

 <p>NAVSARI AGRICULTURAL UNIVERSITY</p>	<p align="center">DEPARTMENT OF AGRONOMY N. M. COLLEGE OF AGRICULTURE NAVSARI AGRICULTURAL UNIVERSITY NAVSARI - 396 450</p>
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Date : 20-3-2014

To
All the member
NRM Agresco Sub-committee
Navsari Agricultural University

Please find attached proceedings of 10th Natural Resource Management Agresco Sub-committee meeting held during 12-13th March, 2014 at Navsari.

All the members are requested to take note of suggestions made in the meeting and implement the same accordingly.

Members, whose recommendations and new technical programmes are accepted, are requested to incorporate all the suggestions of Sub-committee meeting as well as Joint Agresco meeting and submit two hard copies and soft copy of corrected recommendations and new technical programmes and their power point presentation.

Please see that all the compilations and bound volume report of NRM Sub-committee of NAU is to be prepared by this office in time. Hence, it is requested to submit the recommendations and new technical programmes as mentioned above latest by **25th March, 2014**.

(J. D. Thanki)
Convener

**PROCEEDING OF X AGRESKO SUB-COMMITTEE ON NRM
NAVSARI AGRICULTURAL UNIVERSITY, NAVSARI
(MARCH, 12-13, 2014)**

The tenth meeting of Agresko Sub-committee on NRM, Navsari Agricultural University was held in the Seminar Hall of N.M. College of Agriculture during March 12-13, 2014. Hon. Vice-Chancellor, Dr. A.R. Pathak chaired the inaugural session. Dr. A.N. Sabalpara, Director of Research & Dean-PGS and Dr. M.K. Arvadia, Principal & Dean (Agriculture) also graced the sub-committee meeting. Dr. C.L. Patel, Ex-Principal & Dean (Agriculture) was the special invitee to guide and encourage the young scientists of the university. Dr. R.R. Kaswala, Retd. Professor and Member, Board of Management also attended the meeting in technical programme session and inspired the members.

At the outset, Convener Dr. J.D. Thanki extended warm welcome to the Hon. Vice-Chancellor, Director of Research, Dean (Agriculture), invitee scientists as well as all the participants.

Dr. A.N. Sabalpara, Director of Research in his address stressed on soil fertility mapping and due to soil degradation new mapping is required, also soil microbial mapping is required. He also stressed on increasing input use efficiency by different techniques *viz.*, SRI. Adoption of organic farming should be amalgamated with value addition of food grains. Focus should be given on INM and IWM in research programmes. As per our soil conditions, intercropping and crop rotation is the prime requirement of research. He also focused on crop diversification by introduction of new crops *viz.*, sweet corn, french bean, *etc.* He also attracted house attention on increasing new technical programmes and recommendations just like last year. He motivated to centers for conducting new technical programmes.

In his inaugural address, Hon. Vice-Chancellor, Dr. A.R. Pathak called upon the scientists to develop ways and means for minimizing the cost of cultivation. He stressed on to develop various technologies for increasing input use efficiency and soil health management. He suggested that the attention should be given on fertigation and micronutrient trials. Also in organic farming focus should be given on management of the organic waste and suggested to use precision farming for future research. Dr. Pathak suggested for chalk out new technical programmes to meteorologist on climate change in association with agronomist and soil scientist. After acceptance of recommendation the scientist should conduct a maximization trial for one year for confidence building and verification.

During inaugural session, Dr. C.L. Patel, Ex-principal & Dean (Agriculture) delivered a thought provoking lecture on 'Impact of agrochemicals on ecosystem' to sensitize the members about this important issues. He intertwined the topic in his lecture and expressed his views and ideas duly supported by available data and evidences.

Dr. J.D. Thanki, Convener presented the action taken report on proceedings of last year which was accepted by the house.

Dr. R.B. Ardesna, Associate Professor proposed vote of thanks at the end of the inaugural session.

Regular meeting commenced with the presentation of recommendation proposals.

