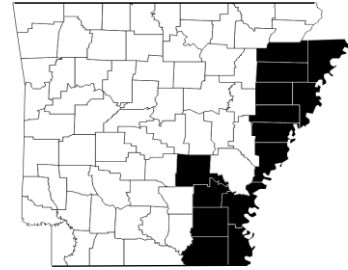


DELTA

Rice Production Ecological Zone

The Delta Ecological Zone lies in parts of Ashley, Chicot, Crittenden, Cross, Craighead, Desha, Drew, Greene, Jefferson, Lee, Lincoln, Mississippi, Phillips, Poinsett, and St. Francis counties and encompasses most of the rice produced east of Crowley's Ridge. It includes floodplains and terraces associated with the Mississippi River and the Arkansas River Valley. Rice is produced in this region primarily on clay soils not suitable for optimal cotton production. This is a large zone encompassing over 260,000 acres of rice in 2017 (~25% of Arkansas rice acreage). Cotton production and irrigation has traditionally dictated the production in this region. The principal crop rotated with rice is irrigated Group IV and V soybean. Soybean acreage appears to be increasing at the expense of rice acreage. Other crops, including corn and grain sorghum, are components of this zone and may also increase in acreage due to biofuels at the expense of rice acreage.



Rice production in this region is often stale seedbed or no-till. Rice is typically drill-seeded in April and May and intensely managed with respect to water needs, weed control, insect control and disease control. Long-grain cultivars are primarily produced in this region. A few growers in the area practice continuous rice production, which typically is water-seeded.

Current and future rice production challenges for the Delta Ecological Zone include, but are not limited to, the following:

- Irrigation efficiency
- Fertility and sustainability of topsoil
- Pest management – weed, disease and insect control
- Consistent, higher rice quality
- Higher yielding, more efficient cultivars
- Agronomics (planting dates, seeding rates, tillage for North and South Arkansas)
- Irrigation water quantity and quality
- Grower education