

**Krishi Vigyan Kendra
Namakkal 637 002**

Technology Assessment (OFTs)2023-24

S. No.	Crop/enterprise	Title of intervention	Technological options TO-1 TO-2 FP	Source of Technology TO-1 TO-2	Status *	No. of trials (replications)	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village(s)	No. of trials targeted under SC-SP
1	Green gram	Assessment of green gram varieties suitable for seed production in Namakkal district	TO-1: Cultivation of green gram – CO 9 TO-2: Cultivation of green gram – VBN-5 FP: Green gram variety - CO-8	TNAU, 2023 NPRC, TNAU, 2022	New New	5	14725	Dr.P. Murugan Dr.S. Alagudurai	-	-
2	Groundnut	Assessment of High yielding Groundnut varieties suitable for seed production in Namakkal district	TO-1: Groundnut variety: VRI-10 TO-2: Groundnut variety: KadiriLepakshi (K-1812) FP: Groundnut variety: Dharani / CO-7	RRS, TNAU, 2023 ARS, Kadiri, ANGRAU, 2020	New New	5	17500	Dr.P. Murugan Dr.S. Alagudurai	-	5
3	Fodder sorghum	Assessment of multicut fodder sorghum varieties for green fodder yield & seed yield	TO-1: Multicut Fodder Sorghum variety – CSV 33 MF TO-2: Multicut Fodder Sorghum variety – CO(FS)-31	TNAU, 2016 TNAU, 2014	New New	5	7900	Dr.P. Murugan Dr.S. Alagudurai	3	2

			FP: Fodder sorghum – COFS29							
4	Cardamom	Assessment of Cardamom varieties suitable for Kollihill	TO-1: Cardamom variety – ICRI-5 TO-2: Cardamom variety – Vijetha – 1 FP: Nallani variety	ICRI, Myladumpara, 2015 ICAR – IISR, Calicut, 2001	New	5	20000	Dr.P. Murugan Dr.S. Alagudurai	-	-
5	Black gram	Assessment of Nano DAP foliar spraying on yield enhancement in Blackgram	TO1 : Foliar spraying with IFFCO NANO DAP (5-8 ml of Nano DAP) with drone 50% Basal P dose through DAP or Complex or SSP form. Top dressing P through nano DAP foliar sprays -1 st spray at flowering stage and 2 nd spray @ 10-15 days after 1 st spray TO2 : Foliar spraying with DAP granules 50 % Basal P dose through DAP or Complex or SSP form. Foliar spraying of DAP @ 2% - 1 st spray at flowering stage and 2 nd spray 10-15 days after 1 st spray FP: Soil application of complex @ 125 kg/ha	IFFCO, New Delhi, 2023 TNAU, Coimbatore, 2020	New	5	8875	Dr.S.Sathya Dr.S. Alagudurai	-	-
6	Banana	Assessment of foliar spraying of nutrient solution on yield	TO1 : Soil drenching /fertigation with organic novel liquid nutrients @ 12 litre/ha in 3 equal splits upto 3 MAP, and	Navasari Agricultural University, Gujarat, 2020	New	5	7125	Dr.S.Sathya Dr.S. Alagudurai	-	-

		enhancement in Banana	foliar spraying @ 1% after bunch emergence TO2 : Foliar spraying with NRCB Banana Shakti dose @ 2 % from 3,5,7 months after planting FP: Foliar spraying with commercial micronutrients (Iron and Zinc Sulphate)	NRCB, Trichy, 2019						
7	Paddy	Assessment of performance of Zinc solubilizing bacteria on zinc nutrition in paddy	TO1 : Soil application of ZSB @ 720 ml in 36 kg vermicompost /ha (<i>Pseudomonas chlororaphis</i>), RDF: 150:50:50 kg NPK/ha & Zinc Sulphate @ 25 kg/ha TO2 : Soil application of 12.5 kg of Zinc solubilizing bacteria/ha (<i>Bacillus aryabhatai</i>) RDF: 150:50:50 kg NPK/ha & Zinc Sulphate @ 25 kg/ha FP: Application of Zinc sulphate along with Macronutrients alone	TNAU, Coimbatore, 2022 IIHR, Bengaluru, 2016	New	5	11750	Dr.S.Sathya Dr.S. Alagudurai	5	5
8	Paddy	Assessment of TNAU Rice Reap for Higher yield in Paddy	TO1 : Foliar spray of TNAU rice reap @ 7.5 kg/ha at Booting stage and 10 days after first spray RDF: 150:50:50 kg NPK/ha – medium duration variety TO2: Foliar spray of Urea @1%	TNAU, Coimbatore, 2022	New	5	11100	Dr.S.Sathya Dr.S. Alagudurai	5	5

