3	196		
175		V10190_125	230	13.2	55	0	0	0	1034	30208	30208	35179	32481	3.8	4.0	197		
175		VBC_30134_025	230	13.2	55	0	0	0	1031	28930	28930	34990	32339	4.3	4.4	196		
175		VBC_30134_125	228	13.1	55	0	0	0	1022	28409	28409	34990	31960	3.8	4.0	196		
175		VBC_40015_025	227	13.3	55	1	0	1	1021	27698	27746	35274	32149	3.6	4.3	197		
175		VBC_40015_125	227	13.3	55	1	0	0	1019	28693	28693	35037	31960	3.1	4.1	197		
	VBC_40009_00	None	234	13.2	56	0	0	0	1050	29687	29924	34943	32717	3.5	4.3	195		
	VBC_40009_00	V10190_025	243	13.1	56	0	0	0	1092	30918	31060	34327	32149	4.0	4.6	195		
	VBC_40009_00	V10190_125	239	13.1	57	0	0	0	1071	31013	31155	35037	32717	3.6	4.1	195		
	VBC_40009_00	VBC_30134_025	241	13.1	57	0	0	0	1084	30729	30965	34753	32149	3.9	4.1	194		
	VBC_40009_00	VBC_30134_125	239	13.1	57	0	0	0	1072	30161	30303	34943	32481	3.5	3.8	195		
	VBC_40009_00	VBC_40015_025	240	13.1	56	0	0	0	1076	30161	30539	34469	32623	3.8	4.3	195		
	VBC_40009_00	VBC_40015_125	240	13.0	57	1	0	0	1076	30350	30681	35179	32481	3.4	4.4	195		
	VBC_40009_15	None	239	13.3	56	0	0	0	1074	29545	29782	34706	32481	3.1	4.1	195		
	VBC_40009_15	V10190_025	230	13.2	56	1	0	1	1032	29119	29545	34564	32481	3.4	3.9	195		
	VBC_40009_15	V10190_125	241	13.1	56	0	0	0	1080	31628	31912	35179	32481	3.5	4.3	195		
	VBC_40009_15	VBC_30134_025	238	13.2	56	0	0	0	1068	29782	29971	34611	33001	3.8	4.1	195		
	VBC_40009_15	VBC_30134_125	242	13.2	56	0	0	0	1086	29450	29450	34327	32054	3.9	4.4	195		
	VBC_40009_15	VBC_40015_025	238	13.2	57	0	0	0	1069	29308	29829	34895	31060	3.4	4.4	195		
	VBC_40009_15	VBC_40015_125	233	13.2	56	0	0	0	1048	29261	29592	34232	32433	2.9	4.3	196		

continued.

