

In-Furrow Insecticides In Corn And Soybean?



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There have been enough questions and marketing about the use of in-furrow insecticides, and specifically Capture LFR, in corn and soybean to justify some comments (granted a little late for comments about corn).

Capture LFR contains bifenthrin which is the same active ingredient as found in Brigade, Fanfare, Sniper or Tundra. However, it contains 1.5 Lb of active ingredient per gallon of product (not 2 Lb/gallon as found in Brigade and the other bifenthrin products). Keep in mind that bifenthrin has no systemic activity in the plant. Capture LFR is specifically formulated to mix with starter fertilizers ("LFR" stands for liquid fertilizer ready). This does not necessarily mean that other bifenthrin products will not mix with starter fertilizers.

Most of the questions have revolved around corn, and for those using a "pop-up" fertilizer, this is a easy option to overcome some weaknesses of insecticide seed treatments in corn. Done right, this treatment can provide protection against cutworms. Data from my counterparts at Mississippi State University (Angus Catchot) and NCSU (Dominic Reisig) also show this treatment provides some protection against sugarcane beetles, and you might expect the same against some other corn pests such as billbugs and white grubs. I would strongly consider using an in-furrow bifenthrin treatment in high risk scenarios such as where new ground is going into production or where sugarcane beetles have been a chronic problem.

What does "done right" mean? Most entomologist agree that you should band this application across the open seed furrow so that some product is being deposited on the shoulders of the seed trench. A 2-inch band is typically suggested. A strictly in-furrow application may not provide protection against cutworm or other surface feeding pests.

How much product would I use? The standard use rate of Capture LFR is 3.4 – 4 Oz of product per acre (0.2 - 0.24 Oz/1000 row feet). This is also the same range that would be used in soy-

bean. You can also use equivalent rates of other bifenthrin products such as Brigade 2E (0.15 – 0.18 Oz/1,000 row feet). If not mixing with a starter, it would be cheaper and just as effective to use the 2 lb formulations of bifenthrin. If using a starter fertilizer and not using Capture LFR, be sure to check the compatibility of your mix before filling up the tank.

What are the alternatives in corn? First let me mention that several other pyrethroid insecticides, other than bifenthrin, are labeled for in-furrow use in corn. However, bifenthrin is somewhat unique among the pyrethroids in having a relatively long soil residual. I would stick with bifenthrin for in-furrow sprays. Another alternative is increasing the rate of insecticide seed treatments to Poncho 500, Poncho 1250, or Cruiser 500. This would shore up some weaknesses of 250 use rates, but it would not be adequate for cutworms. And higher rates of seed treatments are not a miracle cure for sugarcane beetles. Another option is to use granular in-furrow insecticides.

What about in soybean? Using an in-furrow spray in narrow row beans isn't a viable option, which eliminates the vast majority of soybean acres in Tennessee. Despite the marketing push, I am aware of very little independent data showing value to an in-furrow bifenthrin application in soybean. This doesn't mean there isn't any. However, soil insect pests and cutworms are a less consistent problem in soybean than in corn, partly because beans can tolerate and compensate for stand loss better than corn. Seed treatments such as Cruiser, Gaucho, and NipsIt provide good control of most soil insects and systemic benefits against above ground pests. My gut instinct is that an in-furrow insecticide spray in soybean would have little value except in unusual circumstances, and insecticide seed treatments are a better and easier investment.

Note: Capture LFR is the only bifenthrin product labeled for use in soybean. We will be collecting data for corn and soybean this year, but it will take some time to draw hard conclusions on what value in-furrow sprays might bring to the table. Δ

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