

# Pyroxasulfone Based Products (Fierce and Zidua) Now Labeled In Soybeans



**DR. LARRY STECKEL**

**JACKSON, TENN.**

**P**roxasulfone based products of Zidua (pyroxasulfone alone) and Fierce (Valor + Pyroxasulfone) were just recently labeled in soybeans. Pyroxasulfone is a herbicide that is in the same class of herbicides as Dual (metolachlor) or Warrant (acetochlor). Like Dual and Warrant, pyroxasulfone provides residual control of grass and small seeded broadleaf weeds. We have been evaluating these herbicides for many years in Tennessee to see how they might fit into our soybean weed control programs. Below are some thoughts on these new herbicides and some summary statements based on our research.

BASF will be selling pyroxasulfone under the trade name Zidua. It is a 0.85 lb water-dispersible granule product. It is labeled to be applied to soybean pre plant, pre emergence and early post emergence (1st trifoliolate to 3rd trifoliolate soybean leaf stage). The rate range varies from 1.0 to 3.5 ozs/A. It will likely be most commonly applied at 2.5 oz/A but the rate depends upon soil texture and application timing so be sure to refer to the label.

How does Zidua compare to Dual and Warrant? In our research Zidua at the 2.5 oz/A rate has provided longer residual control of grass and small seeded broadleaf weeds like Palmer amaranth than a 16 oz/A rate of Dual or 48 oz/A of Warrant. It will need a similar amount of precipitation to be activated as Dual, but less than Warrant. Like Warrant, Zidua is not as good a herbicide for nutsedge control as Dual. Palmer amaranth control will be more consis-

tent if Zidua is applied pre emergence with another herbicide with good activity on Palmer. In our studies tankmixtures with Sharpen or Verdict have provided about 5 weeks residual control which was similar to our standard of Prefix at 32 oz/A.

Fierce is a premix of Valor and Pyroxasulfone received a label for use in soybean the first of this month. It is a 76 percent water-dispersible granule product (33.5 percent flumioxazin + 42.5 percent pyroxasulfone). The rate range varies from 3.0 to 3.75 ozs/A. It will likely be applied at 3.0 oz/A but the rate depends upon soil texture and application timing so be sure to refer to the label. In our research Fierce at 3.0 oz/A provided about 5 weeks residual control which was similar to our standard of Prefix at 32 oz/A.

Under cool-wet conditions the Fierce premix or Zidua tankmixed with a PPO herbicide like Sharpen or Valor etc. did check up soybean growth compared to untreated areas. The height reduction of 10 to 20 percent was very evident early with later soybean growth having a tendency to even up. In our research this height reduction did not affect yield.

My understanding from visiting with retailers is that both Zidua and Fierce will be in limited supply this year. So this will be a good year to look at how it performs on some limited acres in order to evaluate how it might work in your weed control program. I have been most impressed with the Palmer amaranth control in a pyroxasulfone based system when Fierce or Zidua + Sharpen/Verdict applied pre emergence is followed by a timely post emergence application of Prefix. Δ

*DR. LARRY STECKEL: Extension Weed Specialist, University of Tennessee*