

FORAGE CROPS

Oats (*Avena sativa*)

Varieties:

Varieties	Duration (days)	Green forage (q/ha)	Dry forage (q/ha)	No. of Cuttings
Kent	128	483	96.6	2

Newly recommended Oat varieties

Varieties	GFY	DMY	Adaptation	Disease & pest reaction	Crude protein	Crude fibre	Ash
Phule Hariata (RO-19)	320-340 q/ha	50-60 q/ha	Rabi season	Resistant to Anthracnose, Crown rust, Loose smut, Powdery mildew, Barley yellow dwarf virus, Army Worms, Stinkbugs, Wireworms, Aphids	12.5-14.5%	30-35%	-
JHO-99-2 (Multi cut purpose)	320-340 q/ha	50 - 60 q/ha	Rabi season	Resistant to diseases - PM, anthracnose, CR, LS & bean yellow dwarf virus; resistance to insect pests armyworm, sting bug, wireworm & aphids.	12.5-14.5%	32-35%	1.9-2.1%

Soil: Well drained silty loam, sandy loam soils are suitable. In such soils it can be grown after *sali* paddy.

Field Preparation : Oats need fine compact seedbed.

Time of Sowing : Mid October to

10 December

Seed Rate : 100 kg/ha. (13-14 kg/bigha)

Spacing: Seeds are to be sown in rows 25-30 cm apart in furrows at a depth of 4-5 cm

Fertility Management:

Nutrient	Requirement (kg/ha)	Form	Fertilizer requirement	
			kg/ha	kg/bigha
N	40	Urea	88	12
P ₂ O ₅	20	SSP	125	17
K ₂ O	20	MOP	33	4

Application of 54 kg urea, 125 kg SSP and 33 kg MOP per hectare as basal dose and 34 kg urea after first cutting (60-70 days after sowing) as top dressing is essential. 50% recommended dose of fertilizer + vermicompost @ 2.5t/ha + FYM @ 2.5t/ha should be applied if oat is grown in fodder based cropping sequence.

Irrigation:

Oats can be grown successfully as rainfed crops. If the soil is dry, first irrigation is to be applied immediately after sowing, second at maximum tillering (45 days after sowing) and third immediately after the first cutting.

Interculture: One weeding is necessary 3 to 4 weeks after sowing.

Cutting:

First cutting is to be done at 60-70 days after sowing, and second cutting at 50% flowering. The crop should be cut at a height of 8 to 10 cm from the ground level.

Seed Production:

Oats seeds can be obtained by allowing the crop for seed setting after the first cutting. One fifth of a hectare produces seeds sufficient for sowing one hectare.

Special practices for cultivating of oats after sali rice:

- Cutting of rice stubbles at ground level.
- Application of minimum tillage with one cross ploughing.
- Application of recommended dose of fertilizer @ 20 : 20 : 20 :: N : P₂O₅ : K₂O kg/ha
- Seed inoculation with azospirillum @ 40 g/kg seed and PSB @ 40g/kg seed.
- Sowing of seeds behind the plough with row spacing 25 cm
- Top dressing N @ 20 kg/ha after the first cut at 50 DAS.