Abstract of recommendations

1.	Recommendations for farming community -	10	
2.	Recommendations for scientific community	-	01
3.	Recommendations with held for one year	-	02
4.	Approval for further study	-	01
5.	Concluded experiments	-	04

TECHNICAL SESSION-I : RECOMMENDATIONS

Chairman : Dr. A.R. Pathak

Rapporteurs : Dr. L.J. Desai

Co-Chairman : Dr. A.N. Sabalpara

: Dr. N.N. Gudadhe

: Dr. C.L. Patel

S.No	Title of research work	Presented by	Suggestions
10.1	RECOMMENDATIONS FOR FARMING COMMUNITY		
Soil and Water Management Research Unit, Navsari Agricultural University, Navsari			
10.1.1	Planting geometry and mulching study in watermelon under drip irrigation	Er. N. G. Savani	<ul style="list-style-type: none"> • Remove percentage of increased profit/yield and recast the recommendation. • Mention the thickness of plastic used for mulch • Names of investigators should be mentioned/arranged properly.
10.1.2	Effect of post emergence treatments of sleeving and different chemicals to bunch on quality of banana	Dr. C. S. Desai	<ul style="list-style-type: none"> • Give economics of treatment combinations also. • Residue analysis is required for carbendazim. • Names of investigators should be mentioned/arranged properly.
10.1.3	Evaluation of productivity of off-season planted banana in relation to cover crop and fertilizer schedule	Dr. C. S. Desai	<ul style="list-style-type: none"> • Give data of summer temperature and collar rot incidence in results. • Names of investigators should be mentioned/arranged properly.
10.1.4	Effect of enriched banana pseudostem sap at pre-flowering stage on production and quality of banana var. Grand Naine	Dr. C. S. Desai	<ul style="list-style-type: none"> • Recommend S₂L₁M₃ combination. • Names of investigators should be mentioned/arranged properly.
10.1.5	Validation of desuckering treatments in banana through large scale testing	Prof. B. M. Solia	<ul style="list-style-type: none"> • Prepare its recommendation for joint Agresco. • Add the observation of 'new emergence %' in recommendation proposal.

CSSRS, Danti/Umbharat			
10.1.6	Feasibility study on use of aquaculture effluent as irrigation water for salicornia	Dr. V.R. Naik	<ul style="list-style-type: none"> • Give detailed aquaculture water analysis for nutrients, enzymes, etc. • Include nutrient analysis of feeding material used in aquaculture • Write full form of SPD, <i>i.e.</i>, Split Plot Design.
10.1.7	Crop sequence study under raised and sunken bed configuration on coastal salt affected soils of south Gujarat	Dr. V. R. Naik	<ul style="list-style-type: none"> • Approved.
Main Sugarcane Research Station, Navsari			
10.1.8	Effect of soil conditioners and nitrogen levels on new sugarcane varieties (plant and ratoon crop)	Ms. Darpana Patel	<ul style="list-style-type: none"> • Include only important interactions. • Round up the yield and economics data. • Pooled of pooled should be done for both years • Subsidy amount of biocompost may be considered in calculation of economics. • Check selling price of sugarcane • Recast the recommendation in consultation with Dr. R.G. Patil and Dr. J. D. Thanki.
Main Sorghum Research Station, Surat			
10.1.9	Integrated weed management in <i>kharif</i> sorghum	Dr. Z. N. Patel	<ul style="list-style-type: none"> • Approved.
Dept. of Agronomy, NMCA, Navsari			
10.1.10	Response of <i>rabi</i> green gram (<i>Vigna radiata</i> L.) to land configuration and inorganic fertilizer with and without FYM under south Gujarat condition	Dr. T. U. Patel	<ul style="list-style-type: none"> • Mention units in all the observations • Add CV % in all observations • Check the test weight parameter • Delete the observations nodule no. and its dry wt. • Recast the recommendation by including raised bed part only.

