PADDY

With more than 1.3 billion people to feed, Rice continues to be of prime importance to sustain food security in the country. India's rice productivity needs to improve to achieve future production by the adoption of high-yielding technologies, practicing effective cropping patterns & rationalizing the use of fertilizers, especially Nitrogen. There are various scientific data to show that the application of Nitrogen, phosphorus & potassium fertilizers can produce higher yields in comparison to either applying only nitrogen or Nitrogen & phosphorus. Given the fact that India's soil generally suffers from multi-nutrient deficiency, it is vital to apply the right set of fertilizers to maximize yield.

CLIMATE & SOIL REQUIREMENTS: Rice is a tropical plant that flourishes comfortably in hot and humid climate. Considering this, it is best suited to regions that have high humidity, prolonged sunshine and an assured supply of water. Rice is also grown through irrigation in areas that receive comparatively less rainfall. It grows on a variety of soils like silts, loams and gravels and can tolerate alkaline as well as acidic soils. However, clayey loam is the best suited to raise the crop as it can be easily converted into mud in which rice seedlings can be transplanted.

CROP SEASON:

Region / State	Autumn		Winter		Summer	
	Sowing	Harvesting	Sowing	Harvesting	Sowing	Harvesting
Punjab	May-Aug	Sep-Nov	–	–	–	–
Gujrat	–	–	Jun-Aug	Oct-Dec	–	–
Maharashtra	–	–	Jun-Jul	Oct-Dec	–	–
Rajasthan	–	–	Jul-Aug	Oct-Dec	–	–
Bihar	May-Jul	Sep-Oct	Jul-Sep	Nov-Dec	Jan-Feb	May-Jun
Madhya Pradesh	Jun-Aug	Mid Sep-Mid Dec	–	–	–	–
Orissa	May-Jun	Sep-Oct	Jun-Aug	Dec-Jan	Dec-Jan	May-Jun
West Bengal	Mar-Jun (Broadcasting) May-Jun (Transplanting)	Jul-Nov	Apr-Jun (Broadcasting) Jul-Aug (Transplanting)	Nov-Dec	Oct-Feb	Apr-May
Andhra Pradesh	Mar-Apr	Jul-Aug	May-Jun	Nov-Dec	Dec-Jan	Apr-May
Karnataka	May-Aug	Sep-Dec	Jun-Oct	Nov-Mar	Dec-Feb	Apr-Jul

Field preparation and spacing: The field is prepared by plowing followed by harrowing. The rice field is filled with water and is puddled twice by paddy puddler or once by rotavator. Paddy seedlings should be planted in line to maintain plant population and easy management. Straight rows make convenient practices such as hand or rotary weeding and the application of fertilizers. The spacing between the rows varies from 15 to 30 cm as per the variety and the age of the seedling. In general, row spacing of 15 to 20 cm is adopted. Ropes are stretched along the field and planting is carried out keeping the rope as a baseline.

WATER MANAGEMENT: Refer the document Water Management on Paddy, 2.0

FERTILIZER SCHEDULE OF MOSAIC PRODUCT (FINE VARIETIES)

Transplanting Stage

25-30 DAYS

Mosaic DAP-50 kg/acre

Mosaic MOP-25 kg/acre

Mosaic K-Mag-25 kg/acre

Vegetative & Tillering Stage

0-40 DAT

Seaweed - 3mL/L + Mosaic Magna

Liquid Zinc @ 1-1.25mL/L (250 mL / acre) at 20-30 DAT

Topdressing Urea along with MOP-25 kg at 30-40 DAT

Panicle Initiation Stage

40-60 DAT

Mosaic Magna Liquid Boron – 1mL/L at 40-50 DAT

BENEFITS

Proper root establishment,	Further root development,	Helps in production of panicles
Shoot growth,	Improves plant growth and number of tillers,	Better fertilization
	Minimizing chances of Khaira disease incidence,	
	Better nutrient uptake,	
	Provide strength to the stem,	
	Lodging resistance,	
	Pest and disease tolerance,	
	Improves number of fertile spikelets better grain filling, development, and yield.	

*DAT- Days after transplanting. Based on hybrid/varieties days between stages and crop duration will vary

*Above dosages are applicable for Southern states.