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RED RICE REQUIRES ROTATION

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Missouri has red rice. We've got it bad. Bruce Beck often comments that when he first started as our Rice Agronomist, red rice was an Arkansas problem. However, as we've grown record rice acreages, many fields have been planted to continuous rice. Once it gets started, red rice spreads rapidly during harvest, and tillage operations.

Once you have red rice, crop rotation is the treatment- but it's not a total cure. Arkansas farmers figured out a long time ago- that in bad red rice fields you need to grow two soybean crops for every rice crop. If you have little or no red rice; you can go every other year, or maybe even two rice crops for every soybean crop. Even if you have no red rice, please rotate. If you don't, you will very soon have a severe infestation.

The list of red rice herbicides (which are used during the soybean crop) is short- Dual, Lasso, or Frontier preemergence and Assure, Roundup or Select postemergence. The recommendation for conventional soybeans includes one of the preemergence herbicides, followed by Assure II when red rice was 2 to 3" tall, followed by a booting-stage Select application which could blank the heads of any escapes. Roundup can be slightly weak on red rice- but in the normal situation with two applications, Roundup soybeans are an excellent red rice control.

There are also some things to do in the rice crop. If you have a severe infestation, avoid fall disking. Disking will bury red rice seed where it will become dormant and will remain a problem for many years. Ideally, reflood the field and roll the stubble in a few places to make a "landing strip" for ducks. Ducks will eat a significant quantity of the red rice seed.

Water seeding is a method to inhibit red rice problems. When the field is flooded, red rice seed that are in the soil, will not germinate. A thin layer of oxygen on the soil surface will allow germination of the water-seeded rice. There are two limitations: 1) if some of the red rice seed is on the soil surface, it can germinate. 2) if you use any kind of pinpoint drain, red rice can start germinating when the soil dries. Pinpoint drains require critical management to prevent drying and germination.

Next year we should have a first class option to control red rice in rice. This is the Clearfield (IMI, IR or IT) herbicide resistant rice lines and the herbicide Newpath (which is the rice version of Pursuit). The secret is simple- make the rice tolerant to a herbicide that kills rice and you can kill the red rice out of your commercial rice. This will allow growers to make a rice crop in an infested field. Sorry to use bold and capital letters BUT, **CROP ROTATION WILL STILL BE A KEY TO THIS SYSTEM.** Red rice and commercial rice can cross breed and transfer herbicide tolerance to the red rice. Newpath is like every other rice herbicide- sometimes it just doesn't work. A failure sets the stage for outcrossing. It will take discipline to keep Clearfield as a workable solution to red rice problems.