# Innovative Package of Practices of Paddy

### **1.Prepartion of fertile soil – 2 methods.**

### With Biomass :-

collect available dry biomass like leaves, stubbles, twigs, weeds etc, soak it overnight & spread by layer on nursery bed of 3' x 3' x 10'. Every layer of biomass should follow a sprinkle of water a mixture of 1 kg dung + 12 to 15 lit urine +  $\frac{1}{2}$  lit urine + 2 kg soil. Sow the mixture of cereals, pulses & oilseed crop seeds.

The germinated 20 days old plants are cut at ground level. Second sprouted crops of 40 days is also cut against to increase biomass in the bed & prepare most fertile soil bed. This bed can be used as nursery bed of paddy crops

Green Manuring with arogreen mixture of cereals, pulses, oilseeds or saunhaung / dhaincha which is cut at ground level after 40 days of sowing.



### Seed Treatment :-

Soak the desired variety of paddy seed material (a) 22 to 22 kg / acre in solution of 2 % common salt (2 kg salt in 100 litres water). Floating seed is discarded. Prepare a solution of 1 kg termite mound soil or 1 kg soil from road side + 2.3 kg cow, buffalo, bullock dung or urine. Treat the seed properly to have uniform coating of the solution. The seed material is dried under shed. For 1 acre of paddy cultivation 20 kg seed material & 8 raised beds of 20'x 3' are required. Paddy husk ash 30 kg, karanj cake 40 kg is mixed well uniformly in the bed & seed is sown in line on the bed 10 % urine is sprayed on 10 days old seedlings.







### **Seedling treatment :-**

21 Days old seedlings are taken out & only roots are dipped in the solution of 10 kg dung, 20 kg urine, 10 kg goat litter ash / wood ash & 100 gm jaggery for 5-10 minutes. The same solution can be sprayed in the fired 10 days after transplantation. It helps in profuse growth of white roots.





### **Transplanting** :-

Seedlings are transplanted in such a way that only root part of the seedling goes in the soil & not the white portion above the roots as while portion controls tilling material. This should be critically followed. Seedlings are transplanted at 6'x 6' spring with 3 seedlings / hill. Theses should be 12-14 seedlings / sq. area to get 40 - 45 fruiting plants.







### **Organic Manure Balls :-**

600 kg cow / bullock / buffalo dung, 60 kg karanj / neem cake, 15 kg paddy husk ash, 120 lit urine & 1 kg jaggery is mixed well with sufficient quantity of water to prepare manure balls

1000 balls / guntha plot. One ball is placed in the centre of 4 seedling. Organic balls can either be applied to puddled field or placed in the centre of 3-4 seedlings at the time of transplanting.

Jeevamrut solution of 10 kg dung + 10 litres urine + 1 kg pulse flour green gram or soybean + 1 kg jaggarey is termented for not more than 4 days. It is diluted in 200 lit of water / acre & applied to soil 3 times at an interval of 20 days.









### **Plant protection :-**

For the control of stem borer, snaking pests & leaf eating caterpillars, a solution of following ingredients is sprayed for 2-3 times on crops at an interval of 15 - 20 days. Spraying of 2.5 kgs karanj cake (soaked overnight) in 10 lits of water), 10 litres urine + 12 litres water + 50 gms any soap water (excluding nirma powder) helps in nutrient & pest management of paddy. It is experienced that spray of solution of 15 kg roadside soil & 200 lit water at the time of earhead emergence stage is very effective.

## Gramin Arogya & Vikas Prakalp (Village health & development program) Organic experiment for paddy

**Growth stages & action plan of organic cultivation practices of paddy crop** 

	Germination	Growth of seedlings & leaves	Tillering	Panical emergence	Flowering	Grain Filling Stage
Observation	No. of leaves, growth of root	No. of leaves	No. of tilleres growth of root	All tillers having panical emmergence, how many total no. of leaves, colour of leaves & width, shoot width.	No. of plants, No. of panicals & size, No. of seeds in one panical	How many grains ion one panical & width weight of grains, grains & weight of seedlings weight of grains & seedlings in one 2 square

	Germination	Growth of seedlings & leaves	Tillering	Panical emergence	Flow
Required stage	Two leaves in bunch, white roots	5 to 6 leaves	For each plant 6 tillers & growth of roots in bunch	From each tiller panical is emmerged for each tiller 13 leaves & straight shoot	10-12 10 panic 1 pa 200 - se (gerat one p 120 se (Ha

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2 plant, -12 als. In inical - 235 eds ve). In panical -200 edd lave)

### Grain Filling Stage

Weight of grains in one square feet area = 100gm Weight of grains in one panical = 2.3 gm Weight of seedling in one square feet area = 225 gm (without seeds)

	Germination	Growth of seedlings & leaves	Tillering	Panical emergence	Flowering Stage	
Garve	10 days	20-35 days	35-60 days	60-80 days	80-110 days	110 to 135 days
Nim Garave	10 days	20-30 days	30-55 days	55-75 days	75 – 100 days	100 to 120 days
Halve	10 days	20-30 days	30-50 days	50-70 days	70 – 85 days	85 to 100 days
Fertilizers		Planting after dipping of roots in chemical & spraying after planting	Jivamrut	Jivamrut spraying	Jivamrut spraying	
Germination		Spraying after planting		feromon trap		
Insecticide			Organic insecticide	Lighting take kerosin in water		
Drawback	Yellowing of leaves	Decrease the no of leaves	Decrease the no. of tillers	Lodging of paddy,		
						21

	Germination	Growth of seedlings & leaves	Tillering	Panical emergence	Flowering Stage
Drawback	Yellowing of leaves	Decrease the no of leaves	Decrease the no. of tillers	Lodging of paddy,	
Remedy	Spraying of urine		Tillers	Attack of insect	
Report Irrigation	Do not rest of water	Do not rest of water	Slight rest of water	Slight rest of water	Do not rest of water
Soil :-					
Moisture soil	Moisture soil				
Dry soil					
Moisture condition					
Airated soil					22

	Germination	Growth of seedlings & leaves	Tillering	Panical emergence	Flowering
No. of Micro organisms	Raizobeam, Trichodrama, Sudomonas	Green algae B.G.A.	Azola	Potashy Saul bacteria	
PH	7.00	7.00	7.00	7.00	7.00



	Germination	Growth of seedlings & leaves	Tillering	Panical emergence	Flowering	
Water absorbing capacity	Maximum	Maximum	Maximum	Maximum	Maximu m	Paddy Wt for 1 sq.ft at 10 gms
Essential nutrients	Nitrogen (30 lit urine)	Nitrogen (30 lit urine)	Nitrogen (30 lit urine)	Nitrogen (30 lit urine)		