**Table C-39. Valent BioSciences Early Plant Field Trial - April 14 planting.**

(continued.) **Arlington, WI - 2010.**

Hybrid	Dosage	Additive	Yield	Moisture	Test			Grower	Harvest			V2	Vigor		Si k	
					weight	Total	Stalk		Root	return	pop		ears	Seeded		pop
			bu/A	%	lbs/bu	%	%	%	\$/A	plants/A	ears/A	seeds/A	plants/A	1-5		doy
164	VBC_40009_00	None	248	13.0	58	0	0	0	1114	31912	32386	34564	33143	3.3	4.3	193
164	VBC_40009_00	V10190_025	252	13.0	58	0	0	0	1130	32386	32670	34280	32859	4.0	4.5	193
164	VBC_40009_00	V10190_125	250	13.1	58	0	0	0	1120	32386	32670	35132	33333	3.3	4.0	194
164	VBC_40009_00	VBC_30134_025	250	13.0	58	0	0	0	1122	32386	32859	34280	31818	3.3	3.8	194
164	VBC_40009_00	VBC_30134_125	254	13.1	58	0	0	0	1140	30965	31250	34564	32765	3.3	3.5	194
164	VBC_40009_00	VBC_40015_025	252	13.0	58	0	0	0	1130	32102	32859	33996	31818	3.5	4.0	194
164	VBC_40009_00	VBC_40015_125	250	13.0	58	0	0	0	1123	31155	31818	34753	32670	3.3	4.5	193
164	VBC_40009_15	None	247	13.1	58	0	0	0	1107	30303	30776	34469	32197	3.5	4.3	193
164	VBC_40009_15	V10190_025	238	13.1	58	1	0	1	1068	29356	30113	34280	33333	3.3	4.0	193
164	VBC_40009_15	V10190_125	248	12.9	58	0	0	0	1114	32481	33049	34943	32102	3.5	4.8	194
164	VBC_40009_15	VBC_30134_025	249	13.1	58	0	0	0	1119	30776	31155	34469	33806	3.5	4.0	194
164	VBC_40009_15	VBC_30134_125	253	13.1	57	0	0	0	1134	31439	31439	33996	32386	4.0	4.8	194
164	VBC_40009_15	VBC_40015_025	249	13.0	58	0	0	0	1117	31439	32386	34185	31250	3.5	4.8	194
164	VBC_40009_15	VBC_40015_125	242	13.0	58	0	0	0	1087	30681	31344	33996	33238	3.0	4.5	194
175	VBC_40009_00	None	219	13.5	55	0	0	0	985	27462	27462	35321	32291	3.8	4.3	196
175	VBC_40009_00	V10190_025	235	13.2	55	0	0	0	1053	29450	29450	34375	31439	4.0	4.8	196
175	VBC_40009_00	V10190_125	228	13.2	55	0	0	0	1022	29640	29640	34943	32102	4.0	4.3	196
175	VBC_40009_00	VBC_30134_025	233	13.1	55	1	0	1	1046	29072	29072	35227	32481	4.5	4.5	195
175	VBC_40009_00	VBC_30134_125	224	13.1	55	0	0	0	1005	29356	29356	35321	32197	3.8	4.0	196
175	VBC_40009_00	VBC_40015_025	228	13.2	55	1	0	1	1022	28219	28219	34943	33428	4.0	4.5	196
175	VBC_40009_00	VBC_40015_125	229	13.1	55	1	1	1	1029	29545	29545	35606	32291	3.5	4.3	196
175	VBC_40009_15	None	232	13.4	55	0	0	0	1040	28787	28787	34943	32765	2.8	4.0	198
175	VBC_40009_15	V10190_025	222	13.4	55	1	0	1	995	28882	28977	34848	31628	3.5	3.8	197
175	VBC_40009_15	V10190_125	233	13.3	54	0	0	0	1047	30776	30776	35416	32859	3.5	3.8	197
175	VBC_40009_15	VBC_30134_025	226	13.3	55	0	0	0	1017	28787	28787	34753	32197	4.0	4.3	197
175	VBC_40009_15	VBC_30134_125	231	13.2	56	1	0	1	1038	27462	27462	34659	31723	3.8	4.0	196
175	VBC_40009_15	VBC_40015_025	227	13.4	55	0	0	0	1020	27178	27272	35606	30871	3.3	4.0	197
175	VBC_40009_15	VBC_40015_125	225	13.5	55	0	0	0	1009	27841	27841	34469	31628	2.8	4.0	197
Mean			238	13.2	56	0	0	0	1070	30079	30336	34726	32379	3.5	4.2	195
<b>Probability(%)</b>																
Hybrid (H)			0.2	5.6	0.0	10.1	39.1	13.2	0.2	0.3	0.2	6.9	20.2	50.1	52.2	0.2
Dosage (D)			38.1	28.2	74.9	51.8	35.6	35.3	38.1	3.9	5.2	48.7	55.0	10.7	89.0	4.6
H x D			35.2	49.7	66.5	38.7	35.6	54.9	35.2	35.1	39.9	95.3	57.8	5.1	2.3	6.1
Additive (A)			90.1	44.2	99.5	62.2	43.2	61.2	90.1	1.9	2.5	67.5	82.5	5.2	92.0	41.2
H x A			94.7	2.7	31.9	83.8	43.2	96.6	94.7	35.2	20.7	85.5	61.0	40.5	56.0	5.8
A x D			29.0	60.0	50.1	3.2	43.2	5.1	29.0	33.7	36.7	45.5	51.2	39.6	16.4	32.5
H x D x A			93.8	40.8	26.8	91.5	43.2	97.6	93.8	9.4	14.5	95.2	39.9	80.9	77.8	91.4
<b>LSD (0.10)</b>																
Hybrid (H)			5	0.2	0	NS	NS	NS	23	738	777	516	NS	NS	NS	1
Dosage (D)			NS	NS	NS	NS	NS	NS	NS	520	521	NS	NS	NS	NS	0
H x D			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.5	0.3	1
Additive (A)			NS	NS	NS	NS	NS	NS	NS	834	836	NS	NS	0.4	NS	NS
H x A			NS	0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1
A x D			NS	NS	NS	1	NS	1	NS	NS	NS	NS	NS	NS	NS	NS
H x D x A			NS	NS	NS	NS	NS	NS	NS	1679	NS	NS	NS	NS	NS	NS

