

RESEARCH FOR RESULTS



2018 Seed Company Corn Trials

OVERVIEW: This is year 3 of a continuing study conducted by a major seed company utilizing various organic seed treatments on corn vs. an Untreated Check (UTC) and their own highly successful Conventional seed treatment (Hard Chemistries).

LOCATION: Four central U.S. states: IOWA, ILLINOIS, INDIANA, KENTUCKY

PLOT: VARIOUS

HYBRID: ORGANIC

2018 BECK'S CORN TREATMENT STUDY - ORGANIC - IOWA											
CODE	TREATMENT	IA Marshalltown					Mt. Pleasant				
		Rep 1	Rep 2	Rep 3	Rep 4	Avg.	Rep 1	Rep 2	Rep 3	Rep 4	Avg.
Treatment #2	Hard Chemistries (MQ + IS + PV	272.1	262.5	247.6	257.5	259.9	224.1	219.6	213.9	211.4	217.3
Treatment #7	OBT 2001	273.6	255.8	253.3	265.4	262.0	210.3	215.9	224.0	214.9	216.3
Treatment #16	1R	256.3	251.6	257.5	263.4	257.2	194.2	191.7	246.3	218.1	212.6
Treatment #8	OBT 2012	249.6	249.9	259.3	252.0	252.7	205.0	211.9	221.5	215.8	213.6
Treatment #17	Environoc 401	265.5	244.0	248.7	250.7	252.2	213.4	220.3	237.3	213.4	221.1
Treatment #6	OBT 2001	235.1	253.7	251.5	262.8	250.8	212.2	215.7	221.0	194.7	210.9
Treatment #5	S 208	253.5	241.0	249.8	254.3	249.7	203.5	212.3	235.4	219.8	217.8
Treatment #13	VPH + BIOST Nematicide	238.4	244.5	244.5	248.3	243.9	236.4	195.6	220.3	214.1	216.6
Treatment #10	VPH	249.6	255.8	259.8	268.5	258.4	208.4	207.7	231.1	216.9	216.0
Treatment #3	OBT 2001 + 1R	260.3	269.3	250.1	260.9	260.2	232.5	216.5	232.7	205.6	221.8
Treatment #12	BIOST Nematicide	248.5	249.6	278.1	255.6	258.0	210.9	214.9	246.9	217.4	222.5
Treatment #9	SabrEx 18BE_01019LQ	262.9	239.3	267.7	245.4	253.8	230.9	198.4	229.4	227.2	221.5
Treatment #1	UTC	246.8	248.8	253.2	257.1	251.5	224.0	183.5	242.8	215.8	216.5
Treatment #4	BDX Seed Treatment	243.1	242.6	254.1	248.6	247.1	224.4	203.8	220.6	196.4	211.3
Treatment #11	VPH + 1R	248.2	249.0	251.3	257.0	251.4	243.0	184.4	214.8	203.5	211.4
Treatment #14	M110	253.2	243.9	273.7	262.2	258.3	200.9	205.4	224.9	200.6	208.0
Treatment #15	AgRho S Boost ELX	253.4	255.5	238.3	244.8	248.0	217.6	161.6	221.5	207.4	202.0
MEAN						253.8					215.1
CV						3.5					6.5
LSD						12.7					19.9

SUMMARY:

SoilBiotics **Organic 1r – Seed Treatment** = (Marshalltown) 7nd of 17; 101.3% of Mean Avg., +3.4 Avg. bu/A vs. Check. (Mt. Pleasant) Tie 12th of 17; 98.8% of Mean Avg., -3.9 Avg. bu/A vs. Check.

