

Uniform Fungicide Trial- Corn- Landisville
 UFT_C_LV_2023



Year	2023
Location	Southeast Agricultural Research and Extension Center
Field	R3
GPS coordinates	40.120187, -76.433572
Soil type	Silt loam
Crop	Corn
Previous crop	Soybean
Variety	P0157AM
Seeding rate	32,000
Row space (in)	30
Reps	4
Tillage/Residue	No-till
Trial type	RCBD
Plot dimensions	10'x20'
Herbicide	Pre: y Post: y
Foliar insecticide	n
Foliar fungicide	n
Fertilizer	Starter: n Side-dress: y
Irrigation	n
Planting date	6/12/23
Artificial inoculations (y/n)	n
Inoculum type/density	N/A
Inoculation date	N/A
Rating 1 date	9/19/23
Rating 2 date	10/2/23
Rating 3 date	N/A
Harvest date	11/2/23

Map:

411	412	413	414	415	416	417	418	419	420
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11	15	20	13	16	8	3	8	7	6	
401	402	403	404	405	406	407	408	409	410	
9	12	17	18	2	19	14	10	1	4	
311	312	313	314	315	316	317	318	319	320	
8	19	17	14	5	1	15	16	18	6	
301	BIG ROCK	302	303	304	305	306	307	308	309	310
13		12	7	9	10	5	3	11	4	20
211	212	213	214	215	216	217	218	219	220	
11	10	7	1	2	15	3	9	17	5	
201	202	203	204	205	206	207	208	209	210	
1	18	12	2	16	4	20	19	14	6	
111	112	113	114	115	116	117	118	119	120	
13	4	13	2	7	17	11	19	8	10	
101	102	103	104	105	106	107	108	109	110	
18	12	20	3	6	14	9	5	16	15	

Protocol:

Trt	Product	Rate (oz/A)	Timing	Adjuvant	Rate	Spray Date_1	Spray Date_2
1	UTC						
2	Veltyma	7	VT	NIS	0.25% v/v	8/18/2023	
3	Headline AMP	14.4	VT	NIS	0.25% v/v	8/18/2023	
4	Lucento	5	VT	NIS	0.25% v/v	8/18/2023	
5	Revylok	5.5	VT	NIS	0.25% v/v	8/18/2023	
6	Revylok	6.5	VT	NIS	0.25% v/v	8/18/2023	
7	Headline AMP	10	VT	NIS	0.25% v/v	8/18/2023	
8	Miravis Neo	13.7	VT/R1	Induce	0.125% v/v	8/18/2023	
10	Trivapro	13.7	VT/R1	Induce	0.125% v/v	8/18/2023	
11	Affiance	10	VT	Induce	0.25% v/v	8/18/2023	
12	Instigo/Carbose	16/6	VT			8/18/2023	
15	Lucento	5	R1	Induce	0.25% v/v	8/18/2023	
16	Adastrio	8	R1	Induce	0.25% v/v	8/18/2023	
17	Topguard fb Adastrio	10, 8	V8/10 fb R1	Induce	0.25% v/v	8/9/2023	8/18/2023
18	Topguard EQ	5	R1	Induce	0.25% v/v	8/18/2023	
19	Delaro Complete	8	VT/R1	Induce 90 SL	0.12% v/v	8/18/2023	
20	Veltyma	7	V5			7/21/2023	

Data by plot:

