Spotlight *On Rice* Varieties

High Yielders With Disease Resistance Are In Pipeline

BETTY VALLE GEGG-NAEGER
MidAmerica Farmer Grower

STUTTGART, ARK.

Varieties in the pipeline at the University of Arkansas were spotlighted recently by Dr. Karen Moldenhauer, UA rice breeder at the Rice Research Station at Stuttgart,

"There are some really promising lines in our program, one of our new lines possibly coming out in two years is a long-grain," she said. "It's about a week earlier than the Taggart and Roy J which we released in the last couple of years, and it has high yield potential. We're really excited about that."

In 2010 in very hot weather this experimental line had a yield of 194 bushel per acre and in 2011 it yielded 191 bushels per acre in the Arkansas Rice Performance Trials (ARPT). It was one of the highest yielders in that test and has good milling. It milled a 53 for head rice in 2010, which was very good because most lines were milling in the mid 40s that year. Nothing milled above the mid-50s.

"We also have Taggart which yielded 176 and 215 bushels per acre in the 2010 and 2011 ARPT, respectively. It was released three years ago," Moldenhauer added. "Taggart is a high yielding, long grain, and has a fairly good disease package; it also has a larger kernel which is desired for parboiling, and it mills fairly well even though it has that large kernel. We also released Roy J which yielded 186 and 196 bushels per acre respectively in the ARPT. Roy J will be available as certified seed for the first time in 2012. It's a high yielding variety and has very stiff straw."

Moldenhauer gave an example of high yielding. "The foundation seed field of Roy J in 2011 at the U of A Division of Agriculture RREC, which is rogued several times throughout the growing season, had yields of just over 200 bushel per acre. This is good for a foundation seed field yield. Both Taggart and Roy J have good yield potential. We're very pleased about that."

She also stated that the breeding program is working on developing semi dwarf varieties in the future.

"We have some medium grains that we're looking at but they're a little farther down the road," she added. "They do have good qualities, good blast resistance, they're semi dwarf and people are really looking for an Arkansas medium grain. We believe one of these just might make it."

She warned farmers about the damage that summer heat can do.

"Daytime temperatures of 95 degrees or below are wonderful, but once the temperature rises above 95, pollen sterility begins and as the temperatures rise above 100 degrees, pollen sterility increases and you start having fertility problems in your rice. One method of emasculating rice is to place the panicle in 120 degree water. So that gives you an idea of the damage the heat will do." Δ

BETTY VALLE GEGG-NAEGER: Senior Staff Writer, MidAmerica Farmer Grower

Dr. Karen Moldenhauer, UA rice breeder at the Rice Research Station at Stuttgart, spoke about new varieties in the University of Arkansas pipeline.