

RESEARCH FOR RESULTS



2019 Seed Company Corn Trials

OVERVIEW: This is year 4 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 organic treatments.

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

PLOT: VARIOUS

HYBRID: ORGANIC

2019 BECK'S CORN TREATMENT STUDY - ORGANIC - IOWA		IA															
CODE	TREATMENT	Marshalltown 6/2/19								Planted							
		Mt. Pleasant				Planted 6/4/19				Mt. Pleasant				Planted 6/4/19			
		Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Avg.		Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Avg.	
Treatment #10	Biological Insecticide/Fungicide	255.3	246.8	270.9	262.6	255.4	262.0	258.8		251.6	226.6	252.6	215.5	242.7	237.8	237.8	
Treatment #3	1r-plus	236.0	248.2	248.1	242.7	274.0	214.0	243.8		242.4	237.8	237.5	267.3	219.5	253.1	242.9	
Treatment #5	BIOST Nematicide/ BIOST VPH+HU+M110	242.9	228.8	198.5	241.9	225.0	280.0	236.2		239.8	225.0	252.2	247.5	243.1	260.4	244.7	
Treatment #6	15-1-1 (5oz)	267.1	251.5	252.1	245.1	257.9		254.7		266.0	252.7	251.5	233.7	221.9	220.5	241.1	
Treatment #12	Heads up	253.9	228.2	265.1	223.7	245.1	236.5	242.1		242.0	239.7	255.3	239.2	247.2	232.9	242.7	
Treatment #4	BIOST Nematicide/ BIOST VPH	272.9	208.5	247.9	244.6	241.6	234.1	241.6		248.8	243.1	256.5	247.2	227.3	243.9	244.5	
Treatment #1	Untreated Control	230.2	189.5	257.2	251.1	259.5		237.5		242.1	244.6	222.1	211.2	238.9	263.3	237.0	
Treatment #9	15-1-1 (10 oz) + 1r	251.2	275.7	255.4	267.0	238.8		257.6		219.2	227.2	226.2	232.7	265.1	229.0	233.2	
Treatment #11	Endofuse - OMRI	214.5	276.7	272.3	268.8	282.3	235.8	258.4		223.6	249.9	230.0	241.8	209.7	263.8	236.5	
Treatment #7	15-1-1 (5oz) + 1r	258.4	234.7	230.4	182.2	231.2	252.7	231.6		245.5	222.1	248.3	239.0	229.5	248.9	238.9	
Treatment #2	1R	258.8	243.9	242.5	258.9	247.5	210.9	243.8		231.4	261.9	227.7	227.8	196.1	245.3	231.7	
Treatment #8	15-1-1 (10oz)	211.4	227.2	239.8	173.7	248.3	232.1	222.1		223.6	247.8	242.2	257.3	256.9	220.5	241.4	
MEAN								244.0								239.4	
CV								7.2								6.0	
LSD								15.6								11.7	

Hybrid : Great Harvest Organics - 58E4 GH

SUMMARY:

SoilBiotics **Organic 1r Seed Treatment** and **1r-plus Seed Treatment (Marshalltown)** tied for 5th of 12; 100% of Mean Avg., +6.3 Avg. bu/A vs. Check. SoilBiotics **1r-plus Seed Treatment (Mt. Pleasant)** 3rd of 12; 101% of Mean Avg., +5.9 Avg. bu/A vs. Check.

NOTE: Results for REP #6 at Marshalltown were not given for the Check and two other treatments.

