



## ADJUVANTS

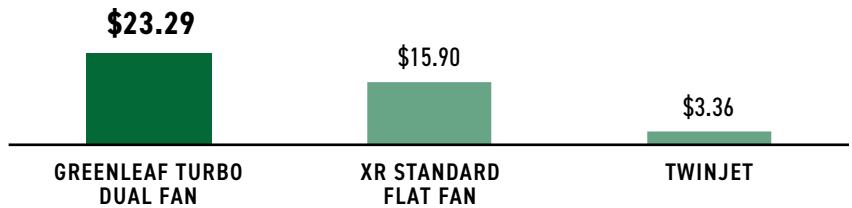
Adjuvants are designed to reduce drift by improving spray pattern deposition, meaning more droplets contact the targeted plants. Surfactants work by lowering the surface tension between the spray droplet and plant surface, keeping droplets on the leaf surface longer, allowing more time for plant intake.

	FUNGICIDE ADJUVANT	PFR PROVEN ROI	ROI WIN %	YIELD ADVANTAGE (BU./A.)	YIELD WIN %	APPLICATION RATE & TIMING	COMPANY
NEW	FULLTEC ADJUVANT™	\$20.94	69%	1.8	75%	3 oz. @ R3	Spraytec Fertilizers LLC.
NEW	XION SILICONGEL®	\$15.25	63%	1.4	63%	0.68 oz. @ R3	Agricultural Innovations, LLC.
	BRANDT® SUPER 7	\$14.87	80%	1.7	87%	6.4 oz. @ R3	Brandt Consolidated, Inc.
NEW	NANOPRO®	\$14.86	72%	1.4	83%	4 oz. @ R3	Aqua Yield Operations, LLC.

## NOZZLES

Nozzle selection will significantly impact droplet size, spray pattern, and ultimately, coverage. The Greenleaf Turbo Dual Fan nozzle is unique in that it offers two different spray angles with each nozzle.

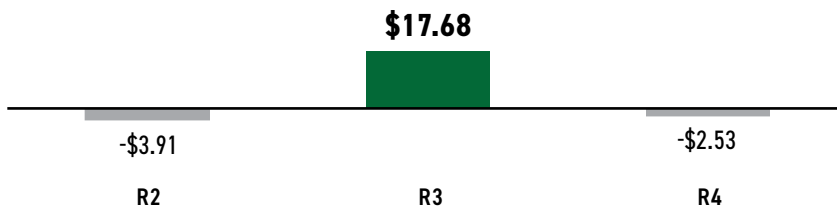
### 3-YEAR MULTI-LOCATION FUNGICIDE NOZZLE TYPE RETURN ON INVESTMENT - NEW



## TIMING

We believe that the R3 timing is typically beneficial because approximately 70% of a soybean plant's yield comes from nodes 6 to 13, which are present at this growth stage. Protecting those yield-driving nodes with a fungicide has proven profitable.

### 7-YEAR MULTI-LOCATION FUNGICIDE AND INSECTICIDE TIMING RETURN ON INVESTMENT



#### WHAT WE RECOMMEND:

Scout your fields to ensure proper application timing. A 3/16 in. pod in one of the top four fully developed nodes (trifoliolate leaves do not touch) marks the beginning of the R3 growth stage that typically lasts 7-10 days, depending on your planting date.



Scan the QR code to watch a video on growth staging soybeans.



# FUNGICIDE & INSECTICIDE APPLICATION STUDY

## OMISSION

The goal of this new study is to compare the various components of a fungicide/insecticide application system vs. a pass that contains all the recommended practices. This first-year data showed that the component that had the least impact was spray pressure. None of the PFR sites experienced heavy disease or insect pressure in 2024.

