

Rice (*Oryza sativa*) Bao Rice (Deep Water Rice)

Varieties:

Varieties	Year of release	*Agro-climatic zones
Maguri	-	N,U,C
Panikekua	-	N,U
**Padmapani	-	N
(PJNB) Panindra	1999	N
(PJNB) Padmanath	1999	N
Amona	-	U
Negheri	-	U,C,L
Kekua	-	C,L
Salibadal	-	B
Dholabadal	-	B

New deepwater rice varieties recommended

Variety	Duration	Yield (t/ha)	Adaptation
LPR 106 (Panchanan)	186 (T), 240 (DS)	3.0	Deepwater (50-100 cm water depth)
KDML 105 [Padumani]	180 (T), 230 (DS)	2.6	Deepwater (50-100 cm water depth)

* Refer to page iii for full forms of agro-climatic zones

** This variety is early maturing (185 days) and escapes ufra disease.

Land Selection:

Areas having higher land submergence- unsuitable for normal rice are selected for growing of *bao* rice. Such areas are broadly classified into two types, *viz.*,

- 1) Water level upto 1 meter (deep water rice areas)
- 2) Water level beyond 1 meter (very deep water rice areas).

Land preparation:

- i) Stubbles of the previous crop should be burnt thoroughly to minimize nematode and pest infestation.
- ii) Adequate ploughing and cross ploughing should be given.

Seed Selection: Plain water is used to select the seeds.

Seed Treatment:

A. Wet method: After selection, the seeds should be soaked directly in any one of the following fungicidal suspensions for 24 hours.

Fungicides	Dose (g/kg seed/lit of water)
Carboxin	2.0

One litre of fungicidal solution is required to treat one kg of seed.

B. Dry method: Seeds and any one of the following fungicides are put in a closed container and then agitated for five minutes for thorough mixing.

Fungicides	Dose (g/kg seed)
Carboxin	2.0

Sowing Time:

Sowing should be done during March – April.

Method of Sowing:

- i) For *ahu* areas: *ahu* + *bao* mixtures in the ratio of 4:1 recommended (8 kg *ahu* + 2 kg *bao* seed/bigha).
- ii) For *bao* areas: monocrop *bao* is recommended.

Seed Rate:

Seed rate for both the situations (mixture and monoculture) is 75 kg/ha.

Fertilizers:

Application of neem coated urea @ 30 kg N/ha in two equal splits as basal and at maximum tillering stage is recommended.

Preparation of neem coated urea:

Neem coated urea can be prepared by mixing 50 kg urea with 500 ml *neem* oil over a polythene sheet till uniform yellow colour is obtained.

As an alternative to neem coated urea, application of 4% urea solution as foliar spray at maximum tillering stage (150 DAS) @ 30 kg N/ha is recommended..

- i) Wherever feasible “*bindha*” (rake) may be used.
- ii) In the case of mixture, *bao* crop should be pruned along with harvesting of *ahu* crop.
- iii) The field should be kept free from weeds like water hyacinth etc.

Plant Protection:

Field rats:

Apply dry poison baits in bait stations (broken earthen pot, coconut shell, bamboo cylinder, etc.). Prebait prepared out of 1kg cereal + 20g vegetable oil + 10g dried fish may be

applied @ 10g/live burrow for 3 days. This treatment should be followed by addition of Zinc phosphide @ 25 g/kg bait on the 4th day.

Bait formula:

1.	<i>Atta</i> or wheat bran or maize crush	80g
2.	<i>Gur</i>	10 g
3.	Fried fish (or dry fish)	5g
4.	Zinc phosphide	5 g

N.B. Sowing of *asra* (shallow water rice) under puddled condition is recommended for Barak Valley Zone.

***Ufra* disease control:**

1. Destruction of diseased stubbles and straw followed by several ploughing just after harvest
2. Delay sowing up to mid April
3. Cultivation of early maturing bao variety like 'Padmapani'