**Table C-40. Valent BioSciences Early Plant Field Trial - May 18 planting.  
Arlington, WI - 2010.**

Hybrid	Dosage	Additive	Yield	Moisture	Test			Lodged		Grower	Harvest			V2	Vigor		Si k
					weight	Total	Stalk	Root	return		pop	ears	Seeded		pop	V5	
			bu/A	%	lbs/bu	%	%	%	\$/A	plants/A	ears/A	seeds/A	plants/A	1-5		doy	
164			237	14.5	57	0	0	0	1065	31757	32176	34131	32569	4.4	4.3	200	
175			216	15.2	54	1	0	1	970	28963	28977	34300	31865	4.1	4.0	203	
	VBC_40009_00		229	14.7	56	1	0	1	1028	30675	30891	34266	32413	4.5	4.3	202	
	VBC_40009_15		224	15.1	56	0	0	0	1007	30046	30262	34165	32021	4.0	4.1	202	
164	VBC_40009_00		239	14.5	57	0	0	0	1072	31939	32372	34199	32846	4.5	4.4	200	
164	VBC_40009_15		236	14.6	57	0	0	0	1058	31574	31980	34063	32291	4.2	4.3	201	
175	VBC_40009_00		219	14.9	54	1	0	1	984	29410	29410	34334	31980	4.5	4.1	203	
175	VBC_40009_15		213	15.5	54	1	0	0	955	28517	28544	34266	31750	3.8	3.9	204	
		None	228	14.8	56	0	0	0	1022	30610	30776	34469	32386	4.6	4.6	202	
		V10190_025	226	14.8	56	1	0	1	1014	30184	30539	33996	31250	4.1	3.8	202	
		V10190_125	222	15.0	56	1	0	0	996	29356	29498	34019	32315	4.0	4.0	202	
		VBC_30134_025	228	14.8	56	0	0	0	1023	30184	30397	34422	32197	4.3	4.3	202	
		VBC_30134_125	227	15.1	56	0	0	0	1018	30066	30279	34161	31889	4.2	4.0	202	
		VBC_40015_025	228	14.7	56	0	0	0	1024	30823	31060	33948	32504	4.3	4.3	202	
		VBC_40015_125	228	14.9	56	1	0	1	1025	31297	31486	34493	32978	4.4	4.4	202	
164		None	243	14.5	57	0	0	0	1090	32149	32481	34280	33049	4.6	4.8	200	
164		V10190_025	237	14.5	57	0	0	0	1063	31297	31912	33712	30776	4.1	4.0	201	
164		V10190_125	232	14.5	57	0	0	0	1040	30729	31013	33948	32859	4.1	4.1	201	
164		VBC_30134_025	238	14.4	57	0	0	0	1068	31392	31818	34422	32575	4.4	4.4	200	
164		VBC_30134_125	239	14.9	57	0	0	0	1071	31581	32007	34138	32481	4.3	4.1	201	
164		VBC_40015_025	235	14.2	57	0	0	0	1054	32528	33001	33854	32812	4.6	4.5	200	
164		VBC_40015_125	238	14.6	57	0	0	0	1070	32623	33001	34564	33428	4.5	4.5	200	
175		None	212	15.1	54	0	0	0	954	29072	29072	34659	31723	4.5	4.4	204	
175		V10190_025	215	15.1	55	1	0	1	965	29072	29166	34280	31723	4.0	3.5	204	
175		V10190_125	212	15.4	54	1	0	1	952	27983	27983	34090	31770	3.9	3.9	204	
175		VBC_30134_025	218	15.2	55	1	0	1	977	28977	28977	34422	31818	4.3	4.1	203	
175		VBC_30134_125	215	15.4	54	1	0	1	966	28551	28551	34185	31297	4.1	3.9	204	
175		VBC_40015_025	221	15.1	55	0	0	0	993	29119	29119	34043	32197	4.0	4.1	203	
175		VBC_40015_125	218	15.2	54	1	0	1	980	29971	29971	34422	32528	4.2	4.3	203	
	VBC_40009_00	None	231	14.6	56	0	0	0	1037	30681	30776	34517	32575	5.0	4.6	202	
	VBC_40009_00	V10190_025	228	14.6	56	1	0	1	1022	30492	30918	34185	31486	4.3	3.9	202	
	VBC_40009_00	V10190_125	222	14.6	56	1	0	1	998	29308	29498	34280	32575	4.1	3.9	202	
	VBC_40009_00	VBC_30134_025	235	14.6	56	0	0	0	1053	31060	31344	34232	32717	4.5	4.4	201	
	VBC_40009_00	VBC_30134_125	227	14.9	56	1	0	1	1020	30492	30539	34422	32481	4.5	4.1	202	
	VBC_40009_00	VBC_40015_025	230	14.5	56	0	0	0	1032	31628	31865	33948	32575	4.6	4.3	202	
	VBC_40009_00	VBC_40015_125	230	14.7	56	1	0	1	1035	31060	31297	34280	32481	4.8	4.6	202	
	VBC_40009_15	None	224	14.9	56	0	0	0	1007	30539	30776	34422	32197	4.1	4.5	202	
	VBC_40009_15	V10190_025	224	15.0	56	0	0	0	1007	29876	30161	33806	31013	3.9	3.6	203	
	VBC_40009_15	V10190_125	222	15.3	56	1	0	0	994	29403	29498	33759	32054	3.9	4.1	203	
	VBC_40009_15	VBC_30134_025	221	14.9	56	0	0	0	992	29308	29450	34611	31676	4.1	4.1	202	
	VBC_40009_15	VBC_30134_125	227	15.4	56	0	0	0	1017	29640	30019	33901	31297	3.9	3.9	203	
	VBC_40009_15	VBC_40015_025	226	14.8	56	0	0	0	1015	30019	30255	33948	32433	4.0	4.4	202	
	VBC_40009_15	VBC_40015_125	226	15.0	56	1	0	1	1016	31534	31676	34706	33475	4.0	4.1	202	

