

### OFT – 3

1.	Title of On farm Trial	Assessment of performance of <b>polythene mulching in Groundnut</b> to enhancing the yield during Rabi-summer season under medium land situation of Paschim Medinipur District.
2.	Problem diagnose	Low productivity of Groundnut in medium land due to scarcity of water
3.	Details of technologies selected for assessment/refinement	<b>Farmers practice:</b> No mulching <b>Technology Option –I:</b> Polythene mulching (15 micron thickness) <b>Technology Option-II:</b> Straw mulching
4.	Source of Technology	State Agricultural University
5.	Production system and thematic area	Rain fed small production system. Crop management & Water management
6.	Performance of the Technology with performance indicators	Germination%, Number of irrigation, No of pods/plant, Pod yield(Kg/ha)
7.	Final recommendation for micro level situation	Technology option-I showed better yield (33.64q/ha) ,no of branches , no of of pod per plant was increased and minimized the irrigational water than the others has found. Net return (Rs. 78220.00/ha) and BC ratio (2.46.) was also higher than other treatments.
8.	Constraints identified and feedback for research	Lack of polythene supply with low cost proper time
9.	Process of farmers participation and their reaction	Training, Interactive demo, Field visit, Field days

**Thematic Area:** Moisture Management

**Problem definition:** Low yield of Groundnut due to scarcity of water.

**Technology assessed:** Effect of black polythene mulching in Groundnut production.

**Table-2 Performance of Poly mulching to enhance the yield of ground nut during rabi-summer season.**

Technology option	No. of trials	Yield component			Disease/ insect pest/weeds incidence (%)	Yield (q/ha)	Cost of cultivation(Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
		No. of effective branch/plant	No. of pod /plant	Test wt. (100 pod wt.)						
<b>Farmers practice:</b> No mulching	10	5	15	46	-	19.76	40400.00	77650.00	37250.00	1.92
<b>Technology Option – I:</b> Polythene mulching (15 micron thickness)		8	24	57	-	33.64	53350.00	131570.00	78220.00	2.46
<b>Technology Option-II:</b> Straw mulching		6	19	51	-	23.2	42200.00	87785.00	45585.00	2.08
<b>SEM±</b>			0.9632			1.3803				
<b>CD at 5%</b>			2.15			3.08				

**Result:** Technology option-I showed better yield (33.64q/ha), no of branches, no of pod per plant was increased and minimized the irrigational water than the others has found. Net return (Rs. 78220.00/ha) and BC ratio (2.46.) than other treatments