

Four New Herbicides In The Works: Promise Is Shown

KRISTEN JOHNSON
Mid America Farmer Grower

STONEVILLE, MISS.

New herbicides for rice are in the works according to Dr. Jason Bond, Mississippi State University Assistant Research Professor at Mississippi's Delta Research and Extension Center.

"Herbicides are my primary research area. We are currently evaluating four potential new rice herbicides two being experimental. They have not been labeled yet. The other two are pre-mixes with propanil that have already received registration," said Bond.

According to Bond, the experimental herbicides are from Valent Corporation. "Imazosulfuron, one of the experimental herbicides from Valent, is still in the numbered compound phase and probably won't be available for commercial use for at least the next two years," said Bond.

"It has finally shown some promise in 2008," said Bond, "it is an ALS inhibitor so it has the same mode of action as Permit, Regiment, Grasp, and Strada. We've targeted broadleaves and nutsedge with imazosulfuron and it also shows promise on Texasweed, a problem here in the Mid-south."

Bond and his team have been working with this new chemical on the basics such as rates and timings for several years. "Some of our data has been really positive and some haven't," said Bond, "I think that we've really hit on it this year with some pre-emergence applications."

"It has shown good pre-activity against hemp sesbania and morning glories. There is no herbicide that provides effective pre-emergence control of hemp sesbania right now. There are some issues with rice injury on our soil at Stoneville, heavy clay soil with a high pH," said Bond.

Bond's site at the Delta Research and Extension Center and the Valent farm site just down the road, are the only two locations that have seen the rice injury from the pre-emergence application. "We've got to work through the injury issues a little bit more but it showed really good activity on those broadleaf weeds with pre-application applications in 2008, so there may be a possible fit for it since we really don't have herbicides to rely on for broadleaf weed control except post compounds," said Bond.

Bond says that they are working through the injury. The team wasn't able to harvest the rice for yield so Bond states that they don't know what the lasting affects on the rice could be.

The second compound that Bond is working on is a pre-mix of two commercial herbicides. The pre-mix is not yet labeled. It is a combination of Regiment and Bolero. Bond states that the good thing about this pre-mix is that it is formulated as a liquid. "We know the strengths of Regiment and Bolero and now we are trying to determine what the points of putting the two together are," said Bond.

"We're applying a three pint rate per acre of the pre-mix. Three pints of the pre-mix contains three pints of Bolero per acre and 0.66 ounces of Regiment per acre," said Bond, "with the Regiment, that's kind of a high use rate. We

usually do not apply more than 0.5 ounces an acre of Regiment."

"We have been able to control some fairly large barn yard grass, four to five leaf, then the Bolero component of the pre-mix should provide some residual control," said Bond, "after the post-emergence knockdown, I think that it has the potential to be a decent mix."

RiceCo has two propanil pre-mixes that have received labels over the last two years according to Bond. "One of these RiceCo products is a mix of propanil and quinclorac, the active ingredient in Facet. The pre-mix has the trade



New herbicides for rice are in the works says Dr. Jason Bond, Mississippi State University Assistant Research Professor at Mississippi's Delta Research and Extension Center. Photo by John LaRose

name Ricepro. I like it because like the Regiment plus Bolero pre-mix, the quinclorac alone is sold as a dry formulation, but the pre-mix of propanil and quinclorac is a liquid," said Bond.

"One of the negative aspects of Ricepro is that the quinclorac is that the rate is not high enough. Usually, we apply from 3/8 and to a half-pound of Facet when we use the quinclorac. If you apply the pre-mix to one gallon per acre, you have an adequate amount of the propanil but the quinclorac rate is only 0.118 pounds of active ingredient per acre which is equivalent to 1/4 pound of Facet per acre," said Bond.

Bond states that often they have to spike the mixture with additional Facet to get the quinclorac rate up high enough. He says that one problem with that is that now you are back to square one with having to mix a dry formulation in the tank.

The last mixture that Bond has been looking at will be called Ricebeaux and is a pre-mix of propanil and thiobencarb, which is the active ingredient in Bolero. "I don't like it as much as the Ricepro, because we had to increase the rate to even get enough propanil for a good knock-down. A gallon of Ricebeaux contains three pounds of propanil and three pounds of thiobencarb. One gallon an acre would be equivalent to applying three quarts per acre of propanil plus three pints per acre of Bolero. However, we have not been applying the full gallon per acre rate," said Bond.

"This is the first year that we have conducted this study and the first year that these propanil mixtures have been available commercially. They have shown promise on our small plot trials," said Bond. △



Link Directly To: **AGROTAIN**



Link Directly To: **SYNGENTA**