2018 BECK'S CORN TREATMENT STUDY - ORGANIC - ILLINOIS						
CODE	TREATMENT	IL				
		Seneca				
		Rep 1	Rep 2	Rep 3	Rep 4	Avg.
Treatment #2	Hard Chemistries (MQ + IS + PV 500 2.0)	256.3	248.4	254.9	246.9	251.6
Treatment #7	OBT 2001	239.6	242.2	220.3	245.5	236.9
Treatment #16	1R	239.1	242.1	248.8	220.2	237.6
Treatment #8	OBT 2012	244.5	229.8	247.0	215.5	234.2
Treatment #17	Environoc 401	242.1	224.5	256.6	235.8	239.8
Treatment #6	OBT 2001	230.6	243.8	220.2	242.6	234.3
Treatment #5	S 208	253.8	228.3	253.3	249.6	246.3
Treatment #13	VPH + BIOST Nematicide	256.0	253.4	238.0	240.0	246.9
Treatment #10	VPH	233.8	231.9	248.8	241.8	239.1
Treatment #3	OBT 2001 + 1R	254.9	210.2	248.5	218.7	233.1
Treatment #12	BIOST Nematicide	231.8	230.5	231.0	228.8	230.5
Treatment #9	SabrEx 18BE_01019LQ	216.7	226.6	216.9	209.5	217.4
Treatment #1	UTC	244.5	223.6	242.7	237.5	237.1
Treatment #4	BDX Seed Treatment	229.0	230.5	244.4	232.9	234.2
Treatment #11	VPH + 1R	232.6	228.3	243.5	225.9	232.6
Treatment #14	M110	221.2	231.2	235.6	241.4	232.4
Treatment #15	AgRho S Boost ELX	230.7	222.8	247.1	208.6	227.3
MEAN						235.9
CV						4.6
LSD						15.3

SUMMARY:

SoilBiotics **Organic 1r – Seed Treatment** = 6th of 17; 101% of Mean Avg., +0.5 Avg. bu/A vs. Check.

2018 BECK'S CORN TREATMENT STUDY - ORGANIC - INDIANA											
CODE	TREATMENT	IN									
		Atlanta					Bourbon				
		Rep 1	Rep 2	Rep 3	Rep 4	Avg.	Rep 1	Rep 2	Rep 3	Rep 4	Avg.
Treatment #2	Hard Chemistries (MQ + IS + PV	257.4	239.8	242.7	245.3	246.3	236.7	219.7	218.3	239.8	228.6
Treatment #7	OBT 2001	224.2	240.3	226.6	231.7	230.7	231.9	246.1		238.9	239.0
Treatment #16	1R	242.5	232.8	231.5	237.9	236.2	222.9	224.7	223.2	214.9	221.4
Treatment #8	OBT 2012	235.5	236.2	241.6	258.2	242.9	230.6	241.2	209.3	229.6	227.7
Treatment #17	Environoc 401	248.5	237.0	220.2	236.8	235.6	226.9	227.7	220.4	233.8	227.2
Treatment #6	OBT 2001	246.0	226.9	226.8	242.6	235.6	229.2	249.3	224.1	226.9	232.4
Treatment #5	S 208	228.1	227.3	241.7	228.8	231.5	228.8	229.9	212.1	214.1	221.2
Treatment #13	VPH + BIOST Nematicide	242.8	224.5	238.2	211.0	229.1	234.9	235.6	223.7	226.4	230.2
Treatment #10	VPH	244.0	219.3	210.8	240.4	228.6	224.9	237.6	210.4	239.7	228.2
Treatment #3	OBT 2001 + 1R	237.1	234.7	237.5	236.2	236.4	226.9	236.3	224.2	204.9	223.1
Treatment #12	BIOST Nematicide	230.9	236.8	214.3	229.5	227.9	232.5	218.9	192.5	193.5	209.4
Treatment #9	SabrEx 18BE_01019LQ	220.0	230.3	225.3	235.1	227.7	244.5	235.4	199.3	216.7	224.0
Treatment #1	UTC	244.9	251.3	218.3	222.3	234.2	244.4	226.3	224.1	194.5	222.3
Treatment #4	BDX Seed Treatment	241.7	239.4	236.3	227.6	236.3	218.1	248.5	230.7	218.4	228.9
Treatment #11	VPH + 1R	232.6	237.7	245.4	240.6	239.1	220.8	229.5	189.0	191.6	207.7
Treatment #14	M110	228.8	251.1	232.6	225.1	234.4	203.9	235.8	206.1	211.0	214.2
Treatment #15	AgRho S Boost ELX	236.9	235.2	224.0	231.9	232.0	223.2	232.1	195.7	243.2	223.6
MEAN						234.4					224.1
CV						5.0					4.9
LSD						16.7					15.5

SUMMARY:

SoilBiotics **Organic 1r – Seed Treatment** = (Atlanta) 5nd of 17; 100.7% of Mean Avg., +1.8 Avg. bu/A vs. Check. (Bourbon) 12th of 17; 98.8% of Mean Avg., -2.7 Avg. bu/A vs. Check.