2019 BECK'S CORN TREATMENT STUDY - ORGANIC - ILLINOIS								
CODE	TREATMENT	Seneca IL		Planted 6/4/19				Avg.
		Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	
Treatment #10	Biological Insecticide/Fungicide	241.2	249.2	256.8	218.3	215.8	227.0	234.7
Treatment #3	1r-plus	210.8	221.2	216.1	256.0	230.7	267.8	233.8
Treatment #5	BIOST Nematicide/ BIOST VPH+HU+M110	195.3	197.1	224.8	231.1	239.5	251.5	223.2
Treatment #6	15-1-1 (5oz)	258.9	245.6	236.0	242.2	199.2	216.7	233.1
Treatment #12	Heads up	236.9	209.9	238.4	217.0	219.5	207.8	221.6
Treatment #4	BIOST Nematicide/ BIOST VPH	229.4	235.1	227.4	219.4	235.7	216.2	227.2
Treatment #1	Untreated Control	212.7	237.7	241.4	248.1	240.0	262.3	240.4
Treatment #9	15-1-1 (10 oz) + 1r	226.5	214.7	205.0	248.9	233.8	207.6	222.8
Treatment #11	Endofuse - OMRI	229.4	198.6	222.7	222.3	218.8	217.7	218.3
Treatment #7	15-1-1 (5oz) + 1r	231.9	199.0	239.3	257.1	230.0	240.1	232.9
Treatment #2	1R	270.4	253.5	221.9	223.0	190.3	252.0	235.2
Treatment #8	15-1-1 (10oz)	216.7	229.5	232.2	232.9	238.1	214.9	227.4
MEAN								229.2
CV								7.9
LSD								15.2
Hybrid : Great Harvest Organics - 58E4 GH								

SUMMARY:

SoilBiotics Organic 1r – Seed Treatment = 2nd of 12; 103% of Mean Avg., -5.2 Avg. bu/A vs. Check. SoilBiotics 1r-plus Seed Treatment = 4th of 12; 102% of Mean Avg., -6.6 Avg. bu/A vs. Check.

2019 BECK'S CORN TREATMENT STUDY - ORGANIC - INDIANA															
CODE	TREATMENT	IN													
		Atlanta		Planted 5/28/19					Bourbon			Planted 5/8/19			
		Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Avg.	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Avg.	
Treatment #10	Biological Insecticide/Fungicide	176.8	199.6	201.7	198.3		194.1	256.1	231.3	236.8	264.4	286.9		255.1	
Treatment #3	1r-plus	219.0	192.3	228.9	214.2	184.2	207.7	184.4	229.5	253.0	243.1	238.5	221.2	228.3	
Treatment #5	BIOST Nematicide/ BIOST VPH+HU+M110	196.3	189.7	162.4	207.1		188.9	248.2		248.3	234.6	240.3	244.3	243.1	
Treatment #6	15-1-1 (5oz)	193.8	186.9	194.2			191.6	204.7	211.0	218.1	264.2	209.1	234.1	223.5	
Treatment #12	Heads up	206.3	162.0	208.9	195.4	197.8	194.1	263.1	221.9	243.7	225.4	206.9	211.6	228.8	
Treatment #4	BIOST Nematicide/ BIOST VPH	167.6	220.9	229.7	214.0	205.8	207.6	226.1	200.1	228.5	215.8	231.5		220.4	
Treatment #1	Untreated Control	188.7	180.0	171.8	211.6	206.2	191.7	242.0	213.2	233.1	236.5	197.4	232.6	225.8	
Treatment #9	15-1-1 (10 oz) + 1r	196.9	189.0	187.7	166.5	224.7	193.0	247.9	237.8	268.7	219.2	240.6	183.0	232.9	
Treatment #11	Endofuse - OMRI	172.8	197.1	190.0	200.8	201.7	192.5	238.1	241.9	242.6	191.7	245.6		232.0	
Treatment #7	15-1-1 (5oz) + 1r	177.5	194.2	169.0	196.2	173.5	182.1	213.4	221.6	252.3	212.6	255.3	248.3	233.9	
Treatment #2	1R	155.1	171.0	182.0	153.4	188.1	169.9	224.7	236.7	243.1	234.3	247.9	179.5	227.7	
Treatment #8	15-1-1 (10oz)	196.7	173.9	155.6	198.5	175.4	180.0	232.4	212.2	236.1	234.6	204.9	261.8	230.3	
MEAN							191.1							231.8	
CV							9.3							9.1	
LSD							20.7							17.6	
Hybrid : Great Harvest Organics - 58E4GH															

SUMMARY:

SoilBiotics 1r-plus Seed Treatment = (Atlanta) 1st of 12; 109% of Mean Avg., +16 Avg. bu/A vs. Check.