10.2	RECOMMENDATIONS FOR SCIENTIFIC COMMUNITY		
NRM, ACHF, Navsari			
10.2.1	Study the influence of different temperature regimes on growth and yield of rice	Prof. Kirti Bardhan	<ul style="list-style-type: none"> • Give the average temperature range instead of 5 and 10% above the ten year mean temperature. • Mention the yield reduction due to temperature fluctuation.
10.3	RECOMMENDATIONS WITHHELD FOR ONE YEAR (to be presented next year)		
Soil and Water Management Research Unit, Navsari Agricultural University, Navsari			
10.3.1	Study on irrigation and fertilizer levels on yield and quality of sugar beet grown on clay soils	Prof. S. L. Patel	<ul style="list-style-type: none"> • Add observation of per day sugar yield and calculate WUE for sugar production • Recommendation to be presented next year.
CSSRS, Danti/Umbharat			
10.3.2	Study on effect of land configuration and integrated nutrient management on productivity of different varieties of sorghum (<i>rabi</i>) in coastal area of south Gujarat	Dr.V. R. Naik	<ul style="list-style-type: none"> • Recommendation to be presented next year.
10.4	APPROVAL FOR FURTHER STUDY		
10.4.1	Study on pit method of planting in sugarcane under drip irrigation	Er. N. G. Savani	<ul style="list-style-type: none"> • Take 3-4 ratoons instead of going upto 50% yield reduction • Mention observations of number of millable canes and tillers
10.5	CONCLUDED EXPERIMENTS		
Regional Rice Research Station, Vyara			
10.5.1	Effect of nutrient management through organic sources in SRI under south Gujarat condition	Dr. V. P. Patel	<ul style="list-style-type: none"> • Concluded.
Department of Agronomy, NMCA, Navsari			
10.5.2	Response of <i>rabi</i> maize (<i>Zea mays</i> L.) to integrated nitrogen management with and without vermiwash under south Gujarat condition	Dr. N. N. Gudadhe	<ul style="list-style-type: none"> • Concluded.
10.5.3	Varietal trial in B x N hybrid Napier	Dr. R.M. Pankhaniya	<ul style="list-style-type: none"> • Concluded.

10.5.4	Varietal trial in Guinea grass	Dr. R.M. Pankhaniya	• Concluded.
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Note : Corrected drafts of the recommendations after incorporation of above suggestions are enclosed.

10.1 Recommendations for farming community

Soil & Water Management Research Unit, Navsari

10.1.1 Planting geometry and mulching study in watermelon under drip irrigation

The farmers of South Gujarat growing water melon during summer season are advised to follow paired row planting (1m x 0.8 m : 3.2 m) with drip irrigation and mulching using either black plastic or silver black plastic (thickness: 50 μ and 38% area coverage) for getting higher fruit yield and net profit along with 29% water saving over conventional method of irrigation. Full dose of P and 10 % each of N and K should be applied as basal and the remaining N and K should be applied through drip system in 8 equal splits at an interval of 8 days starting from 3-4 leaves stage.

System details:

1	Lateral spacing	: 4 m
2	Dripper spacing	: 1m
3	Dripper discharge	: 8 lph
4	Operating pressure	: 1.2 kg/cm ²
5	Operating frequency	: Alternate days
6	Operating time	: March:3.5-4.0 hr April : 4.0-4.5 hr May to June: 4.5-5.25 hr

(Research Scientist, Soil & Water, SWMRU, NAU, Navsari)

10.1.2 Effect of post emergence treatments of sleeving and different chemicals to bunch on quality of banana

The banana growers of South Gujarat are recommended to adopt following practices after complete emergence of bunch for getting higher yield and net profit than conventional cultivation of banana.

- 1) Spray mixture of Hogland solution (0.5 %) + Carbendazim (0.5 %) + banana pseudostem enriched sap (1%) on bunch immediately after its complete emergence.
- 2) Then tie the pouch containing fresh cow dung (300-500 g) + 18 g mixture of (K₂SO₄ : (NH₄)₂SO₄ 1:2) at the terminal end of pathe after removing male flower.
- 3) Subsequently, cover the whole bunch with blue plastic film of 16-18 micron thickness.

Further, adoption of these practices also extend shelf life by 3-4 days, increase length of finger of lower hand, improves quality of fruit and induces 17 days early maturity.

Note : Subject to residue analysis for carbendazim.

(Research Scientist, Soil & Water, SWMRU, NAU, Navsari)

10.1.3 Evaluation of productivity of off-season planted banana in relation to cover crop and fertilizer schedule

The banana growers of South Gujarat planting their crop during off-season (January-February) are advised to sow two rows of til as nurse crop on both the sides of banana row after 25-30 days of planting. The nurse crop should be harvested 2 months after sowing (around flowering stage) and the biomass should be applied as mulch. Further, they are also advised to follow fertilizer schedule as given below.

