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Arkansas Row Crops Radio, providing up to date information and timely recommendations on row crop production in Arkansas.

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Welcome to Arkansas Row Crops Radio. I'm Jarrod Hardke, rice extension agronomist for the University of Arkansas System Division of Agriculture. Welcome rice fans to another episode of Rice and Advice. Today we'll be talking about the ins and outs of harvest aids. So a few things to cover initially, we'll call them near-harvest herbicides, some questions around those always come up. We covered some of the true late season herbicides a little while back on an earlier episode with Tommy, a little earlier in the in the year. But these comments really kind of geared toward Aim and Ultra Blazer two of the later season ones we get a lot of questions on, but Blazer or Ultra Blazer has a 50-day pre harvest interval. So when we're talking about now where we are in the season with, you know, preparing for harvest, all that stuff that that option is out, that's a no go for rice during heading and beyond so we've got to be back before heading begins to kind of be in that neighborhood of when that's a viable option. So go ahead and kind of eliminate that one from, from being a possibility. So really the only other one along those lines would be Aim and AIM only has a three day PHI, pre-harvest interval. Still, with that one, we want to be less than 25% grain moisture, preferably no milky kernels, just to be on the safe side, just to make sure there's no potential for impact there. But really, with this one we still don't want to be spraying that far out in front of it, we want to adhere to the three day interval on the label. But that that's really kind of what we're shooting for is, you know, three, four or five days before we intend to be harvesting a field. It works really quickly, you know, cleaning up a few things, several different things folks may be after. But that's kind of what we're using there. Really the only other option. And again, we want to work pretty quickly and have our rice to be pretty close to where we want it to be for harvest before we go with that option.

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So really shifting gears beyond that kind of the that herbicide point, obviously the major one for us in rice, sodium chlorate or salt most of the time just talking about, referring to it as salt that we're doing to rice. So really getting in the full swing of harvest right now up and down the state finally with the northeast moisture finally getting to a point, we can really start getting up and moving more consistently and it's looking like it's only going to increase from here and really start knocking out some harvest. But a few of our majority general recommendations about the use of salt or sodium chlorate, we do have a little bit of a distinction depending on what you're what you're raising. So you're talking about a variety and talking a pure line variety like a Diamond or a CLL16, those where we want to be below 25% grain moisture. And that is from a combine sample that has been checked. Don't just trust the, you know, the moisture meter on the combine, you know, go go check a sample whether it's a sample house, you happen to have one at your shop, something just to kind of back that up. If you're trying to do a hand sample to check moisture, just keep in mind, you know, we pull hand samples a lot for trials and things just checking where stuff is and then we'll, you know, we'll go cut of plot. We've done a lot of the comparisons a hand sample it always come out 2 to 3% lower than what that rice actually is in the field. So you go pull a hand sample and say, oh, it's 23, it's probably 25 or 26% at that point, just as one example. So, you know, hand samples can have their utility, but, but be careful trusting them to be actually that close to what it's really going to be when you start harvesting. So again, four varieties below 25% grain moisture before we want to consider salting.

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And when we move over talking about hybrids, HP753, RT721 FP, for those we'd want to be below 23% moisture. Again, same thing comments on sampling where that comes from. We've seen just a little bit of a distinction for wanting to be a little bit lower moisture. What do I kind of pin that on? Really the longer panicles that those hybrids can have a tendency to have with the greater discrepancy in grain moisture throughout it and potentially having some more still finishing development kernels there at the base of the head. So with that and kind of those timings, another major recommendations were trying to harvest a field that we have salted in 3 to 5 days after application. And really what that means is I want to be in that field by three days after application and done with that field by five days after application. I do not want it lingering out there any longer than that. From a rate standpoint, we're usually talking 5 to 6 pounds active. The more common products right now are 5 pounds of active ingredient per gallon. So pretty comfortable, you know, easy recommendation rate is a gallon of product per acre of those 5 pound material. So that's pretty standard there. The timing being of a salt application should always take into account the moisture level you're shooting for that that you're comfortable beginning harvest at. So you know we start talking are you comfortable beginning harvest at 20% moisture or do you want it 18% below that's going to be a major player in when we actually should be making the salt application on rice. I mean we talk about some of the restrictions. You know, we want to start, you know, below this point, but that's just one layer. The other layer is what moisture do we want the rice to be when we actually do put the combine in it.

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So if we're salting at a higher moisture, the problem is you may have to wait longer than that 3 to 5 days I mentioned earlier to actually begin harvest if you're targeting something lower. So what's the problem? Why the five days? Why do I want to be done then? As the upper part of that plant dries out and the portions of the panicle, the things that that actually hold the grain on the plant, they're really drying out and becoming brittle and not going to hold on to the grain as well. So that's going to increase our risk of shattering the longer the rice sits out there after a salt application and the longer the grain is sitting out there on the plant drying down in the field. Yeah, it's still drying down, but it's also exposed to to the heavy dew night after night. Typically re wetting and drying. And the longer it's out there, the greater risk of fissures or cracking in those kernels from that wetting and drying that's going to drive milling yields down. So that's the other concern part of that.