			+MAP @ 2% +KCL @1% in panicle initiation stage and 10 days after first spray RDF: 150:50:50 kg NPK/ha – medium duration variety FP: Foliar spraying with commercially available fertilizers	TNAU, Coimbatore, 2020						
9	Banana	Assessment of suitable IPM practices for Stem weevil, <i>Odoiporus longicollis</i> management in Banana	TO:1 - Stem injecting of bio molecules(Nanma) 10 to 15 ml has to be injected 5 cm below the infested region of the banana stem @8 lit/ha TO:2 - Trap the adult weevils - Pseudo stem chopped into small pieces and kept near infested clump at 100/ha with Swabbing the cut surface of the traps with Beauveria bassiana @ 20g/ trap. FP: Cultivation of local variety followed by soil drenching of local available systemic insecticide 70ml/lit	CTCRI, Coimbatore, 2019 NRCB, Trichy, 2018	New	5	4925	Dr.C.Sankar Dr.S. Alagudurai	-	-
10	Tomato	Assessment of tomato hybrids against major diseases	TO:1 - Tomato hybrid – CO4 TO:2 - Tomato hybrid - Arka Abhed FP: Tomato hybrids (US618)	TNAU, Coimbatore, 2020 IIHR, Bengaluru, 2018	New	5	7000	Dr.C.Sankar Dr.S. Alagudurai	-	-

11	Pepper	Assessment of suitable IPDM practices for Quick wilt <i>Phytophthora capsici</i> management in pepper	<p>TO:1 - Soil application of IISR pepper booster, @50 g per vine thrice at 2 months interval</p> <ul style="list-style-type: none"> •Soil application of IISR <i>Trichocapsule</i> and PGPR capsule @ 10 capsule/ac/time dissolved in 200 lit water •Application of <i>Pochonia chlamydospora</i> 50 g per vine <p>TO:2 - Neemcake 1/2 kg per vine + Swabbing of Bordeaux paste upto 1 m from the ground level.</p> <ul style="list-style-type: none"> •<i>Trichoderma viride</i> @ 20 g/vine + FYM or Bordeaux mixture 1 % or Metalaxyl-Mancozeb @ 2 g/lit. •Neemcake 2 kg per vine + 0.1% Metalaxyl (pre monsoon foliar spray and soil application). •<i>B.subtilis</i> (50 g) (pre and post monsoon) + neemcake (2 kg) (post monsoon) + metalaxyl 0.1 %. <p>FP: Foliar spraying of mixed fungicide (Carbendazim+ Mancozeb) 10g/lit during infestation</p>	<p>IISR, Calicut, 2019</p> <p>TNAU, Coimbatore, 2020</p>	New	5	17500	Dr.C.Sankar Dr.S. Alagudurai	-	-
12	Tapioca	Assessment of suitable IPM practices for	<p>TO:1 - Foliar spraying of Entomopathogenic fungus, <i>Paecilomyces fumosoroseus</i> @</p>	NBAIR, Bengaluru, 2021	New	5	13250	Dr.C.Sankar Dr.S.	-	-

		management of mites in tapioca	<p>5.0kg/ ha during mites incidence at 15 days interval in 2 times</p> <p>TO:2 – Foliar spraying of Spiromesifen (Oberon 2SC at @ 0.4ml/ l) for during mites incidence</p> <p>FP: Foliar spraying of mixed spraying Neem oil + Dimethoate (0.05 %) for control of mites during incidence</p>	TNAU, Coimbatore, 2020				Alagudurai		
13	Mulberry	Assessment of juvenile hormones to increase the yield of silkworm cocoon	<p>TO:1 - Treating the 5th instar larvae with serimore- Serimore was administrated during the fifth instar at 24h and 48h of intervals at a concentration of 0.1 microliter/silkworm larvae (5ml Serimore dissolved in 2.5 liters potable water and sprayed on the healthy silkworm) and utilized for day to day changes in the catalase activity of hemolymph and midgut tissue.</p> <p>TO: 2 - Treat the mulberry leaves with 'Ilamathi' @ 1ml/litre of water. Feed the second day of fifth instar larvae with treated leaves once in the mornin</p> <p>FP: Not treated the juvenile hormones</p>	<p>CSB, mysore 2020</p> <p>TNAU, Coimbatore 2015</p>	New	5	19975	Dr.C.Sankar Dr.S. Alagudurai	-	-

