

Technology Assessment during 2017-18

S. No.	Crop/enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial in	No. of trials	Total cost for the intervention (₹)	Parameters to be studied
7.1	Paddy	Lesser/non availability of labour increased cost Of weed management	Assessment of Integrated weed management in rice	T1 - Farmer's practice- 2HW	TNAU	Pre Herbicide (Butacholor)	1 lit	1000	5	5,000	Weed control efficiency, Weed index ,productive tillers, grain yield, Economics
				T2 –Pre Herbicide + HW		Post E Herbicide (Bispyribac sodium)	200 ml				
				T3 – Early post E Herbicide +HW		Field Board	1				
7.2	Paddy	Delayed release of water consequent to delayed onset of monsoon Low organic matter of rice soils	Contingent Plan of Rice cropping for Periyar Vaigai Command Area	T1 - Green manure - SRI T2 - Green manure - Drum seeder T3 - Rice cum green manure seeder	TNAU	Seed (Co 51) Green manure seed	25kg/ac 60/ac	2,000	5	10,000	Growth and yield attributes, BCR
7.3	Paddy	Under utilization of traditional rice varieties Therapeutic properties of traditional rice varieties not known	Assessment of glycemic index of traditional paddy varieties	TO1 : Milled rice IR 20, CR1009, TRY 3 TO1: Kattuyanam Rice TO1: Red kavuni rice	TNAU	Estimate for available carbohydrate Rice flakes Glucometer and strips for glucometer	3 samples 75g 1no	900 1000 4400	3	10,000	Consumer preference test, sensory evaluation, pre and post prandial blood glucose level, recovery of flakes , BCR

7.4	<i>Jasminum sambac</i>	off season flowering is low	Assessment off season production technologies in <i>Jasminum sambac</i>	T ₁ – September pruning + Application of Paclobutrazol 1.0 ml/plant	ITK Validation, 2013	Chemicals		5400	5	27,000/-	yield per bush & BCR
				T ₂ –September pruning + foliar spray of 1000 ppm CCC (Cycocle) and 0.4% Humic acid	TNAU, 2012	Field board	1 No				
				T ₃ - Manual Pruning alone	IIHR, 2009						
7.5	Big onion	Yield gap of 15-20%. Deficiency lead to die back and eventually loss in onion development at early stages.	Assessing micronutrient concentration and method of application in Big onion (<i>Allium cepa</i> var. <i>cepa</i>)	T ₁ – Foliar application (5g/lit) on 45 and 60 days after transplanting T2- IIHR, Vegetable special @ 3g/lit @20, 40 and 60 DAT T3- Farm Yard Manure @2t/acre (Farmers Practice)	NRC Onion and Garlic, 2012 TNAU, 2014 IIHR, 2014	Vegetable Special Micronutrient mix Field board	2 Kg 1 Kg 1	1800	5	9,000/-	Marketable yeild per ha, BCR
7.6	Vegetables Tomato	Yield loss due to severe incidence of wilt and nematode complex	Assessment of biointensive management of wilt disease and nematode complex in tomato	T1 Control T2 Soil solarization before preparation of nursery bed. Seed treatment of <i>P. fluorescens</i> @ 10g/kg. Nursery bed treatment of <i>Pf</i> @ 20 g/sq.m. S.A of <i>P.f</i> @ 2.5 kg/ha mixed with 50 kg vermicompost/ha at 30 days of transplanting. T3 - Soil solarization before preparation of nursery bed. Seed treatment of	Farmers practice TNAU IIHR	<i>P. fluorescens</i> Trichorich – N Field board	2 kg 2 kg 1	1150	5	5,750/-	Disease incidence, nematode population, yield and B:C ratio

				Trichorich – N @ 10g/kg. Nursery bed treatment of Trichorich - N @ 50 g/sq.m. SA of Trichorich - N @ 2.5 kg mixed with 50 kg vermicompost/ha at 30 days of transplanting.							
7.7	Onion	Post Harvest losses Minimum price at season	Assessment of dehydration efficiency in onion	T1- Solar Drying T2 – Cabinet Drying	TNAU	Onion , packaging materials and food additives	1500	2	3000	Dehydration ration, Sensory attributes, self life BC ration	

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