continued.

**Table C-40. Valent BioSciences Early Plant Field Trial - May 18 planting.**

(continued.) **Arlington, WI - 2010.**

Hybrid	Dosage	Additive	Yield	Moisture	Test			Grower	Harvest			V2	Vigor		Si k	
					weight	Total	Stalk		Root	return	pop		ears	Seeded		pop
			bu/A	%	lbs/bu	%	%	%	\$/A	plants/A	ears/A	seeds/A	plants/A	1-5		doy
164	VBC_40009_00	None	242	14.5	57	0	0	0	1087	32291	32481	34185	33238	5.0	4.8	200
164	VBC_40009_00	V10190_025	237	14.3	58	0	0	0	1064	31250	32102	33806	31344	4.3	4.0	200
164	VBC_40009_00	V10190_125	231	14.3	57	0	0	0	1035	30776	31155	34280	33143	4.0	4.0	200
164	VBC_40009_00	VBC_30134_025	246	14.5	58	0	0	0	1105	31818	32386	34659	33049	4.5	4.5	200
164	VBC_40009_00	VBC_30134_125	239	14.8	57	0	0	0	1074	31818	31912	34375	33143	4.5	4.3	200
164	VBC_40009_00	VBC_40015_025	236	14.3	57	0	0	0	1061	33143	33617	33522	32670	4.8	4.3	200
164	VBC_40009_00	VBC_40015_125	240	14.5	57	0	0	0	1079	32481	32954	34564	33333	4.8	4.8	200
164	VBC_40009_15	None	243	14.5	57	1	0	1	1092	32007	32481	34375	32859	4.3	4.8	200
164	VBC_40009_15	V10190_025	237	14.7	57	0	0	0	1063	31344	31723	33617	30208	4.0	4.0	201
164	VBC_40009_15	V10190_125	233	14.7	57	0	0	0	1044	30681	30871	33617	32575	4.3	4.3	202
164	VBC_40009_15	VBC_30134_025	230	14.4	57	0	0	0	1031	30965	31250	34185	32102	4.3	4.3	200
164	VBC_40009_15	VBC_30134_125	238	15.0	57	0	0	0	1068	31344	32102	33901	31818	4.0	4.0	202
164	VBC_40009_15	VBC_40015_025	234	14.2	57	0	0	0	1048	31912	32386	34185	32954	4.5	4.8	200
164	VBC_40009_15	VBC_40015_125	236	14.7	57	0	0	0	1062	32765	33049	34564	33522	4.3	4.3	201
175	VBC_40009_00	None	220	14.8	54	0	0	0	986	29072	29072	34848	31912	5.0	4.5	203
175	VBC_40009_00	V10190_025	218	14.9	55	2	0	2	980	29734	29734	34564	31628	4.3	3.8	203
175	VBC_40009_00	V10190_125	214	14.9	54	1	0	1	961	27841	27841	34280	32007	4.3	3.8	203
175	VBC_40009_00	VBC_30134_025	223	14.8	55	0	0	0	1002	30303	30303	33806	32386	4.5	4.3	203