Fertilizer schedule (% of RDF i.e. 180:90:120 NPK g/plant)

Element	Planting (basal)	Days after planting					
		30	60	90	120	150	180
N	10	10	20	30	30	-	-
P	100	-	-	-	-	-	-
K	10	10	10	10	20	20	20

Adoption of this technology gives higher fruit yield as well as net income.
(*Research Scientist, Soil & Water, SWMRU, NAU, Navsari*)

10.1.4 Effect of enriched banana pseudostem sap at pre-flowering stage on production and quality of banana var. Grand Naine

The banana growers of South Gujarat region are recommended to apply enriched banana pseudostem sap @ 120 ml/plant in three equal splits through cone feeding at monthly interval starting from 3 months after planting or apply whole 120 ml/plant at 6 month after planting for getting higher yield and net income.

(*Research Scientist, Soil & Water, SWMRU, NAU, Navsari*)

10.1.5 Desuckering of banana through use of conventional fertilizers

The banana growers of South Gujarat are advised to apply 2-4 D treatment (60 g/liter solution) for effective sucker control. Alternatively, for sucker control they can apply SSP 4 g/sucker. The use of SSP minimizes emergence of new suckers and risk of deformation of pseudostem caused due to unscientific use of 2-4 D for desuckering.

(*Research Scientist, Soil & Water, SWMRU, NAU, Navsari*)

CSSRS, Danti/Umbharat

10.1.6 Feasibility study on use of aquaculture effluent as irrigation water for *Salicornia* (*S. brachiata* Roxb.)

The brackish water aquaculture farmers of South Gujarat heavy rainfall zone (AES-IV) are advised to grow salicornia on the waste land available around the ponds. Further, they are recommended to use aquaculture effluent water for irrigating salicornia along with application of fertilizer @ 250-75-50 NPK kg/ha. By adopting these practices, they can get higher fresh biomass yield and net return.

(*Research Scientist, Soil & Water, SWMRU, NAU, Navsari*)

10.1.7 Crop sequence study under raised and sunken bed configuration on coastal salt affected soils of south Gujarat

The farmers of coastal area of South Gujarat (AES-IV) are recommended to follow raised bed (top width: 1.8m) and sunken bed (bottom width : 3.6 m) configuration and grow brinjal on raised bed (*kharif-rabi*) and paddy (*kharif*)-wheat (*rabi*) in sunken bed for realizing higher yield and net income as compared to sole paddy-wheat sequence only. Alternatively, they are advised either to grow castor (*kharif-rabi*) and paddy (*kharif*)-wheat (*rabi*) in the same land configuration or sole brinjal during *kharif-rabi* seasons on flat bed.

(*Research Scientist, Soil & Water, SWMRU, NAU, Navsari*)

Main Sugarcane Research Station, Navsari

10.1.8 Effect of soil conditioners and nitrogen levels on new sugarcane varieties (plant and ratoon crop)

Sugarcane growers of South Gujarat heavy rainfall zone (AES-III) are advised to apply either biocompost @ 15 t/ha or poultry manure @ 5 t/ha or castor cake @ 2 t/ha and fertilize the crop with 125% recommended dose of nitrogen (312.5 kg/ha in plant and 375 kg/ha in ratoon crop) and 100 % recommended dose of phosphorus and potassium (125-125 kg PK/ha in plant and 62.5-125 kg PK in ratoon crop, respectively) alongwith *acetobactor* 2 kg/ha as soil application to sugarcane variety CoN 05071 for getting higher cane yield, net return and sustaining soil health.

(Research Scientist, Sugarcane, RSRS, NAU, Navsari)

Main Sorghum Research Station, Surat

10.1.9 Integrated weed management in *kharif* sorghum

The farmers of South Gujarat Agro-climatic Zone II growing *kharif* sorghum GJ 38 are advised to apply 0.75 kg/ha Atrazine as pre-emergence herbicide + one hand weeding at 50 DAS for effective weed control and getting higher profitable yield.

(Assoc. Res. Sci., Agron., MSRS, Surat)

Dept. of Agronomy, NMCA, Navsari

10.1.10 Response of *rabi* green gram (*Vigna radiata* L.) to land configuration and inorganic fertilizer with and without FYM under south Gujarat condition

The farmers of AES-III of south Gujarat heavy rainfall zone are advised to adopt raised bed system of sowing under *kyari* land and fertilize the crop as per recommended dose for getting higher profitable yield of *rabi* green gram (Co-4).

