RICE INFORMATION

UofA DIVISION OF AGRICULTURE RESEARCH & EXTENSION University of Arkansas System

2016 Recommended Nitrogen Rates & Distribution for Rice Cultivars in Arkansas

Cultivar	Single Preflood[†] N rate	Rates and Distribution for 2-way Split Application			
		Total N Rate	Preflood N[z] Rate	Midseason N Rate[y]	Late Boot N Rate[x]
	---------- lb N/A ----------				
Caffey	115	135	90	45	--
Cheniere	130	150	105	45	--
CL111	130	150	105	45	--
CL151[w]	100	120	75	45	--
CL152	130	150	105	45	--
CL153	130	150	105	45	--
CL163	130	150	105	45	--
CL172	130	150	105	45	--
CL271	130	150	105	45	--
CLXL4534	--	120	90	--	30
CLXL729	--	120	90	--	30
CLXL745	--	150	120	--	30
Cocodrie	130	150	105	45	--
Della-2	115	135	90	45	--
Diamond	130	150	105	45	--
Francis	130	150	105	45	--
Jazzman-2	115	135	90	45	--
Jupiter	130	150	105	45	--
LaKast	130	150	105	45	--
Mermentau	130	150	105	45	--
Roy J	115	135	90	45	--
Taggart	130	150	105	45	--
Wells	130	150	105	45	--
XL723	--	120	90	--	30
XL753	--	150	120	--	30
XL760	--	150	120	--	30

[†] Conditions required for use of optimum preflood N rate: 1) field can be flooded timely, 2) preflood urea is treated with a recommended urease inhibitor that includes NBPT; or ammonium sulfate is used as the N source, 3) can maintain a 2- to 4-inch flood depth for at least 3 weeks following flood establishment, and 4) the preflood N must be applied uniformly across the field (no streaking).
[z] N rate for rice on silt loam soils following soybean in rotation. Rates may need adjustment for soil factors, thin stands, and other rotational crops.
[y] Apply Midseason N in one application a minimum of 3 weeks after the preflood N application AND internode elongation has started; both conditions must be met to receive maximum benefit from the Midseason N application.
[x] Hybrids should receive additional N at late boot rather than at midseason. 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

INCREASE 30 lbs N/A on CLAY SOIL	
INCREASE 20 lbs N/A following RICE Or stand <10 plants/ft^2 for varieties	DECREASE 10 lbs N/A following FALLOW
INCREASE 10 lbs N/A following SORGHUM, WHEAT, CORN, COTTON	OMIT early N rate following FISH, LONG-TERM PASTURE, or FIRST YEAR AFTER CLEARING

Nitrogen Conversions: Urea needed (lbs) = [lbs N recommended x 100] / 45
Ammonium Sulfate needed (lbs) = [lbs N recommended x 100] / 21

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