plot	trt	rep	ndvi	GLS_severity	yield_bu_a	TS_severity	GLS_severity2	TS_severity2
101	18	1	0.702	3.37	159.22	0.07	6.13	0.27
102	12	1	0.747	6.27	218.27	0.77	15.03	1.67
103	20	1	0.758	6.50	185.49	1.23	10.97	2.17
104	3	1	0.775	5.83	227.90	0.47	5.57	0.80
105	6	1	0.775	2.13	213.58	0.17	2.90	0.37
108	5	1	0.763	1.73	200.54	0.17	2.80	0.30
109	16	1	0.731	1.70	172.06	0.07	4.60	0.40
110	15	1	0.704	2.50	152.54	0.30	5.13	0.83
112	4	1	0.725	2.20	175.70	0.07	4.67	0.40
114	2	1	0.76	1.57	188.61	0.23	2.03	0.10
115	7	1	0.778	3.17	219.24	0.33	5.07	0.60
116	17	1	0.719	0.87	126.79	0.00	1.27	0.23
117	11	1	0.743	2.57	177.76	0.07	4.43	0.33
118	19	1	0.76	3.30	191.38	0.20	6.07	0.57
119	8	1	0.739	3.07	167.92	0.03	4.63	0.23
120	10	1	0.707	3.17	123.52	0.23	7.53	0.53
201	1	1	0.71	17.07	155.85	0.97	24.37	1.40
202	18	2	0.738	2.73	163.99	0.13	4.57	0.53
203	12	2	0.708	11.07	148.32	0.43	21.30	1.03
204	2	2	0.644	0.87	85.42	0.00	2.97	0.00
205	16	2	0.704	1.70	204.99	0.00	3.87	0.47
206	4	2	0.757	1.90	190.39	0.00	3.37	0.43
207	20	2	0.773	5.00	210.78	0.77	11.43	1.60
208	19	2	0.749	2.30	176.63	0.10	4.87	0.20
210	6	2	0.689	3.47	118.20	0.07	3.20	0.17
211	11	2	0.704	3.40	155.29	0.17	5.20	0.53
212	10	2	0.744	3.00	168.48	0.00	6.80	0.43
213	7	2	0.674	2.13	85.36	0.00	7.20	0.13
214	1	2	0.69	12.57	158.78	0.57	25.30	1.10
215	2	3	0.695	1.83	162.75	0.03	3.80	0.03
216	15	2	0.728	2.00	181.85	0.27	5.47	0.60
217	3	2	0.718	3.87	155.99	0.00	5.73	0.30
219	17	2	0.745	0.77	184.82	0.03	2.20	0.20
220	5	2	0.704	1.57	120.73	0.07	3.47	0.33
302	12	3	0.651	6.40	86.50	0.23	26.23	0.57
303	7	3	0.663	3.30	126.74	0.07	9.40	0.40

305	10	3	0.708	2.57	151.15	0.03	6.37	1.07
306	5	3	0.7	2.23	126.09	0.13	3.10	0.43
307	3	3	0.717	2.97	160.56	0.13	6.30	0.70
308	11	3	0.751	1.73	140.44	0.00	3.90	1.27
309	4	3	0.687	1.90	147.23	0.00	3.23	0.97
310	20	3	0.685	6.97	NA	0.20	12.83	1.37
311	8	2	0.713	1.67	148.17	0.20	4.60	0.93
312	19	3	0.713	2.67	142.62	0.07	8.47	1.13
313	17	3	0.662	0.77	98.53	0.03	2.40	1.07
315	5	4	0.709	2.20	171.11	0.23	2.40	0.67
316	1	3	0.722	10.10	196.09	0.80	14.87	2.00
317	15	3	0.76	2.40	191.05	0.30	7.93	1.33
318	16	3	0.778	1.27	190.35	0.07	3.00	0.87
319	18	3	0.754	1.77	187.77	0.17	4.13	1.30
320	6	3	0.725	2.17	147.26	0.07	2.13	0.30
402	12	4	0.74	44.07	169.86	0.60	13.97	3.20
403	17	4	0.744	1.27	163.33	0.00	1.73	1.20
404	18	4	0.751	2.30	174.20	0.00	4.57	1.17
405	2	4	0.749	6.37	198.67	0.53	9.47	1.87
406	19	4	0.732	2.70	184.31	0.07	6.37	1.13
408	10	4	0.784	2.43	200.37	0.07	5.13	1.00
409	1	4	0.757	10.00	183.67	0.83	22.83	2.87
410	4	4	0.688	4.63	145.42	0.37	7.37	1.17
411	11	4	0.721	2.60	148.94	0.10	5.10	0.93
412	15	4	0.748	3.00	158.32	0.53	5.00	1.67
413	20	4	0.762	4.23	192.28	1.03	12.13	5.27
415	16	4	0.791	1.50	195.56	0.03	5.43	1.53
416	8	3	0.792	2.70	227.40	0.00	6.43	1.20
417	3	4	0.794	3.63	216.95	0.47	7.03	1.37
418	8	4	0.797	2.80	232.05	0.10	5.17	1.33
419	7	4	0.779	3.70	203.95	0.30	8.87	1.07
420	6	4	0.756	4.23	200.23	0.23	3.07	0.43

Summary by treatment:

trt	GLS_severity_9.19	TS_severity_9.19	GLS_severity_10.2	TS_severity_10.2	yield_bu_a
1	12.43	0.79	21.84	1.84	173.60
2	2.66	0.20	4.57	0.50	158.86
3	4.08	0.27	6.16	0.79	190.35
4	2.66	0.11	4.66	0.74	164.69
5	1.93	0.15	2.94	0.43	154.62

6	3.00	0.13	2.83	0.32	169.82
7	3.08	0.18	7.63	0.55	158.82
8	2.56	0.08	5.21	0.93	193.88
10	2.79	0.08	6.46	0.76	160.88
11	2.58	0.08	4.66	0.77	155.60
12	16.95	0.51	19.13	1.62	155.74
13	9.24	0.84	17.92	2.09	159.09
16	1.54	0.04	4.23	0.82	190.74
17	0.92	0.02	1.90	0.68	143.37
18	2.54	0.09	4.85	0.82	171.29
19	2.74	0.11	6.44	0.76	173.74
20	5.68	0.81	11.84	2.60	147.14

Discussion/Results:

The UFT_C_LV_2023 trial was extremely dry which led to low gray leaf spot (GLS) and tar spot (TS) severity. Although GLS and TS did develop late in the season at the end of September, these diseases did not cause economically significant losses. No significant differences were found in yield.