(Professor & Head, Dept. of Agronomy, NMCA, Navsari)

10.2 Recommendations for scientific community NRM, ACHF, Navsari

10.2.1 Study the influence of different temperature regimes on growth and yield of rice

On the basis of two season experiment in controlled environmental conditions, it is recommended that there is need to develop new rice varieties in context of future global warming. The significant yield reduction was recorded in all the three rice varieties *viz.* Jaya, Gurjari and GNR-2. The yield reduction was up to the tune of 18% and 36.6% when rice crop experienced rise of only 1.3°C and 2.7°C respectively, in average daily temperature above 10 years of average temperature.

(Professor, NRM, ACHF, Navsari)

TECHNICAL SESSION-II : NEW TECHNICAL PROGRAMMES

Chairman : Dr. A.N. Sabalpara
Co-Chairman : Dr. R. R. Kaswala
: Dr. C. L. Patel

Rapporteurs : Dr. V. P. Usadadiya
: Dr. Sonal Tripathi

S.No.	Title of research work	Presented by	Suggestions	Status
10.6	NEW TECHNICAL PROGRAMME			
Soil and Water Management Research Unit, Navsari				
10.6.1	Effect of different colour shade nets on biomass yield and quality of fenugreek, coriander and garlic	Dr. J.M. Patel	<ul style="list-style-type: none"> • Specify crops variety. • Pest and diseases observations to be recorded. • Take FRBD instead of CRD. • Record damage to shed nets over the time. 	Approved
10.6.2	Study on rain water harvesting and its efficient utilization in tribal area	Dr. J.M. Patel	<ul style="list-style-type: none"> • Quantity of water harvest should be recorded. • Observation on water storage capacity. 	Approved
10.6.3	Survey related to feed back of CSSD farmers	Er. N.G. Savani	<ul style="list-style-type: none"> • If possible, also include the farmers of adjoining area who have not installed CSSD. 	Approved
10.6.4	Study on intercropping in drip irrigated bottle gourd	Prof. S.L. Pawar	<ul style="list-style-type: none"> • Add onion intercrop. • Mention seed rate of intercrops. • Also record intercrop observations on biomass, nutrient content and uptake. • Correlate meteorological data with intercrop growth. 	Approved
10.6.5	Quantify the contribution of each factor towards productivity of banana var. Grand naine	Prof. S.L. Pawar	<ul style="list-style-type: none"> • Design large plot. • Rectify treatment T₆. 	Approved
CSSRS, Danti/Umbharat				
10.6.6	Integrated nutrient management in <i>kharif</i> okra under coastal areas of South Gujarat	Dr. V.R. Naik	<ul style="list-style-type: none"> • Biofertilizer @ 2 lit/ha, seed treatment. 	Approved
10.6.7	Study the N and K requirement of beet root grown on coastal soils of South Gujarat	Dr. V. R. Naik	<ul style="list-style-type: none"> • Revise K₂O levels as 0, 30 and 60 kg/ha. • Observations on nutrient content and uptake and biochemical parameters are to be recorded. 	Approved

			<ul style="list-style-type: none"> • Collaborative trial with Dept. of Soil Science and Agril. Chem. NMCA, NAU, Navsari. 	
10.6.8	Effect of Fe on newly released bio fortified variety of rice (GNR-4) under South Gujarat conditions	Dr. V.P. Usadadiya	<ul style="list-style-type: none"> • Take two varieties viz., GNR-4 and GNR-2 • Recast Fe treatments as : 1) Control, 2) FeSO₄ @ 25 kg/ha soil application, 3) FeSO₄ @ 50 kg/ha soil application, 4) Spray 1% FeSO₄ at tillering + panicle initiation stage, 5) Spray 1% FeSO₄ at tillering + panicle initiation stage + dough stage, 6) Fe-EDTA, 7) Spray 1% banana pseudo stem enriched sap at tillering stage. 	Approved
Main Paddy Research Centre, Navsari				
10.6.9	Comparative performance of hybrid and variety of rice under different spacing and age of seedling in south Gujarat conditions	Dr. V.P. Usadadiya	<ul style="list-style-type: none"> • Keep 28 days old seedling treatment instead of 24 days. 	Approved
Main Sugarcane Research Station, Navsari				
10.6.10	Impact of integrated application of organic and inorganics in improving soil health and sugarcane productivity	Prof. H. C. Patel	<ul style="list-style-type: none"> • Add soil analysis observations N, P, K, OC, EC pH and BD. • Correct dose of bio-fertilizer. • Add pest and diseases observations. 	Approved
Niger Research station, Vanarasi				
10.6.11	Optimization of nutrient requirement for AVT genotypes	Prof. M. C. Patel	AICRP trial.	Approved
10.6.12	Optimization of niger production under resource constraints	Prof. M. C. Patel	AICRP trial.	Approved
Regional Rice Research Station, Vyara				
10.6.13	Effect of spacing and nitrogen levels on yield in aerobic rice	Dr. V. P. Patel	<ul style="list-style-type: none"> • Revise N level as 100, 125, 150 kg/ha. • Take N levels in main plot and spacing in sub-plot. • Weed observations to be recorded. • Take GNR 3 variety. 	Approved

