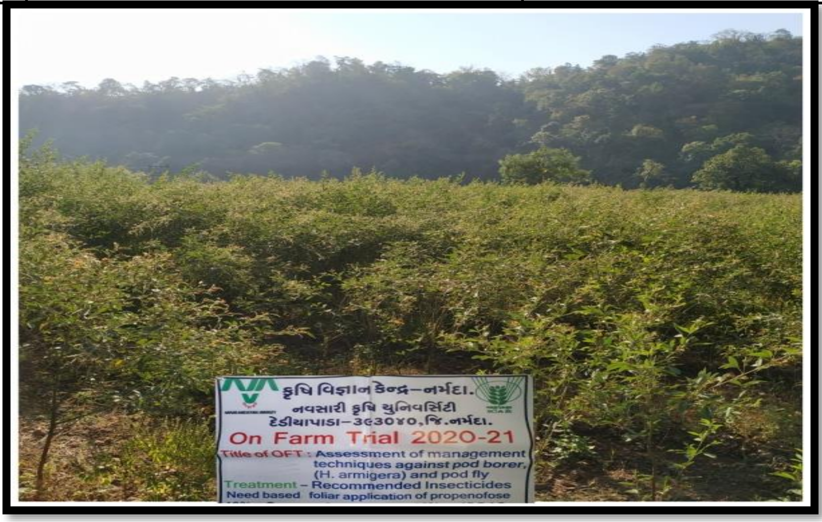
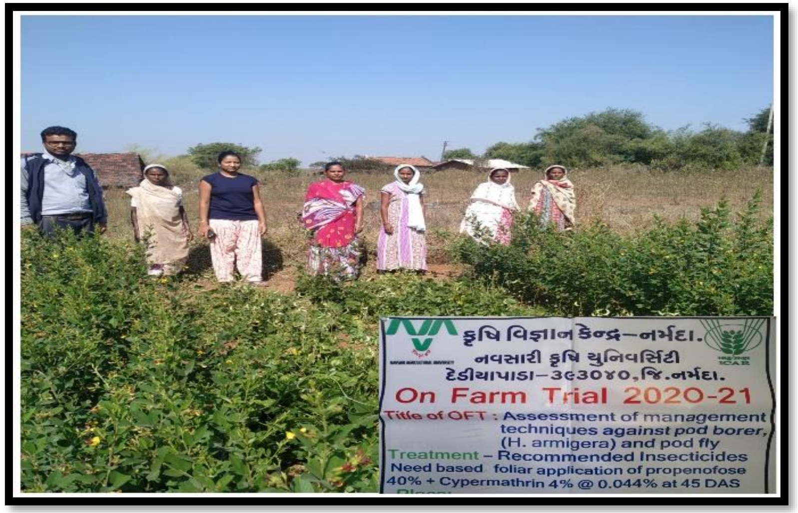
OFT 1 : Effect of Insecticide against pod borer (H. *armigera*) and Pod fly in pigeon pea. Year: 2020-21 Source of technology NAU, Navsari.

Problem Identified	**Use of high dose of insecticides to manage H. *armigera*, and pod fly, Low yield with more cost of cultivation.**
Technologies assessed & No. of trials : 05	**T1- Farmers method : Application of Chlorpyriphos 20 EC** **T2- Recommended chemical insecticides Propenofose 40%+Cypermathrin 4% @ 0.044% (10 ml+10 ml/10 lit. water)**
Farmers reactions / Feedback	**Low incidence of pod borer and pod fly was recorded in demonstration plot**

Treatments	Number of Pod borer per 100 pods	Number of Pod fly per 100 pods	Damage %	Yield (Q/ha)	B:C ratio
T1	10.6	9.82	14.05	12.7	1.21
T2	4.56	3.23	1.95	14.4	2.69

