

2015 Recommended Nitrogen Rates and Distribution for Rice Varieties in Arkansas

Trenton L. Roberts, Assistant Professor, Soil Fertility
Jarrod T. Hardke, Assistant Professor, Rice Extension Agronomist

Cultivar	Single Preflood [†] N rate	Rates and Distribution for 2-way Split Application			
		Total N Rate (lb N/A)	Preflood N [‡] Rate (lb N/A)	Midseason N Rate [‡] (lb N/A)	Late Boot N Rate [‡] (lb N/A)
Antonio	115	135	90	45	--
Bengal	130	150	105	45	--
Caffey	115	135	90	45	--
Catahoula	130	150	105	45	--
Cheniere	130	150	105	45	--
CL111	130	150	105	45	--
CL151 ^w	100	120	75	45	--
CL152	130	150	105	45	--
CL261	115	135	90	45	--
Cocodrie	130	150	105	45	--
Colorado	115	135	90	45	--
Della	90	110	65	45	--
Della-2	115	135	90	45	--
Francis	130	150	105	45	--
Jazzman	115	135	90	45	--
Jazzman-2	115	135	90	45	--
Jupiter	130	150	105	45	--
LaKast	130	150	105	45	--
Mermentau	130	150	105	45	--
Neptune	115	135	90	45	--
Presidio	115	135	90	45	--
Rex	130	150	105	45	--
RiceTec CL XL729	--	120	90	--	30
RiceTec CL XL745	--	150	120	--	30
RiceTec XL723	--	120	90	--	30
RiceTec XL753	--	150	120	--	30
RiceTec XP4523	--	120	90	--	30
RiceTec CL XP4534	--	120	90	--	30
Roy J	115	135	90	45	--
Taggart	130	150	105	45	--
Wells	130	150	105	45	--

[†] Conditions required for use of optimum preflood N rate: 1) field can be flooded timely, and 2) can maintain a 2- to 4-inch flood depth for at least 3 weeks following flood establishment. If the field cannot be flooded in >2 days for silt loam soils and >7 days for clay soils then use of the urease inhibitor NBPT is required or use ammonium sulfate in place of urea. Single optimum preflood method NOT recommended for hybrid rice.

[‡] Nitrogen rate for rice on silt loam soils following soybean in rotation. Rates may need adjustment for soil factors, thin stands, and other rotational crops.

[‡] Midseason N may be applied in a single application between beginning internode elongation and ½-inch internode elongation.

^{*} Midseason N application for hybrids should be made at boot rather than at internode elongation. Refer to the DD50 for proper timing of this application.

^w Total of 120 but may be split 75-45 or 90-30.

Early N Rate Adjustments

1. Increase early N rate by 30 lbs/A if rice is grown on clay soils.
2. Increase early N rate by 20 lbs/A if:
 - i) rice follows RICE in rotation.
 - ii) stand density is < 10 plants per sq. ft. for varieties
3. Increase early N rate by 10 lbs/A if rice follows GRAIN SORGHUM, WHEAT, CORN, or COTTON in rotation.
4. Decrease early N rate by 10 lbs/A if rice follows FALLOW that is not continuously tilled in rotation.
5. Omit early N rate if rice follows FISH, LONG-TERM PASTURE, or FIRST YEAR AFTER CLEARING in rotation.

Nitrogen Source Conversions
Urea Needed (lbs) = [lbs N recommended * 100] /45
Ammonium Sulfate Needed (lbs) = [lbs N recommended * 100]/21