175	VBC_40009_00	VBC_30134_125	215	14.9	54	1	0	1	966	29166	29166	34469	31818	4.5	4.0	203
175	VBC_40009_00	VBC_40015_025	223	14.7	55	0	0	0	1003	30113	30113	34375	32481	4.5	4.3	203
175	VBC_40009_00	VBC_40015_125	221	15.0	55	2	0	2	990	29640	29640	33996	31628	4.8	4.5	203
175	VBC_40009_15	None	205	15.3	54	0	0	0	922	29072	29072	34469	31534	4.0	4.3	204
175	VBC_40009_15	V10190_025	212	15.4	54	0	0	0	951	28409	28598	33996	31818	3.8	3.3	204
175	VBC_40009_15	V10190_125	210	15.9	54	1	1	0	943	28125	28125	33901	31534	3.5	4.0	204
175	VBC_40009_15	VBC_30134_025	212	15.5	54	1	0	1	952	27651	27651	35037	31250	4.0	4.0	204
175	VBC_40009_15	VBC_30134_125	215	15.8	54	1	0	1	965	27935	27935	33901	30776	3.8	3.8	204
175	VBC_40009_15	VBC_40015_025	219	15.4	55	0	0	0	982	28125	28125	33712	31912	3.5	4.0	204
175	VBC_40009_15	VBC_40015_125	216	15.3	54	1	0	1	970	30303	30303	34848	33428	3.7	4.0	203
Mean			227	14.9	56	0	0	0	1017	30360	30577	34216	32217	4.3	4.2	202
<b>Probability(%)</b>																
Hybrid (H)			0.1	1.6	0.0	2.6	18.2	2.4	0.1	0.2	0.2	52.0	8.3	25.8	3.8	0.1
Dosage (D)			3.6	0.4	10.7	39.1	13.4	23.4	3.5	5.1	5.4	54.6	20.3	1.6	16.5	0.1
H x D			38.4	2.7	78.8	10.8	13.4	6.0	37.2	34.6	40.4	83.8	57.6	21.3	28.0	58.2
Additive (A)			46.1	1.7	39.1	34.4	1.1	38.0	44.7	0.6	0.7	26.4	5.3	15.6	0.0	1.0
H x A			32.9	78.5	56.9	9.7	1.1	14.0	33.7	90.2	91.8	92.1	36.2	89.9	98.4	19.2
A x D			45.2	68.9	65.5	88.1	1.1	74.4	47.1	18.4	18.8	50.0	45.6	76.1	35.2	7.2
H x D x A			78.6	50.9	80.6	50.5	1.1	43.4	79.1	85.6	88.4	22.5	90.7	95.7	87.4	74.5
<b>LSD (0.10)</b>																
Hybrid (H)			4	0.3	0	0	NS	0	19	693	741	NS	647	NS	0.2	0
Dosage (D)			3	0.2	NS	NS	NS	NS	15	501	512	NS	NS	0.3	NS	0
H x D			NS	0.3	NS	NS	NS	0	NS	NS	NS	NS	NS	NS	NS	NS
Additive (A)			NS	0.2	NS	NS	0	NS	NS	804	822	NS	857	NS	0.3	0
H x A			NS	NS	NS	1	0	NS	NS	NS	NS	NS	NS	NS	NS	NS
A x D			NS	NS	NS	NS	0	NS	NS	NS	NS	NS	NS	NS	NS	1
H x D x A			NS	NS	NS	NS	0	NS	NS	NS	NS	NS	NS	NS	NS	NS