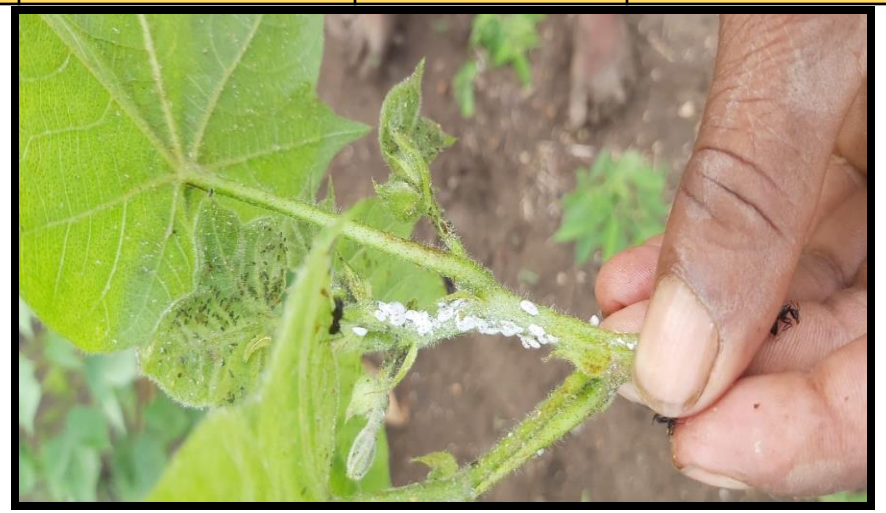




OFT 2 : Assessment of management techniques against cotton mealy bug. **Year:** 2020-21 Source of technology: NAU, Navsari.

Problem Identified	**Unawareness about application of proper insecticides**
Technologies assessed & No. of trials :05	**T1: Farmers practice Imidacloprid 17.5SL @ 10 DAS,** **T2: Application of Monocrotophos 35 EC @ 15DAS** **T3: Alternate spraying of Acetamiprid 20 SP 0.004% +Chlorpyriphos 20 EC 0.004% (2 gm + 25 ml/ 10 lit water) at 15 DAS**
Farmers reactions / Feedback	**Alternate spraying of Acetamiprid 20 SP 0.004% + Chlorpyriphos 20 EC 0.004% (2 gm + 25 ml/ 10 lit water) at 15 DAS insecticides reduced mealy bug population in cotton.**

Treatments	Aphids	Jassids	Whitefly	Thrips	Mealy bug index	Yield (Kg/ha)	BCR
T-1	25.4	3.1	12.7	15.5	2.8	16.5	1.89
T-2	11.2	24.4	3.3	13.4	5.6	17.6	1.97
T-3	3.1	11.2	6.7	4.4	0.0	19.6	2.22



OFT 3 : Assessment of weed control methods in Bt cotton.

Year: 2020-21 Source of technology: AAU, Anand.

Problem Identified	**Low yield in Bt cotton, high cost of cultivation, Labour problem**
Technologies assessed & Year of assessment :05	**T1: Farmers practice (Inter culturing and hand weeding as and when required)** **T2 : Quizalophop-ethyle 50 gm/ha after 15-20 DAS and HW and IC at 30 DAS**
Farmers reactions / Feedback	**Quizalophop-ethyle 50 gm/ha after 15-20 DAS effectively control weeds in cotton**

Treatments	% increase	Yield (Q/ha)	B:C ratio
T1	-	15.67	1.5
T2	14.0	17.85	2.10

OFT 4 : Assessment of INM practices in cotton
Year: 2020-21 Source of technology, NAU, Navsari.

Problem Identified	**Imbalance use of chemical fertilizer, Improper fertigation management, Biotic and abiotic stress.**
Technologies assessed & No. of trials: 05	**T1: Farmers practice (No use of cake)** **T2: Application of 75 % nitrogen in term of Urea (180 kg N) + 25 % nitrogen from castor cake (100 kg)**
Farmers reactions / Feedback	**Use of Urea (180 kg N) and Castor cake (100 kg) gave better yield with profitable B:C ratio.**

Treatments	Yield (Q/ha)	% increase	Gross Return (Rs/ha)	Cost of cultivation (Rs/ha)	Net Return (Rs/ha)	B:C ratio
T1	14.2	-	59640	21800	37840	1.74
T2	16.6	17.3	69972	20500	49472	2.41

OFT-5. Assessment of nutrition management on performance of milk yield of local Indigenous cattle of Narmada district. Year: 2020-21 Source of technology, AAU, Anand.

Problem Identified	**The little milk yield in local Indigenous milking cattle of Narmada district due to Imbalance feeding practices**
Technologies assessed & No. of trials: 04	**T1: No stall feeding and Imbalance feeding practices** **T2: Supplementation of concentrate feeding (0.5 kg/ 1kg milk production + 1.5 kg) + 30g mineral mixture +De-worming**
Farmers reactions / Feedback	**concentrate feeding had significantly increased milk yield and reduced negative energy balance, body condition score loss & calving interval**

Technology Assessed	Production	Please give the unit (lit/Animal/day)	Net Return (Profit) in Rs./unit	BC Ratio
T1	168 lit	1.4 lit/Animal/day	8400	2.61
T2	504 lit	4.2 lit/Animal/day	25200	3.95