NOTE: Results for several treatments were not reported in various reps at each location.

2019 BECK'S CORN TREATMENT STUDY - ORGANIC - KENTUCKY								
CODE	TREATMENT	Ridgeway KY						
		Planted 5/9/19						
		Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Avg.
Treatment #10	Biological Insecticide/Fungicide	166.3	167.6	194.8	188.8	185.9	179.3	180.5
Treatment #3	1r-plus	176.4	200.0	186.3	169.0	182.7	198.7	185.5
Treatment #5	BIOST Nematicide/ BIOST VPH + HU + M110	189.2	165.5	197.4	205.5	168.8	187.7	185.7
Treatment #6	15-1-1 (5oz)	163.7	173.7	186.3	163.9	185.8	167.5	173.5
Treatment #12	Heads up	194.8	192.3	176.2	179.9	191.1	191.7	187.7
Treatment #4	BIOST Nematicide/ BIOST VPH	157.5	131.2	207.0	177.4	181.5		170.9
Treatment #1	Untreated Control	163.9	179.1	192.7	140.8	195.7	192.9	177.5
Treatment #9	15-1-1 (10 oz) + 1r	200.6	155.7	159.8	167.9	174.3	159.5	169.6
Treatment #11	Endofuse - OMRI	152.8	124.8	177.6	177.3	191.5	169.8	165.6
Treatment #7	15-1-1 (5oz) + 1r	190.1	188.8	183.1	154.9	184.2	170.8	178.7
Treatment #2	1R	177.9	153.6	203.3	195.9	185.2	190.6	184.4
Treatment #8	15-1-1 (10oz)	181.3	192.4	188.9	183.2	166.9	190.2	183.8
MEAN								178.6
CV								8.8
LSD								13.2

Hybrid : Great Harvest Organics - 58E4 GH

SUMMARY:

SoilBiotics **1r-plus Seed Treatment** = 3rd of 12; 104% of Mean Avg., +8 bu/A vs. Check. **Organic 1r – Seed Treatment** = 4th of 12; 103% of Mean Avg., +7.1 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.

2019 BECK'S CORN TREATMENT STUDY - ORGANIC - ALL STATES AVERAGE					
CODE	TREATMENT	Replicated Average	Yield % of Mean	Overall Rank	
Treatment #10	Biological Insecticide/Fungicide	226.8	103.6%	1	
Treatment #3	1r-plus	223.7	102.1%	2	
Treatment #5	BIOST Nematicide/ BIOST VPH + HU + M110	220.3	100.6%	3	
Treatment #6	15-1-1 (5oz)	219.6	100.3%	4	
Treatment #12	Heads up	219.5	100.2%	5	
Treatment #4	BIOST Nematicide/ BIOST VPH	218.7	99.9%	6	
Treatment #1	Untreated Control	218.3	99.7%	7	
Treatment #9	15-1-1 (10 oz) + 1r	218.2	99.6%	8	
Treatment #11	Endofuse - OMRI	217.2	99.2%	9	
Treatment #7	15-1-1 (5oz) + 1r	216.3	98.8%	10	
Treatment #2	1R	215.4	98.4%	11	
Treatment #8	15-1-1 (10oz)	214.2	97.8%	12	
MEAN		219.0			
CV					
LSD					
Hybrid : Great Harvest Organics - 58E4 GH					
http://www.greatharvestorganics.com/resources/Great-Harvest-ProductGuide-2020-Web.pdf					

FINAL SUMMARY: SoilBiotics **1r-plus Seed Treatment*** placed 2nd overall of 12 seed treatments tested. The seed company’s seed treatment (Biological Insecticide/Fungicide) was first overall. **1r-plus Seed Treatment** scored 102.0% of Mean Avg., and a +5.4 Avg. bu/A vs. Untreated Check over the 4-state study.

*SoilBiotics **1r-plus Seed Treatment** is marketed under the tradename **Seed Start 200**.