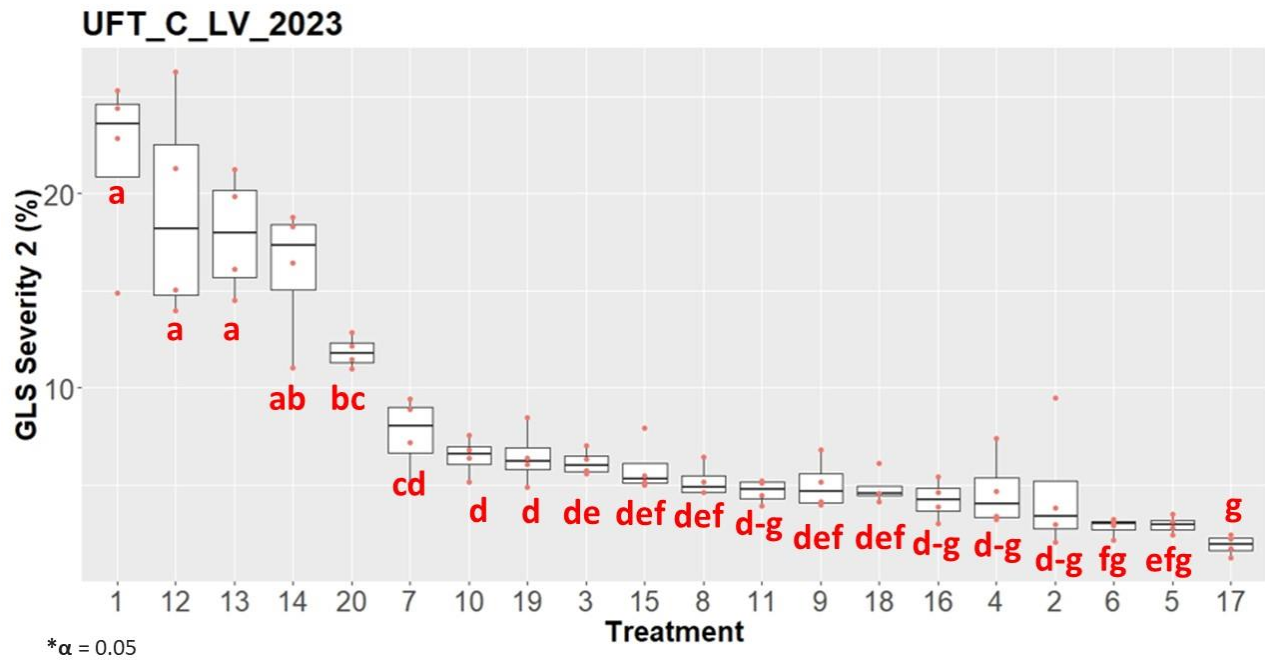


Figure 1. Gray leaf spot ratings were completed on 10/2/23 and Veltyma (VT), Revylok (VT), and Topgaard (V8) followed by Adastrio (VT) were the most effective at reducing GLS severity.

