

RESEARCH FOR RESULTS



Beck's Multi-State Practical Farm Research (PFR) Starter Additive Study – CORN – 2020

OVERVIEW: This trial evaluates different starter additive products, applied in-furrow, and their impact on yield and profitability.

LOCATIONS: Michigan, Minnesota and Wisconsin at Beck's PFR testing locations.

LOCATION: MICHIGAN

HYBRID: BECK 5279VRbrand

POPULATION: 32,000 seeds/A.

PLANTING DATE: 5/5/2020

HARVEST DATE: 10/18/2020

ROW WIDTH: 30" rows

PREVIOUS CROP: Soybeans

TILLAGE: Fall – Disk-Rip; Spring – Field Cultivation

SOIL: Tappan (Loam)

HERBICIDE: Post: 1 pt. Armezon® PRO; 1 pt. Atrazine; 1 pt. RoundUp PowerMAX®

INSECTICIDE: Escalate®

STARTER (control): 5 gal. PureGrade® Diamond 6-24-6 in-furrow

NITROGEN: Total 190 units as UAN

TREATMENTS: See Table Below

IN-FURROW TREATMENTS	PERCENT MOISTURE	BU./A.	BU./A. DIFFERENCE	RETURN ON INVESTMENT
Control: Starter (5 gal. PureGrade® Diamond 6-24-6)	19.9	136.2	--	--
Starter + 4.5 oz. Terrasym® 408	20.6	143.5	+7.3	+\$20.14
Starter + 1 pt. SB4400	20.7	139.9	+3.7	+\$4.47
Starter + 1 pt. Vertex-IF	20.5	138.5	+2.3	+\$0.06
Starter + 1 qt. Bio Pass™	20.6	136.7	+0.5	-\$19.27

Corn \$3.72/Bu. Vertex-IF \$68.00/gal. Bio Pass™ \$84.50/gal. SB4400 \$74.40/gal. Terrasym® 408 \$1.56/oz. These results are based on the disclosed study parameters and participating sites.

LOCATION: MINNESOTA
HYBRID: BECK 4636V2Pbrand
POPULATION: 34,000 seeds/A.
PLANTING DATE: 4/24/2020
HARVEST DATE: 10/2/2020
ROW WIDTH: 30" rows
PREVIOUS CROP: Soybeans
TILLAGE: Fall – Disk-Rip; Spring – Field Cultivation
SOIL: Harps (Clay Loam)
HERBICIDE: Post: 3 oz. Laudis®; 3 oz. Stinger®; 22 oz. RoundUp PowerMAX®
INSECTICIDE: Escalate®
STARTER (control): 5 gal. PureGrade® Diamond 6-24-6 in-furrow
NITROGEN: Total 190 units as UAN
TREATMENTS: See Table Below

IN-FURROW TREATMENTS	PERCENT MOISTURE	BU./A.	BU./A. DIFFERENCE	RETURN ON INVESTMENT
Control: Starter (5 gal. PureGrade® Diamond 6-24-6)	17.5	222.9	--	--
Starter + 1 pt. SB4400	17.6	226.1	+3.2	+\$2.60
Starter + 4.5 oz. Terrasym® 408	17.4	224.1	+1.2	-\$2.56
Starter + 1 pt. Vertex-IF	17.6	223.2	+0.3	-\$7.39
Starter + 1 qt. Bio Pass™	17.4	223.7	+0.8	-\$18.16
Corn \$3.72/Bu. Vertex-IF \$68.00/gal. Bio Pass™ \$84.50/gal. SB4400 \$74.40/gal. Terrasym® 408 \$1.56/oz. These results are based on the disclosed study parameters and participating sites.				

LOCATION: WISCONSIN
HYBRID: BECK 4636V2Pbrand
POPULATION: 35,400 seeds/A.
PLANTING DATE: 5/3/2020
HARVEST DATE: 10/14/2020
ROW WIDTH: 30" rows
PREVIOUS CROP: Soybeans
TILLAGE: Fall – Chisel; Spring – Field Cultivation
SOIL: Fox (Silt Loam)
HERBICIDE: Pre: 1 pt. Verdict®, 8 oz. Outlook®; Post: 1 qt. Durango® DMA®; 3 oz. Stinger®; 4 oz. Status®
INSECTICIDE: Escalate®
STARTER (control): 5 gal. PureGrade® Diamond 6-24-6 in-furrow
NITROGEN: Total 190 units as UAN
TREATMENTS: See Table Below

IN-FURROW TREATMENTS	PERCENT MOISTURE	BU./A.	BU./A. DIFFERENCE	RETURN ON INVESTMENT
Control: Starter (5 gal. PureGrade® Diamond 6-24-6)	15.8	207.5	--	--
Starter + 1 pt. Vertex-IF	15.6	214.6	+7.1	+\$17.91
Starter + 1 pt. SB4400	15.4	214.0	+6.5	+\$14.88
Starter + 4.5 oz. Terrasym® 408	15.7	211.5	+4.0	+\$7.86
Starter + 1 qt. Bio Pass™	15.4	209.0	+1.5	-\$15.55
Corn \$3.72/Bu. Vertex-IF \$68.00/gal. Bio Pass™ \$84.50/gal. SB4400 \$74.40/gal. Terrasym® 408 \$1.56/oz. These results are based on the disclosed study parameters and participating sites.				

MULTI-STATE TOTALS:

IN-FURROW TREATMENTS	PERCENT MOISTURE	BU./A.	BU./A. DIFFERENCE	RETURN ON INVESTMENT
Control: Starter (5 gal. PureGrade® Diamond 6-24-6)	17.7	188.9	--	--
Starter + 4.5 oz. Terrasym® 408	17.9	193.0	+4.1	+\$8.23
Starter + 1 pt. SB4400	17.9	193.3	+4.4	+\$7.07
Starter + 1 pt. Vertex-IF	17.9	192.1	+3.2	+\$3.40
Starter + 1 qt. Bio Pass™	17.8	189.8	+0.9	-\$17.78

Corn \$3.72/Bu. Vertex-IF \$68.00/gal. Bio Pass™ \$84.50/gal. SB4400 \$74.40/gal. Terrasym® 408 \$1.56/oz. These results are based on the disclosed study parameters and participating sites.

SUMMARY:

SoilBiotics SB4400 was the Top Performer for Yield and BU/A increases. It was the only tested product with a positive ROI in all states, placing second overall for ROI across the three state PFR locations.