

Rice Processing Program Hosts Industry Sponsors

FAYETTEVILLE, ARK.

Some 40 representatives of rice processing and food companies met with researchers from the University of Arkansas System's Division of Agriculture to hear reports about rice processing research.

The meeting was held May 21-22 in the John W. Tyson Poultry Science Building on the U of A campus. Participants also toured labs and a pilot plant in the Food Science Building at the Arkansas Agricultural Research and Extension Center in Fayetteville.

The annual Industry Alliance Meeting of the U of A Rice Processing Program gives rice processing companies an opportunity to hear about ongoing research and to offer feedback on issues important to the industry. Participants also toured food science labs and a pilot plant where rice research is conducted.

"It's a way for us to make sure our research is reaching those who are supporting our program and is relevant to their needs," said Terry Siebenmorgen, university professor of food science and UARPP director.

A few of the presented topics in the areas of pre-harvest properties, drying, milling and quality assessment included:

- Estimating the economic value of rice as a function of harvest moisture content. Research led by Siebenmorgen has shown that the moisture content of rice kernels at harvest affects head rice yield, or the percentage of intact kernels left after milling. Division scientists in collaboration with industry scientists have developed estimates of optimal harvest moisture

content to achieve the best value for milled rice.

- Research by Jean-François Meullenet to provide rice quality data on existing and upcoming rice varieties. The data, which also is used by breeders to assess breeding lines, includes kernel size and color, cooking properties, milling quality, chemical composition, cooked rice texture and other properties important to food processors. An online database is being developed to make the information readily available.

- Meullenet is developing and refining methods for using near infrared light analysis that can rapidly collect rice quality data that now requires time-consuming "wet lab" techniques. Rapid analysis will permit analysis of larger sample collections from many rice varieties to provide more accurate data.

- Two projects by graduate student George Ondier and undergraduate Ashley Wiedower look at the feasibility of using low temperature, low relative humidity desiccant driers as a power-saving alternative to heated driers.

- Siebenmorgen leads studies of rice kernel composition, harvesting and drying that can lead to fissuring, which causes cracking of rice kernels during milling. These studies provide the foundation for a project to develop drying techniques that can reduce fissuring during drying.

Siebenmorgen said the research projects presented during the meeting receive funding support from rice cooperatives and companies and the Arkansas Rice Research and Promotion Board, which is funded by rice farmers through a check-off program. Δ