Factors To Focus On In Rice Production

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The success of rice production is dependent upon commodity price and the cost of production in addition to satisfactory yields. In recent years, the development of new cultivars, combined with new research information and technologies, have improved the ability of rice growers to produce a successful crop and improve profitability while minimizing risk. Topics to be addressed include recent research in rice cultivar selection, insecticide seed treatments, seeding rates, planting date, fertility management, and irrigation.

Cultivar selection has improved as more research has been conducted on recently released lines. Selecting the best cultivar for a particular field situation is often the first step toward having a successful season. Soil type, history of disease, and irrigation capability should play a significant role in cultivar selection. The decision to treat seed with an insecticide prior to planting increases upfront costs but also provides what some describe as “cheap insurance”. Further research into the effects of
insecticide seed treatments on reduced seeding rates provides new possibilities to minimize the upfront cost of these treatments. New research will be discussed that suggests insecticide seed treatments may help buffer more stress than we realize. Planting date studies indicate that planting earlier generally leads to higher yields, but not all cultivars are created equal in this regard. When you plant can have a significant impact on yield, but what cultivar you plant and whether you use an insecticide seed treatment at that time may be just as important.

Recommendations for fertility management are also undergoing changes with the development of the N-STaR program. New recommendations from research evaluating preflood and midseason nitrogen applications may also help to decrease inputs and improve profitability.

Irrigation management can also affect profitability. Multiple-inlet irrigation has the potential to reduce water use and irrigation costs while maintaining production. Options also exist for irrigation strategy, such as continuous flood, straighthead drain, intermittent flood, and flush/furrow irrigation.

This presentation will highlight ongoing research into these and other factors that should assist in improving agronomic production practices of rice.