14	Desi bird farming	Assessment of improved pure bred as an alternative to backyard poultry strains	TO-1 : TANUVAS Star chicken (TANUVAS Aseel x Nandanam chicken 4), Livability 96 %, annual egg production 183 Nos TO-2 Vanashree (Evolved from Aseel-Peela (PD-4) breed through selective breeding with production of 195 eggs per annum.	TANUVAS, Chennai 2021 DPR, Hyderabad, 2019	New OFT	5	20000	Dr. N. Muthusamy Dr.S. Alagudurai	-	5
15	Dairy farming	Assessment of ecto-parasiticide in dairy cattle	TO-1 : TANUVAS- Methicone (Dimethicone, also known as polydimethylsiloxane, is a substance that comes from silicone. Silicone comes from silica, which is a natural compound present in sand, sandstone, granite, and quartz.) TO-2 : Megatex (Each contains per 100ml Annona squamosa 2 gm, Adhatodavasica 3gm, Anacylus Pyrethrum 3 gm, Sodium benzoate q.s)	TANUVAS, Chennai 2021 CIRG, Mathura - 2018	New OFT	5	10000	Dr. N. Muthusamy & S. Alagudurai	5	5
16	Sheep farming	Assessment of the lamb milk replacer for growth and immunity	TO-1 : ICAR NIANP Milk replacer for lambs @ 50 g/day TO-2 : ICAR CSWRI Milk replacer @	ICAR NIANP 2021 ICAR CSWRI 2016	New OFT	5	20000	Dr. N. Muthusamy & S. Alagudurai	-	-

			200-250 ml/day							
17	Dairy animals	Assessment of herbal based drug to control sub-clinical mastitis in dairy animals	TO-1 : TANUVAS Bio-teat dip (Nanopolymer based herbal solution to control sub-clinical mastitis) TO-2 : Mastirak Gel (Poly herbal spray reduces SCC by 2-3 days, ideal to control sub-clinical mastitis & mastitis)	TANUVAS, Chennai 2021 NIF-DST, Gujarat 2021	New OFT	5	10000	Dr. N. Muthusamy & S. Alagudurai	-	5
18	Silkworm pupae/ Fish	Assessment of Alternative Source of Protein "Silkworm Pupae" in Polyculture	TO-1- GIFT Tilapia and Pacu(1:1) – Feed- Silkworm pupae only TO-2- Commercial floating fish feed. FP: Local feed: GNOC :Rice bran	SKUAST-Kashmir-2017 ICAR-CIFA-2016 -	New	3	20000	Dr.S.Paulpandi Dr.S.Alagudurai	-	-
19	Scampi	Assessment of Polyculture of CIFA GI Scampi with Indian major carps	TO1- CIFA-GI Scampi with IMC Fingerlings (Catla: rohu:GI Scampi) TO2- Non GI Scampi with IMC Fingerlings(Catla: rohu: Non GI Scampi) FP: Mixed fish culture	ICAR-CIFA, Bhubaneswar - 2021 ICAR-CIFE-Mumbai,-2017 -	New	3	20000	Dr.S.Paulpandi Dr.S.Alagudurai	-	-

20		Assessment of different floating fish feed on growth and production of GIFT Tilapia	TO1- CIFA Carp Grower Feed – (Protein-36-40%) TO2 - TNJFU Feed – (Protein-39-42%) FP - Local made feed	ICAR-CIFA, Bhubaneswar - 2021 TNJFU-2018 -	New	3	19300	Dr.S.Paulpandi Dr.S.Alagudurai	-	3
21	Composite fish culture	Assessing the Growth performance of Jayanti rohu with IMC (Catla, Rohu and Mrigal) combination at different stocking	TO1- Catla ,Jayanti rohu, and Mrigal TO2- Catla, Rohu, and Mrigal FP – poly culture	CIFA, Bhubaneswar-2021 CIFRI, Barrackpore, 2017	New	3	19200	Dr.S.Paulpandi Dr.S.Alagudurai	-	1
22	Millet/ Value Addition	Assessment of Quality Parameters of Millet substituted Flavored Milk beverage	TO1: Millet Milk (Germinated millet, jaggery, cardamom)- TNAU 2022 TO2: Millet Milk Fox tail Millet Milk(Soaked millet, jaggery, cardamom) FP: Selling millet as produce	TNAU, Coimbatore, 2022 TNAU Coimbatore, 2020 -	New	5	12200	Dr.P.G. Thenmozhi Dr.S.Alagudurai	1	1
23	Fruits/ Value addition	Assessment of suitable drying process for value addition of Fruits	TO 1: Solar dryer +UV Stabilized Polycarbonate sheet +solar panel(night /rainy days) TO2: Domestic solar dryer, UV Stabilized Polycarbonate sheet FP: Sun drying	TNAU, Coimbatore, 2019 NRCB, Trichy, 2019	New	5	8750	Dr.P.G. Thenmozhi Dr.S.Alagudurai	1	-