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Depending on the temperature and humidity, once we get to around 25% grain moisture, again, these are very generalized comments. But once we get to around 25% grain moisture from there on in, you can generally expect somewhere between a half to a whole point, half to 1% of moisture drop per day. This is generally true for long grains. It's not always quite as true for medium grains. Jupiter would be one in particular that that's always play by the rules. But again, the temperature and humidity are going to be big drivers in what that that daily drop is. And certainly any, you know, big front that comes in that say spikes, humidity really high or big rain fall event telling you that's going to reset the clock a little bit that we have to you know back up and start drying back out again a little bit. So always issues with saying it's going to consistently do that. But barring any, any big changes to conditions, that's the general last fall - a half to one point per day. When we apply salt to rice, basically you get an immediate extra jump down of one and a half to 2%. So when we compare non salted rice or the control to rice that we did salt at 3 to 4, or seven to ten days after application, you continue to see that one and a half, 2% gap. So it means

whether you salt or not, the moisture just keeps trending down at a similar pace. You just get an extra reduction from the salt. So we go ahead and take that extra jump down there to keep moving. Okay. So with that in mind, again, you're not always getting an a big dramatic drop out of a salt application. I mean, there's other benefits to what is drying out that upper canopy or what it can do for ease of harvest. Some of those elements. But it's not alone going to make it drop. So if we if we start talking about salting it, you know, 24 or 25%. Well at 3 to 4 days the the salted may be it you know, at 20 but you know, the where you didn't salt that grain moisture would be you know 21 and a half 22.

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So what about some situational stuff just to throw a few examples out there of things we could run into around this time and again, this is reflective of some questions we're getting out there. Let's say I'm at 25% moisture, but I want my rice to be 18% when I start cutting. So, that means you most likely need to wait a few days before you consider applying salt. Why? Because after three days you may still only be at 20% moisture. This is going to lead to you want to wait a little bit longer, a few more days now we're 5 to 7 days potentially out before we're going to consider beginning harvest, just bringing more risk to the table. So it is better to wait until that 22 to 23% moisture. Then by the time we're about three days out from there, we should be at least knocking on the door of 18% where we can consider starting. Another scenario: didn't address some of this earlier about the low end moisture we really don't, some more recent data says we don't have to be quite as worried about that lower end moisture cut off as we were in the past but we have to do a few things a certain way to make it not a risk. So let's say I'm at 18% moisture and you know, I've been told, you know, old rule, you know, don't salt below that. But it depends. There aren't really any savings from a drying chart standpoint once you're at this moisture, but particularly for those folks running stripper headers, the leaves are still very green. Even though the grains are getting pretty dry, we know that can be a problem that using using stripper headers is a different element than running the draper headers in rice and the benefits of salt can go further, certainly. Anybody runs a stripper header already knows that I'm preaching to the choir, but the goal there, if we're talking like 18% moisture or even a little lower, you're still really green, it's going to give my header trouble. I need to be able to get up to speed. So I want to just, you know, knock it out a little bit. Mainly going after, you know, the green leaves, not so much grain moisture. Then we can talk about maybe lowering that rate to again, still talking about 5 pound active material. You can start talking about going to a half gallon. It's still going to work very rapidly and do the job on that upper canopy very quickly. But we want to target getting into that field 24 to 48 hours after that application and minimize just how much that that grain moisture wants to drop and that risk coming into play. We've looked at a little bit of that over the years, and if we're getting in there very quickly and out of there, then then the risk and impacts are very low. Certainly we don't want to flirt with the trying to, you know, any immediate, you know, upcoming rainfall events that they're there. We want to try to dodge that stuff and stay out of that neighborhood. So, again, just a pretty broad generalization of some of our recs. There's plenty of times where where the pay off is probably just a wait a few more days and avoid salting if we don't really have to have it but absolutely situations running stripper headers and things where it's a very, very good tool to use. But I've used this example a lot of times use of salt applications is a lot like a hammer when you hit the nail, it's great when you hit your thumb, not so great. So we just want to be careful as we kind of manage through some of these options and try to get things to play out.

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Now, certainly with the risks that are there, we've seen instances where both plot wise, research and at a commercial level where, you know, sometimes harvest get strung out a little bit and we don't get penalized that bad. Certainly we hope that if we get pushed into that scenario, but best from everything we've seen to avoid prolonged periods between application and harvest. So we want it to all happen fairly quickly and obviously that's the goal anyway. We're trying to get the crop out as quick as we can. So certainly if you have any other any questions, feel free to to reach out, to call, text, email, anything. No problem. You can go to for any obviously rice related questions jump over to our website www.uaex.uada.edu/rice. There you can find a ton of our publications and other information, including the rice management guides, online or county extension office. But it's always good to sign up for our text service I know it's the end of the season, but get text messages to receive these or other updates, text the word rice to 501 300 8883 and again, feel free to get a hold of me or my counterparts at any time with any questions. And with that, thank you for joining us for this episode of Rice and Advice on Arkansas Row Crops Radio. Have a Rice Day.

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