## **Fierce And Zidua Management Tips In Soybeans**



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JACKSON, TENN. Palmer amaranth has come late to the party compared to last year but is making up for it by taking off in a lot of fields. If you remember, last year it started emerging in early March. This was a big advantage as we had

a lot of time to control multiple Palmer flushes prior to planting. This allowed growers to really whittle down the numbers of Palmer before we even thought about planting the crop. That will not be the case this year. Even more of a problem, is there will be considerably more soybean acres to manage weeds in and pretty much all the planting, both "full season" and "double crop" will take place the first couple weeks of June. The probability of getting all those soybean acres sprayed post emergence prior to Palmer reaching a 3" height in a two week window is not probable. My point is that pre applied herbicides, though they take more time in a spring when time is so much a premium, are even more important this year. The new pre applied herbicides to help manage Palmer amaranth in soybean are the pyroxasulfone based products of Zidua (pyroxasulfone alone) and Fierce (Valor + Pyroxasulfone). There have been a number of questions on how best to utilize them.

Zidua is best utilized as a pre along with another residual herbicide. The Zidua rate ranges from 1.5 to 3.5 oz/A depending upon soil type. The rate most often utilized will probably be 2 oz/A. In our studies we have gotten good residual control with this rate of Zidua tankmixed with Sharpen at 1 oz/a, Verdict at 5 oz/A or Valor at 2 oz/A. Those tankmixtures in our research have provided about 5 weeks residual control which was similar to our standard of Prefix at 32 oz/A. Zidua like Dual Magnum or Warrant can be applied post emergence in soybeans. However the application window to apply Zidua post to soybeans is very narrow (V1 to V3).

Fierce is a premix of Valor and Pyroxasulfone and will most commonly be used at the 3 oz/A rate. However, it can go out at rates as high as to 3.75 oz/A. It can be applied pre plant to pre emergence. In our research Fierce at 3.0 oz/A applied pre emergence provided about 5 weeks residual control which again was similar to our standard of Prefix at 32 oz/A.

The residual Palmer amaranth and grass control from these pyroxasulfone based product has been very consistent over our years of research. What also has been consistent particularly under cool-wet conditions with either the Fierce premix or Zidua tankmixed with a PPO herbicide like Sharpen or Valor etc. is some soybean stunting. I just rated some trials this morning and indeed soybeans treated with a pyroxasulfone by PPO herbicide based treatment are slower establishing a stand than where other pres were used like Boundary or Envive. In our research in previous years this early season stunting has not resulted in yield loss.

Finally, Fierce and Zidua are welcome new tools to help us manage weeds, particularly Palmer amaranth. Unfortunately, they are not the silver bullet everyone is looking for. However, in a planned program where a pyroxasulfone based pre applied herbicide is followed with say a Prefix applied post emergence will be a nice addition in a complete weed management system to manage Palmer amaranth.  $\Delta$ 

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