



agronomy



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SOUTH DAKOTA STATE UNIVERSITY®
AGRONOMY, HORTICULTURE, & PLANT SCIENCE DEPARTMENT

2019 South Dakota Corn Hybrid Trial Results Volga

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Location:	1.5 miles south of Volga (57101) in Brookings County, SD (GPS: 44.298742°, -96.920945°)
Cooperator:	SDSU Volga Research Farm - Jack Ingemansen, manager
Soil Type:	Brandt silty clay loam, 0-2% slope
Fertilizer:	80 lb/acre 30-10-10 starter + 180-40-40-7S preplant
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	Conventional
Row spacing:	30 inches
Seeding Rate:	32,000/acre
Herbicide:	Pre: 1.8 pt Staunch II (acetochlor +flumetsulam + cropyralid) Post: 1 pt Buctril (bromoxynil)
Date seeded:	5/17/2019
Date harvested:	11/9/2019
Notes:	This trial location was affected by wet conditions immediately following planting, which reduced emergence for some hybrids. Green snap also occurred in a few of the hybrids. Please pay attention to harvest population and green snap percentage when examining the data.



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Table 1. Glyphosate-resistant corn hybrid performance results (average of 4 replications - **Early Season Trial** (100 day maturity or less) at Volga, SD.

Hybrid Information		Agronomic Performance						
Brand	Hybrid	Maturity Rating	Yield Bu/A (15.5%)	Moisture	Test Wt. (lbs/bu)	Lodging (%)	Final Stand (plants/A)	Green Snap (%)
Renk Seed	RK593VT2P	96	252.1	21.4	53.6	2.2	29800	0.0
Dairyland Seed	DS-3550AM	95	250.8	21.1	50.8	1.2	26700	0.0
Heine Seeds	6500VT2PRO	99	250.3	21.5	53.4	1.1	29700	0.0
Renk Seed	RK579DGVT2P	98	247.2	22.8	51.9	0.4	29500	0.0
Federal Hybrids	4580 VT2P RIB	95	246.0	22.8	53.7	1.1	30100	0.0
Heine Seeds	6200VT2PRORIB	95	244.6	22.9	51.7	0.0	31300	0.0
LG Seeds	LG5465VT2RIB	97	242.5	23.5	52.6	0.4	31000	0.0
LG Seeds	LG46C73VT2RIB	96	235.5	24.5	50.9	1.4	30200	0.0
Heine Seeds	6550VT2PRO	99	234.4	24.1	51.7	0.7	30400	0.0
Heine Seeds	6225STX	95	234.0	26.0	52.5	0.0	28300	0.0
Federal Hybrids	4990 VT2P RIB	99	232.0	26.4	51.7	1.5	29100	0.0
Check	CHECK	100	231.4	24.8	52.4	0.8	28900	0.0
LG Seeds	LG5494VT2RIB	99	226.4	25.1	51.6	0.5	23500	0.0
Heine Seeds	6230VT2PRO	95	225.7	21.0	54.9	0.4	29900	0.0
Heine Seeds	7010VT2PRO	100	224.2	23.6	51.0	2.7	27900	0.0
LG Seeds	LG44C27VT2RIB	94	223.7	21.7	53.1	0.0	28900	0.0
Dairyland Seed	DS-3715AM	97	222.6	20.3	52.3	0.6	21800	0.0
Hoegemeyer	HPT 7088 AM	100	218.9	25.3	51.0	0.4	27000	0.0
Channel	194-49DGVT2PRIB	94	218.5	23.8	51.6	0.8	27800	14.5
Masters Choice	SP1970	94	217.6	20.5	54.3	0.0	25300	0.0
Federal Hybrids	4800 VT2P RIB	98	217.4	23.7	51.5	0.4	26600	0.0
Federal Hybrids	4999 SS RIB	99	217.2	23.3	52.5	0.0	28900	0.0
Heine Seeds	7000STX	100	216.8	25.4	53.3	0.4	27800	0.0
Peterson Farms Seed	72D00	100	216.0	25.7	50.3	0.4	27100	0.0
Heine Seeds	638DGVT2PRORIB	98	214.3	26.5	49.8	0.0	28400	0.0
Federal Hybrids	4780 VT2P RIB	98	213.5	23.5	51.1	0.0	24900	0.0
Federal Hybrids	4770 VT2P RIB	97	211.5	23.9	52.6	1.2	27800	0.0
Federal Hybrids	4680 VT2P RIB	96	206.9	23.8	51.3	0.0	29000	0.0
Channel	197-90VT2PRIB	97	204.8	21.9	53.5	0.0	23000	0.0
Hoegemeyer	HPT 6620 AM	96	192.4	20.1	52.1	0.5	21800	0.0
Channel	199-11VT2PRIB	99	189.4	23.5	51.9	0.0	26200	20.7
Federal Hybrids	4805 SS	98	187.5	29.6	50.6	7.3	28700	18.6
Masters Choice	SP1927	95	152.9	23.9	52.0	0.0	16800	0.0
Trial Average			221.8	23.6	52.1	0.8	27400	-
LSD (0.05)†			15.2	1.2	1.4	2.3	1400	-
C.V.‡			4.9	3.8	1.9	-	3.7	-

* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

† Yield or moisture value required (\geq LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.



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Table 2. Glyphosate-resistant corn hybrid performance results (average of 4 replications - **Late Season Trial** (101 day maturity or more) at Volga, SD.

Hybrid Information		Agronomic Performance						
Brand	Hybrid	Maturity Rating	Yield Bu/A (15.5%)	Moisture	Test Wt. (lbs/bu)	Lodging (%)	Final Stand (plants/A)	Green Snap (%)
Heine Seeds	740VT2PRORIB	103	244.5	25.8	52.2	0.0	26700	0.0
Channel	205-63VT2PRIB	105	242.2	27.0	50.9	0.4	28200	0.0
Peterson Farms Seed	73P01	101	236.6	23.9	50.7	1.6	28300	0.0
Check	CHECK	100	235.3	25.8	52.2	0.0	30200	0.0
Channel	201-67STXRIB	101	229.4	26.2	53.4	0.4	27300	0.0
Dairyland Seed	DS-4310AM	103	223.8	28.6	51.0	0.0	27400	0.0
Federal Hybrids	5280 SS RIB	102	222.4	25.2	52.9	0.4	26100	0.0
Federal Hybrids	5570 VT2P RIB	105	217.2	27.7	51.1	0.0	24100	0.0
Peterson Farms Seed	87A01	101	216.4	24.7	52.1	0.0	29100	0.0
Dairyland Seed	DS-4440AM	104	216.3	25.0	50.8	0.5	23000	0.0
Renk Seed	RK642VT2P	103	216.0	27.3	50.1	0.5	24200	0.0
Federal Hybrids	5300 VT2P	103	208.6	27.9	50.2	0.0	22500	0.0
Dairyland Seed	DS4580Q	105	207.3	24.8	50.9	0.0	24100	0.0
Peterson Farms Seed	88B03	103	201.7	25.8	50.8	0.0	24000	0.0
Heine Seeds	739VT2PRORIB	102	200.6	29.8	51.5	0.0	26500	0.0
Renk Seed	RK621VT2P	102	192.1	25.7	50.3	0.0	18500	0.0
Heine Seeds	7430STX	104	189.5	32.7	50.1	0.0	29900	8.4
Peterson Farms Seed	74H04	104	187.3	18.3	54.6	0.0	24500	0.0
Dairyland Seed	DS-4018AM	101	182.1	29.0	48.5	0.5	21600	0.0
Masters Choice	SP2272	101	180.0	23.6	53.3	0.0	23300	0.0
Renk Seed	RK626SSTX	102	166.0	31.0	48.7	0.4	28900	20.0
Trial Average			210.2	26.5	51.2	0.2	25600	-
LSD (0.05)†			18.2	1.6	0.9	0.8	1500	-
C.V.‡			6.1	4.2	1.2	-	4.1	-

* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

† Yield or moisture value required (\geq LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.