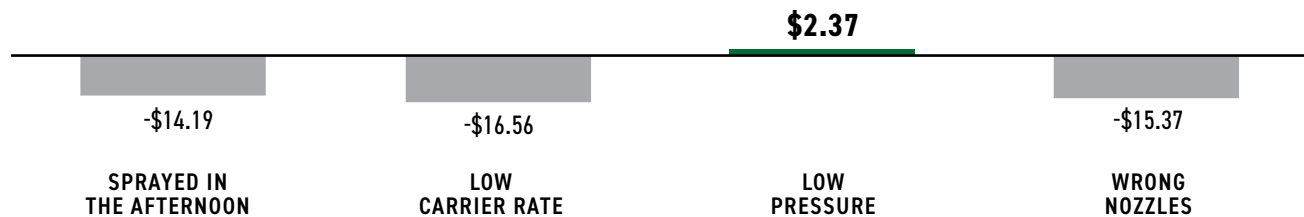
### 2024 MULTI-LOCATION RESULTS

FUNGICIDE & INSECTICIDE	TREATMENTS	APPLICATION ADJUSTMENT	PERCENT MOISTURE	BU./A.	BU./A. DIFFERENCE	RETURN ON INVESTMENT
8 oz. Revytek® + 3.2 oz. Mustang® Maxx @ R3	Control: Enhanced Application	--	12.3	85.8	--	--
	Time of Day	Sprayed at 3 p.m.	12.3	84.6	-1.2	-\$14.19
	Carrier Rate	10 gal./A. Carrier Rate	12.4	84.4	-1.4	-\$16.56
	Pressure	30 PSI	12.1	86.0	+0.2	+\$2.37
	Nozzle Type	TwinJet Nozzles	12.2	84.5	-1.3	-\$15.37

Soybeans \$11.83/Bu. These results are based on the disclosed study parameters and participating sites.

### 2024 MULTI-LOCATION FUNGICIDE & INSECTICIDE APPLICATION - OMISSION RETURN ON INVESTMENT

	SPRAYED IN THE AFTERNOON	LOW CARRIER RATE	LOW PRESSURE	WRONG NOZZLES
INDIANA	-\$10.65	-\$16.57	-\$18.93	-\$14.20
KENTUCKY	\$14.20	-\$15.38	\$20.11	-\$21.29
C. ILLINOIS	-\$36.67	-\$28.39	\$22.48	-\$33.12
WISCONSIN	-\$22.47	-\$8.28	-\$13.01	\$4.73



### 2024 DISEASE PRESSURE

SITE LOCATION	FROGEYE	SEPTORIA	TARGET SPOT
INDIANA	--	--	--
KENTUCKY	Light	Light	Light
C. ILLINOIS	--	--	--

**ENHANCED APPLICATION =**  
 Sprayed at 8 a.m.  
 20 gal./A. Carrier Rate  
 60 PSI  
 Greenleaf Turbo Dual Fan Nozzles

PARTICIPATING SITES





# FUNGICIDE & INSECTICIDE STUDY

## NOZZLE TYPE

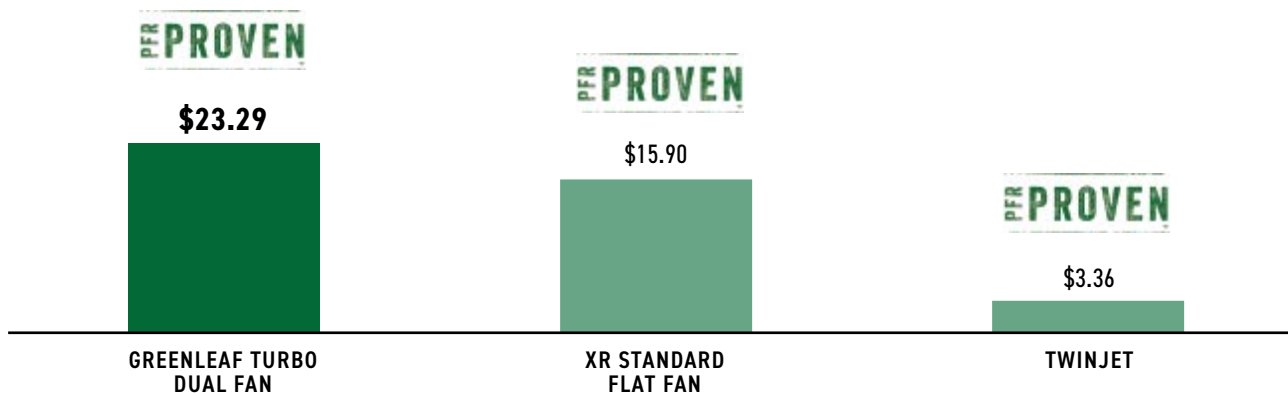
The Greenleaf Turbo Dual Fan nozzle provides forward and rearward spray patterns and a downward application. The goal of these nozzles is to provide better plant coverage and canopy penetration. After three years of testing, this nozzle has earned PFR Proven™ status.

