

# BECK'S YDrop™ Capture® LFR Study - 2013

**PLANTED:** April 23, 2013  
**HARVESTED:** September 23, 2013  
**POPULATION:** 34,500 seeds/A.  
**ROWS:** Six 30" rows  
**REPLICATIONS:** Two (averaged)

**PREVIOUS CROP:** Soybeans  
**TILLAGE:** Chisel / Reel Disk  
**HERBICIDE:** Pre: 8 oz. Verdict™  
 Post: 24 oz. Durango®  
**INSECTICIDE:** Escalate®

RAINFALL	
April	8.80 in.
May	4.15 in.
June	4.30 in.
July	2.60 in.
August	0.40 in.
Total	20.25 in.

**PURPOSE:**

This study is designed to evaluate the use of Capture® LFR® insecticide, applied on corn at the V10 growth stage via YDrop™ application. YDrop is a versatile system that can be installed on almost any sprayer and has the ability to precisely place any liquid product with 2 - 3 inches of a crop row. Its unique design allows liquid products to be applied within the row at anytime during the growing season. For this study, we installed the YDrop on a Hagie STS 10 high-clearance sprayer and evaluated applications of Capture LFR insecticide on multiple corn hybrids with various rootworm trait packages. Capture LFR contains the active ingredient Bifenthrin and is classified as a non-systemic pyrethroid that controls corn rootworms, cutworms, wireworms and grubs. It should be noted that this application at V10 is off-label and is only being demonstrated for research purposes. Capture LFR is labeled for use as a liquid fertilizer at-plant insecticide, however, we are analyzing the use of this insecticide via YDrop applications at a later date to help increase pest control at the base of the plant. Applications were made at the highest labeled rate of 8.5 oz./A., due to soil surface non-incorporated applications.

Treatment	Rootworm Trait	Percent Moisture	Bushels <sup>†</sup> Per Acre	Bu./A. Difference	Cost	Net <sup>^</sup> Return	Return on Investment
<b>Phoenix 5552A4**</b>							
Control	MIR604	19.7	192.5	---	---	\$1,039.50	---
YDrop™ 8.5 oz. Capture® LFR @ V10		19.6	198.8	6.3	\$28.50	\$1,045.02	+\$5.52
<b>BECK 6175AMX™**</b>							
Control	Cry34/35	20.5	199.7	---	---	\$1,078.38	---
YDrop 8.5 oz. Capture LFR @ V10		20.3	202.9	3.2	\$28.50	\$1,067.16	-\$11.22
<b>BECK 5442VT3</b>							
Control	Cry3Bb1	26.2	203.5	---	---	\$1,098.90	---
YDrop 8.5 oz. Capture LFR @ V10		26.2	214.5	11.0	\$28.50	\$1,129.80	+\$30.90
<b>BECK 6179VT3</b>							
Control	Cry3Bb1	19.7	209.7	---	---	\$1,132.38	---
YDrop 8.5 oz. Capture LFR @ V10		<u>20.4</u>	<u>217.4</u>	<u>7.7</u>	\$28.50	<u>\$1,145.46</u>	<u>+\$13.08</u>
AVERAGE		21.6	204.9	7.1		\$1,092.10	+\$9.57

<sup>†</sup>Bushels per acre corrected to 15% moisture.

\*XL® brand seed is distributed by Beck's Superior Hybrids, Inc. XL® is a registered trademark of DuPont Pioneer.

\*\*Phoenix™ brand is distributed by Beck's Superior Hybrids, Inc. Phoenix™ is a trademark of a Syngenta Group Company.

<sup>^</sup>Net return based on \$5.40/Bu. corn, \$19.50 Capture LFR and \$9.00 application cost.

YDrop is a trademark of Ag Alternatives, Inc. Capture is a registered trademark of FMC Corporation. Verdict is a trademark of BASF. Durango is a registered trademark of Dow AgroSciences LLC.



YDrop system on a Hagie STS 10 high-clearance sprayer.



YDrop precision sidedress placement.

## BECK'S YDrop™ Capture® LFR Study - Continued

### SUMMARY:

Capture LFR via YDrop offered average yield gains of 7.1 Bu./A. along with net returns of \$9.57/A. It is interesting to note the differences in yield response within the various rootworm platform events. BECK 5442VT3 and BECK 6179VT3 containing the Cry3Bb1 platform incurred the highest benefit from Capture LFR applications with average gains of 9.4 Bu./A. and net returns of \$21.99/A. However, as we evaluated other rootworm platforms such as MIR604 and Cry34/35, yield gains were reduced. The MIR 604 event in Phoenix 5552A4\*\* incurred yield gains of 6.3 Bu./A. with a net return of \$5.52/A. The Cry34/35 platform in BECK 6175AMX™\* only saw yield gains of 3.2 Bu./A. and consequently incurred net losses of \$11.22/A. from Capture LFR applications.

This data seems to be consistent with our 2013 soil applied insecticide study evaluating various corn rootworm event platforms (see page 174). As rootworm resistance becomes more prevalent throughout Beck's marketing area, it is important for producer's to understand which individual rootworm events may have resistance issues. Contact your local Beck's representative for questions regarding corn rootworm resistance.

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