2018 BECK'S CORN TREATMENT STUDY - ORGANIC - KENTUCKY						
CODE	TREATMENT	KY				
		Columbia				
		Rep 1	Rep 2	Rep 3	Rep 4	Avg.
Treatment #2	Hard Chemistries (MQ + IS + PV 500 2.0)	241.9	213.8	241.1	219.1	229.0
Treatment #7	OBT 2001	208.0	239.9	238.8	218.2	226.2
Treatment #16	1R	247.3	251.0	227.2	230.8	239.1
Treatment #8	OBT 2012	241.8	224.9	234.6	215.5	229.2
Treatment #17	Environoc 401	225.6	221.6	239.2	202.4	222.2
Treatment #6	OBT 2001	227.9	231.4	231.6	241.8	233.2
Treatment #5	S 208	220.8	231.4	239.2	225.5	229.2
Treatment #13	VPH + BIOST Nematicide	221.5	230.2	231.2	228.9	228.0
Treatment #10	VPH	233.5	224.1	209.9	229.0	224.1
Treatment #3	OBT 2001 + 1R	218.1	215.1	243.7	186.9	216.0
Treatment #12	BIOST Nematicide	241.9	242.9	244.1	236.0	241.2
Treatment #9	SabrEx 18BE_01019LQ	224.4	223.1	252.4	247.5	236.9
Treatment #1	UTC	202.2	215.7	225.3	232.2	218.9
Treatment #4	BDX Seed Treatment	211.2	211.5	213.9	219.4	214.0
Treatment #11	VPH + 1R	229.5	228.4	243.3	211.4	228.2
Treatment #14	M110	210.3	210.2	222.5	209.7	213.2
Treatment #15	AgRho S Boost ELX	223.1	214.0	227.5	228.1	223.2
MEAN						226.6
CV						5.5
LSD						17.8

SUMMARY:

SoilBiotics **Organic 1r – Seed Treatment** = 2th of 17; 105.5% of Mean Avg., +20.2 Avg. bu/A vs. Check.

NOTES: These tests were conducted strictly for Seed Treatment performance and not conducted in a true restricted Organic program. They were instead conducted utilizing the growers actual normal cropping plans. These included all standard tillage, fertilizer and other input programs, so results are more indicative of “real world” farming.

2018 CORN TREATMENT STUDY - ORGANIC - STATE AVERAGES				
CODE	TREATMENT	Replicated Average	Yield % of Mean	RANK
Treatment #2	Hard Chemistries	231.7	102.8%	1
Treatment #16	1R	227.7	101.0%	5
Treatment #7	OBT 2001	229.6	102.0%	3
Treatment #9	SabrEx 18BE_01019LQ	224.9	99.8%	11
Treatment #8	OBT2012	226.2	100.3%	8
Treatment #17	Environoc 401	227.6	100.1%	10
Treatment #6	OBT 2001	227.7	101.0%	5
Treatment #5	S 208	228.6	101.4%	4
Treatment #13	VPH + BIOST Nematicide	230.4	102.2%	2
Treatment #10	VPH	226.8	100.6%	7
Treatment #3	OBT 2001 + 1R	223.5	99.1%	13
Treatment #12	BIOST Nematicide	225.9	100.2%	9
Treatment #1	UTC	223.7	99.2%	12
Treatment #4	BDX Seed Treatment	222.1	98.5%	14
Treatment #11	VPH + 1R	220.0	97.6%	15
Treatment #14	M110	216.9	96.2%	17
Treatment #15	AgRho S Boost ELX	219.0	97.2%	16
MEAN		225.4		
CV		5.4		
LSD		16.3		

FINAL SUMMARY: SoilBiotics **Organic 1r – Seed Treatment** placed tied for 5th overall of 17 seed treatments tested (16 organic). The seed company’s primary Conventional seed treatment (Hard Chemistries) was first overall. **Organic 1r – Seed Treatment** scored 101.0% of Mean Avg., and a +4 Avg. bu/A vs. Untreated Check over the 4-state study.