# Welcome

Rice is a staple food for over half of the world's population, with Asia being its primary consumer base. As global demand continues to rise due to population growth and changing dietary patterns, optimizing rice production and quality has become essential. The state of Arkansas, known for its rich rice heritage, is a leading producer of rice in the United States. Understanding the variation in milling efficiency and physicochemical attributes among Arkansas rice cultivars is crucial for enhancing the competitiveness of the state's rice sector and meeting consumer preferences.

Our research aims to comprehensively assess the variation among Arkansas rice cultivars concerning milling efficiency and physicochemical attributes, including amylose content, gelatinization temperature, and grain dimensions. By analyzing a diverse range of cultivars under controlled conditions, we seek to elucidate the genetic and environmental factors contributing to differences in rice quality.

This dashboard provides an interactive platform for exploring the data collected from our research study. Through various visualizations and metrics, you can:

* Explore the variation in milling efficiency and physicochemical attributes among different Arkansas rice cultivars
* Identify similarities and differences between cultivars based on their milling yield and physicochemical attributes
* Access detailed information about individual cultivars, including their genetic and environmental characteristics

By leveraging this dashboard, we hope to provide valuable insights into the factors influencing rice quality and inform breeding programs aimed at developing cultivars with superior milling and physicochemical characteristics. We also aim to contribute to the global understanding of rice quality and its determinants.

# Explore the Data

Use the navigation menu on the left to access different sections of the dashboard, including:

* Cultivar Comparison: Compare the milling efficiency and physicochemical
* attributes of different cultivars
* Attribute Analysis: Explore detailed information about individual attributes,
* such as amylose content and gelatinization temperature
* Correlation Analysis: Identify relationships between different attributes and
* factors influencing rice quality

We hope this interactive platform will facilitate a deeper understanding of the complexities involved in rice production and quality, ultimately benefiting rice breeders, producers, and consumers alike.