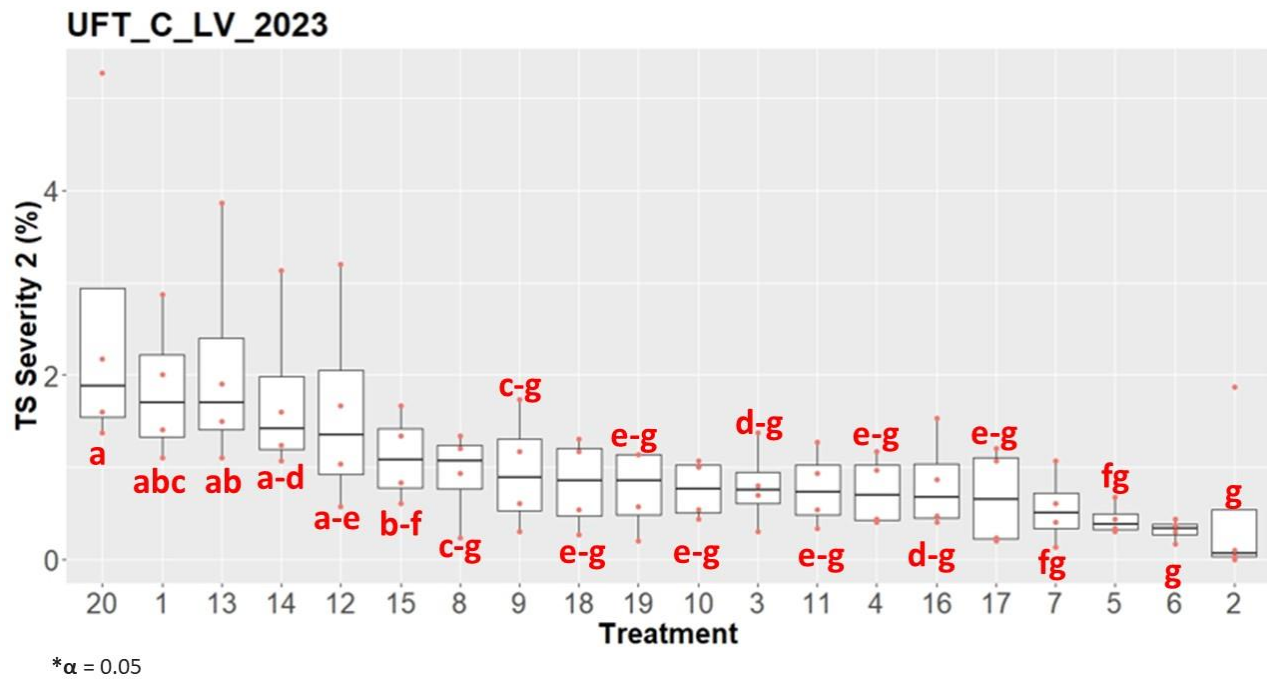


Figure 2. Plots were rated for tar spot disease severity on 10/2/23 and showed Veltyma and Revylok at VT were the most effective treatments.

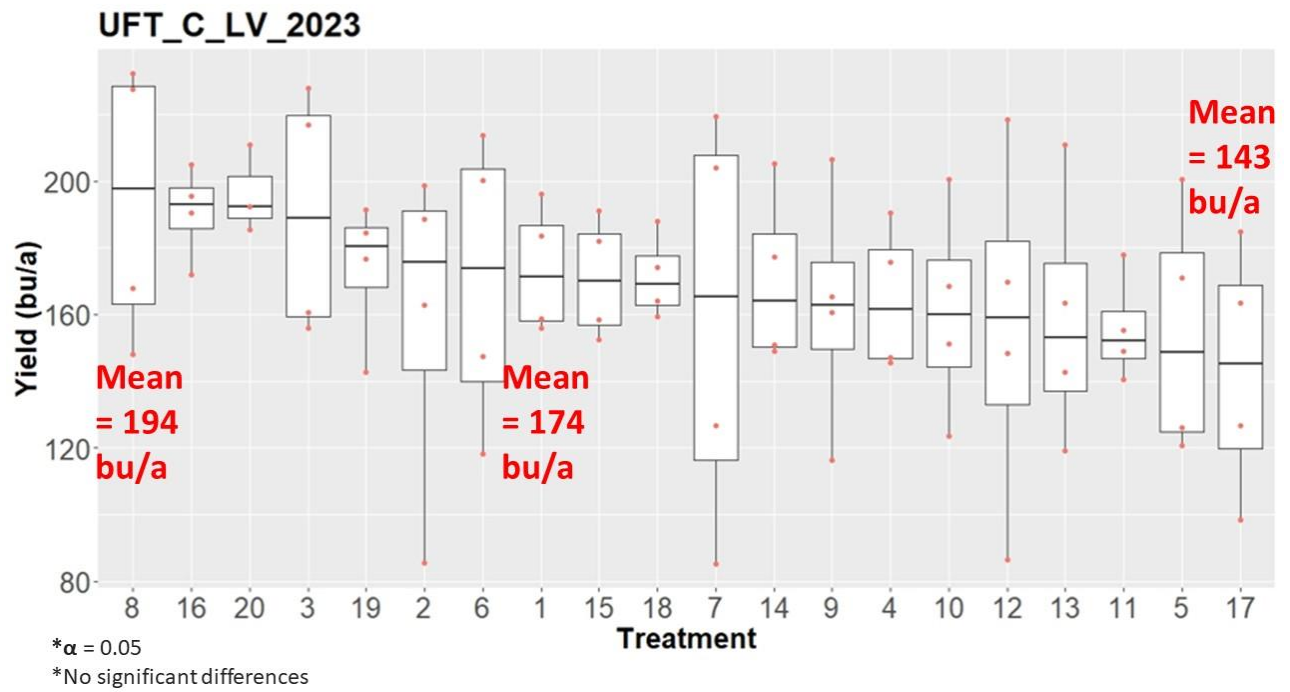


Figure 3. No significant differences were observed between treatments for yield (bu/A).

Acknowledgements:

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