RiceTec Meeting Needs Of Growers And Processers

Options For Diversity: Future Hybrids

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Dr. Brian Ottis, RiceTec industry support manager, spoke recently about his role in coordinating RiceTec's efforts with industry.

Amylose, a long, straight starch molecule that does not gelatinize during cooking, is an example of RiceTec's coordination efforts. "Right now our hybrids have a little bit lower amylose than what the industry is looking for as parboiled rice. However, some major rice mills and processors have learned how to work with the lower amylose hybrids to make them work in their processes. We do have a new hybrid that we will hopefully have commercially available in 2012, which has a higher amylose content," stated Ottis.

Dr. Brian Ottis, RiceTec Industry Support Manager, spoke recently about their new XP hybrids. Photo by John LaRose, Jr.

Ottis said RiceTec has gotten validation from a third party parboil processor and from the University of Arkansas Rice Processing Program that his experimental hybrid will be a good candidate for parboiling. The high amylose content also lends itself to rice flour production.

"We are trying to not only provide a portfolio of products with the agronomic characteristics such as earliness, lateness, short stature, and disease resistance to fit all the different growing regions and customer preferences but we are also trying to create products that meet the needs of the milling and processing industry. Growers can pick and choose. Mills can pick and choose. RiceTec can meet the needs of the entire industry," said Ottis.

Also new for the future is a smooth leaf hybrid with a smooth seed coat. Ottis explained this new hybrid addresses pubescence. "We continue to hear from growers and folks in the drying industry about pubescence. Seed pubescence are small fine hairs on the seed coat which tend to break off as rice is being moved around and it creates a dust that can cause some problems as far as wear on equipment. Pubescence also causes problems in the drying industry. This new hybrid is the answer to that."

The feedback Ottis receives from the mills includes two numbers. A head rice yield and a total rice yield. According to Ottis, "typically hybrids have higher totals. Another interesting point is that we have found with hybrids is that university data suggest that hybrids have a thinner bran layer than typical varieties. This means we can mill a hybrid in half the time that we can Wells to an equal milling degree. Millers can get to surface lipid content in half the time than they can with Wells or Cocodrie. When the mills are bringing in a lot of hybrids they can increase their throughput, nearly double it. That we can double our throughput; reduce energy expenditure in the mill that is another great advantage of hybrids and leads to better sustainability."

Ottis spoke about the disease package of RiceTec hybrids. RiceTec hybrids are resistant to all common races of rice blast, which Ottis says is showing up in South Arkansas. He added Texas is facing bacterial panicle blight. "That is something you can't treat with a fungicide obviously because it is a bacterium. Our hybrids are fairly resistant. Another issue is narrow brown leaf spot which has historically been a problem in southwest Louisiana. Hybrids tend to do a lot better. When narrow brown leaf spot affects a variety it tends to hurt the plant itself, so it lends itself to poor ratoon crop yields," stated Ottis.

"Sheath blight is one that most growers are aware of. These new hybrids that we have got coming are going to actually be a little bit more resistant to sheath blight than say a Clearfield. The RiceTec disease package is a big issue because growers can plant a hybrid and know that at the end of the season, they will have the peace of mind and sleep better at night knowing that when they hit the field with the combine, rice blast, narrow brown leaf spot and panicle blight are not something they will have to worry about."

Crop diversity is another area Ottis discussed. "RiceTec has a product mix where a grower can be 100 percent RiceTec hybrids and still have enough diversity where they can manage and mitigate disease resistance development. Two of the new hybrids, XP754 and Clearfield XP756 are seven to ten days later than say an XL723. This enables growers, even those using the big air seeders and GPS, to plant 350 acres a day. Growers will be able to plant 723 and XP754 the same day and spread the harvest."

Ottis stressed the importance of stewardship. "Red rice outcrossing is becoming an issue not just with Clearfield hybrids but with all Clearfield rice. Another thing we are starting to see and become concerned about is the resistance to development in barnyard grass to ALS herbicides, including Newpath, Beyond, Regiment and Grasp. We are not advocating by any means a continuous Clearfield hybrid system, we prefer folks go into a three to one rotation where we are going Clearfield rice, soybeans (conventional or herbicide-tolerant) and then back to a conventional rice. This is why at RiceTec we put a large effort into diversifying our portfolio. We are really trying to promote crop diversity not only within RiceTec's lineup but just in the field in general. Rotate out. Get some beans or corn in there, diversify your crop mix but also diversify your herbicide mix so you don't get into this process of developing an ALS resistance problem on your farm." Δ

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