### 2024 MULTI-LOCATION RESULTS

R3 TREATMENTS	NOZZLE TYPE	PERCENT MOISTURE	BU./A.	BU./A. DIFFERENCE	RETURN ON INVESTMENT
Control	--	10.3	82.9	--	--
5 oz. Lucento® + 3.2 oz. Mustang® Maxx	Greenleaf Turbo Dual Fan	10.3	86.7	+3.8	+\$17.56
	XR Standard Flat Fan	10.1	86.0	+3.1	+\$9.28
	TwinJet	10.2	85.1	+2.2	-\$1.37

Soybeans \$11.83/Bu. Mustang® Maxx \$188.37/gal. Lucento® \$580.60/gal. These results are based on the disclosed study parameters and participating sites.

### 3-YEAR MULTI-LOCATION FUNGICIDE/INSECTICIDE NOZZLE TYPE RETURN ON INVESTMENT



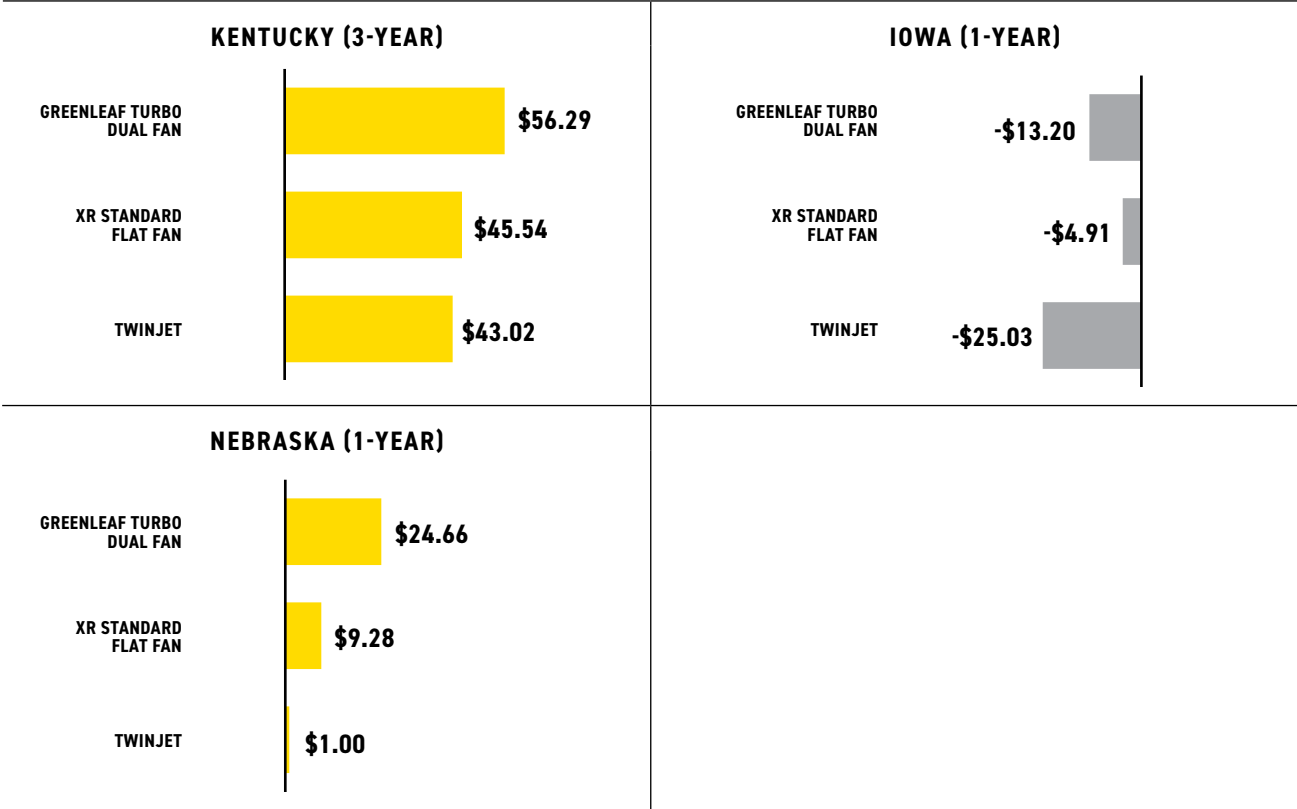
### 2024 DISEASE PRESSURE

SITE LOCATION	FROGEYE	SEPTORIA	TARGET SPOT	SDS
KENTUCKY	Light	Light	Light	--
IOWA	--	--	--	Light
NEBRASKA	--	--	--	Light

#### PARTICIPATING SITES



**MULTI-YEAR FUNGICIDE/INSECTICIDE - NOZZLE TYPE RETURN ON INVESTMENT**



**WATER SENSITIVE CARDS - NOZZLE SPRAY PATTERN**

