OFT – 03 (Horticulture)
(Kharif 2024-25)

- **Thematic area:** Varietal Trial
- **Problem definition/Name of OFT:** Evaluation of onion variety for kharif session

1.	**Title of On farm Trial (OFT)**	**Evaluation of Onion variety for Kharif season**
2.	**Problem diagnosed**	No Cultivation of Kharif onion
3.	**Details of technologies selected for assessment/refinement**	**FP -** Nasik-53 (N-53). **TO_1** – Agrifound Dark Red **TO_2** – Arka Kalyan.
4.	**Source of Technology (ICAR/ AICRP/SAU/other, please specify)**	IIHR- Banglore
5.	**Production system and thematic area**	Vegetable based Production System and Varietal trial
6.	**Performance of the Technology with performance indicators**	**Table- Evaluation of Onion variety for Kharif season**

Technology Option	No. Of replication	Date related problem addressed No. of plant population/m^2				Yield component		Yield (q/ha)	Rotting (%)			
		15 days	45 days	60 days	at harvesting stage	Bulb diameter (cm)	10 bulb weight (gm)		15 days	30 days	45 days	60 days
FP - Nasik-53 (N-53).	10	52.8	51.21	50.19	49.99	4.26	650	205.32	7.17	8.24	9.32	11.75
TO_1 – Agrifound Dark Red		58.08	56.33	55.21	54.93	5.15	825	285.16	5.10	5.19	5.75	7.66
TO_2 – Arka Kalyan.		59.4	57.61	54.46	56.18	6.24	950	305.24	3.14	3.26	3.88	5.60
SEM +							**16.27**	**1.34**				
CDCP=0.05							**48.74**	**4.02**				

			Physiological Weight loss (%)				**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
			15 days	**30 days**	**45 days**	**60 days**				
		FP - Nasik-53 (N-53).	12.14	15.37	19.24	23.15	105000	410640	305640	3.91
		TO_1 – Agrifound Dark Red	8.53	11.70	16.39	20.17	122500	570320	447820	4.65
		TO_2 – Arka Kalyan.	5.16	9.17	12.39	14.85	12550	610480	484980	4.86
7.	**Final recommendation for micro level situation**	The Trail Was Conducted during kharif season (2024-25) among 10 farmers field in village Sarango nawatoli, Porha of Ghaghra block, Chatam of Bishunpur block to find out the suitable technology i'e variety for getting out maximum yield and income. The data collected during the trail Clearly indicated that the technology option 2 i'e variety Arka Kalyan yielded maximum yield (305.24 q/hac), net income (rs 484980) and B:C ratio (4.86) . The present yield enhancement of 48.74 was found over farmer practices (Nasik-53) and 7.04 over technology option 1 i'e variety Agri found dark red. Minimum rotting percentage (5.60%) at 60 days after harvesting and minimum physiological Loss weight percentage (14.85%) was found in technology option 2 i'e variety Arka Kalyan. Hence Technology option 2 i'e variety Arka Kalyan being recommended for better yield and income gain during kharif.								
8.	**Constraints identified and feedback for research**	• Difficulties in promoting the Cultivation of Kharif onion. • More number of awareness and demonstration is required about new varieties								
9.	**Process of farmers participation and their reaction**	• Participatory and interactive. • Showing happiness and willingness for Cultivation of onion in kharif season.								

B. Results with Table and good quality photographs in jpg.

Thematic area	Technology options with detailed treatments	Area (in ha)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Varietal Trial	**FP** - Nasik-53 (N-53).	0.30	0.30	205.32	105000	410640	305640	3.91
	TO_1 – Agrifound Dark Red	0.30	0.30	285.16	122500	570320	447820	4.65
	TO_2 – Arka Kalyan.	0.30	0.30	305.24	12550	610480	484980	4.86