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## USA Rice Federation Steve Hensley, Director Regulatory Affairs

Federation staff were unable to attend the November 16 Workshop. In addition, establishing priorities was complicated in the southern rice states by recent natural disasters that also precluded a complete reporting. Below are priorities as reported from three southern, rice-growing states. Different areas have differing cultural practices, seasons and pests.-----

### **Arkansas Rice Research Priorities:**

- 1) Variety Development
  - A) Transgenic
  - B) Marker Assisted Selection
- 2) Disease control through genetic improvement as well as expedited registration of additional fungicides
- 3) Insect control through genetic improvement as well as expedited registration of additional insecticides
- 4) Weed control-all aspects
- 5) Agronomic practices with major emphasis on environmental implications
- 6) Climate change and implications on the sustainability of U.S. rice production
- 7) Numerous areas of post harvest research

### **Louisiana Rice Research Priorities:**

#### Breeding/Genetics

Number one priority is assignment of gene function for the rice genome. Associated with identification of gene function is the development of suitable markers. Both would facilitate variety development through the use of marker-assisted selection. Also, continue research into the evaluation of the worldwide diversity of rice with the objective of the detection of novel genes.

#### Pathology

- Priority - Discovery of new resistance genes and a better definition of the minor genes involved with resistance.
- Analysis of gene function and the development of markers with limited definition would facilitate disease resistance.
- Genetic searches for novel genes would benefit development of varieties resistant to other diseases (e.g. sheath blight).
- Alternative management practices of diseases, such as irrigation flood depth and the impact on rice blast, needs to be more fully researched. Certain aspects of the biology, ecology, and life cycle remain unknown for many pathogens.

#### Rice Production

- Production practices are dynamic. Changes are often a result of government regulations, climatic changes, and a desire by growers to reduce costs. Some changes are perfect opportunities for research to integrate control tactics in response to shifts in pest status or new invasive pests and include all pest management disciplines (weeds, diseases, and insects). Other disciplines also must be included to provide comprehensive research in production and would include plant physiology, nutrition, tillage practices, and crop rotation.

#### Insects

- Arthropod pests require continued determination of strategies and tactics to mitigate impact and to develop less obtrusive management options including pest-resistant plants, cultural options, and biologically based options.
- Continue to support research on post-harvest pest control.

### **Texas Rice Research Priorities (not in order of importance):**

- 1) Allow continued use of pest management tools crucial to the survival of our industry
- 2) Expedite registrations of pest management tools with better environmental profiles than existing tools
- 3) Support research on increasing main and ratoon crop yields and quality
- 4) Support research on management of stored product pests
- 5) Support extension efforts to better serve stakeholders
- 6) Support research that delivers useable information that provides direct economic benefits to stakeholders
- 7) Support conservation tillage research--or any research that reduces petroleum-based inputs-- due to skyrocketing cost of fuel
- 8) Support research that reduces and conserves water use
- 9) Support research to reduce production costs
- 10) Support research that enhances collaboration among research agencies---Land Grant Universities and USDA
- 11) Support any research that potentially can reduce oil input would be highest priority