

Rice (*Oryza sativa*) Early *Ahu* (Direct Seeded)

Varieties:

Varieties	Year of release	# Agro-climatic zone	Duration (days)	# Reaction to blast
A. Semi Dwarf				
IR50*	-	U,C	110-120	S
Rasi	-	N,U,L	125-130	T
IR36	1982	-	120-130	-
Luit	1997	N,U,C,L	95-100	T
Kapilee	-	N,U,C,L	95-100	T
B. Tall				
Banglami	-	N,L	115-120	S
Rangadoria	-	N,U	115-120	S
Dubaichenga	-	N,U	115-120	S
Dagaranga	-	N	85-95	S
Ihajit	-	C	-	-
Fapori ahu	-	C	-	-
Koijapori	-	L	95-105	S
Hasakumra	-	L	80-85	-
Guni	-	L	80-85	S
Koimurali	-	B	95-100	-
Nilajee	-	U,L	-	S
Harin Kajali	-	L	115-120	-
Dishang	1998	N,U,C,L,B	90-95	-

* Not recommended for blast endemic areas

Refer to page iii for full forms of the abbreviations

Newly recommended variety:

Variety	Year of release	Plant height (cm)	Duration (days)	Sowing time	Trans planting time	Age of seedlings (days)	Yield (q/ha)	*Agro-climatic Zone	Disease reaction
Kanaklata	2017	125	130-135	February	March	25-30	40-45	U,C, L,B	MS to blast & sheath rot, and T to BLB & sheath blight

Land selection:

Low lying areas having sufficient soil moisture even during January and February should be selected. The land should be prepared by ploughing 3 to 4 times followed by laddering. Proper leveling has to be done so as to retain water uniformly in the field.

Fertility management:

Compost or FYM @ 10 t/ha (15 q/bigha) is to be applied during initial ploughing.

Nutrient	Requirement (kg/ha)	Form	Fertilizer requirement	
			kg/ha	kg/bigha
A. Dwarf variety				
N	40	Urea	88	12
P ₂ O ₅	20	SSP	125	18
K ₂ O	20	MOP	33	4
B. Tall variety				
N	20	Urea	44	4
P ₂ O ₅	10	SSP	62	9
K ₂ O	10	MOP	16	2

N.B.: For problem areas like flood affected areas of Majuli, where farmers have to take some risk in growing early *ahu* crop before flood, need-based fertilizer is to be recommended.

In absence of SSP, Diammonium Phosphate (DAP) can be applied in proportion to the quantities of N and P₂O₅ as suggested above.

1. Full dose of phosphatic fertilizer is to be applied at the time of final ploughing.
2. Half of the nitrogenous and potassic fertilizers have to be applied during 15-25 days after germination or after first weeding.

3. The second top dressing with the remaining quantities of nitrogenous and potassic fertilizers should be done during 45-50 days after germination or after the second weeding, but not later than panicle initiation stage.

Sowing time:

The optimum time of sowing is in the middle of February. For Barak Valley Zone, the broadcast sowing should be done in March.

Seed selection: Same as in *boro* rice.

Seed treatment with chemicals:

A. Wet method: Same as in *boro* rice

B. Dry method: Same as in *boro* rice

Seed rate and sowing:

Sowing is done in lines with an inter-row spacing of 20 cm. Seeds are to be sown @ 75 kg/ha (10 kg/bigha)

Broadcasting:

For broadcast crop, seed rate of 85-105 kg/ha is to be used.

Interculture:

1. Weeding is preferably done with wheel hoe, dry land weeder or *bindha* followed by laddering after 3 to 4 weeks from sowing. The second weeding should be done with wheel hoe or dry land weeder at 2-3 weeks after the first weeding. If wheel hoe or dry land weeder is not available, manual weeding should be given. Weeding should precede fertilizer application.
2. Pre-emergence herbicide pretilachlor @ 0.75 kg a.i./ha after 2-3 days of sowing or post-emergence herbicide bispyribac sodium @ 25.0 g a.i./ha at 2 to 3 leaf stage of dicot weeds and sedges or 25-30 days after emergence of rice should be applied.

Plant Protection

A). Insect pests: Plant protection measures should be adopted against insect pests at their economic threshold levels as given in Table 1. Wherever threshold level is not mentioned, control measures are to be taken with the appearance of the pest.

To control rice pests, erect 50 'T'-perches per ha 2 ft (60 cm) above crop canopy as roosting site for insectivorous birds, which are to be removed before flowering in order to prevent activity of granivorous birds.

B). Root-knot nematode: Apply, *Pseudomonas flourescens* @ 20g/ sq. m at the time of sowing

C). Diseases

i). **Blast:** As in case of *boro* rice. Sheath blight: As in case of *boro* rice

Water management: As in case of *boro* rice