Department of Agronomy, NMCA, Navsari

10.6.14	Impact of different summer green manures on succeeding <i>Kharif</i> paddy under integrated nutrient management	Dr. R. R. Pisal	<ul style="list-style-type: none"> • Keep common fertilizer dose 20:40:0 kg NPK/ha in all green manure crops. • Delete N₃ and N₄ treatments and add 50% RDF + 5 t FYM/ha + <i>Azospirillum</i> treatment. • Mention varieties of green manure crops. • Carry out initial soil analysis for physical properties, macro and micro-nutrients. • Trial to be taken on fix site • Analysis of GM crops and paddy grains for micronutrients. • Collaborative trial with Dept. of Soil Science and Agril. Chem. NMCA, NAU, Navsari 	Approved
10.6.15	Effect of row spacing and seed rate on growth and yield of sunnhemp (<i>Crotalaria juncea</i> L.) seed crop during <i>rabi</i> season	Dr. R. B. Ardesna	<ul style="list-style-type: none"> • Remove observation on nodule count. 	Approved
10.6.16	Real time nitrogen management in rice through leaf colour chart and SPAD meter	Dr. N. N. Gudadhe	<ul style="list-style-type: none"> • Take as feeler trial with N management tools on 3-4 variety. 	Feeler trial
10.6.17	Integrated nutrient management in lucerne under south Gujarat condition	Dr. R.M. Pankhaniya	<ul style="list-style-type: none"> • Add the quality word in objective. • Take biocompost instead of vermi-compost based on carbon content of FYM. • Treatment F₁ to be deleted. • Take 4 replications. 	Approved
10.6.18	Nutrient management in Guinea grass under south Gujarat condition	Dr. R.M. Pankhaniya	<ul style="list-style-type: none"> • Recast treatments as under <ul style="list-style-type: none"> - FYM levels: Two (0 and 10 t/ha). - Fertilizer levels: Four (75,100,125 and 150 % of FD). • Soil analysis : Initial and after harvest of crop. • Add nutritional observations. • Take observation in alternate cut. 	Approved

			<ul style="list-style-type: none"> • Collaboration with Department of Animal nutrition, Veterinary College, N.A.U., Navsari 	
Dept. of Meterology, NMCA, Navsari				
10.6.19	Analysis of rainfall variability and trends using 112 years of rainfall data over South Gujara	Dr. Neerajkumar	-	Approved
10.6.20	Markov chain and incomplete gamma distribution analysis of weekly rainfall for heavy rainfall zone of South Gujarat	Dr. Neerajkumar	<ul style="list-style-type: none"> • Add Bharuch location. 	Approved
10.6.21	Analysis of climatic variability at heavy rainfall zone of South Gujarat	Dr. Neerajkumar	-	Approved
College of Agriculture, Bharuch				
10.6.22	To study the effect of foliar application of enriched sap, KNO ₃ and MgSO ₄ on Bt. cotton under rainfed condition of South Gujarat	Dr. A. P. Italiya	<ul style="list-style-type: none"> • Survey the reasons for leaf reddening first. 	Not approved
10.6.23	Survey and assessment of nutrient responsible for leaf reddening in cotton	Dr. A. P. Italiya	<ul style="list-style-type: none"> • Add pest/disease observations. • Record symptom and capture photographs. • Analyse soil samples for EC, pH and all important elements. • Take soil samples from 0-25 and 25-50 cm depths. • Delete Bharuch and Narmada districts, instead that survey 50 framer's fields. 	Approved
10.6.24	Screening of pigeonpea varieties for salinity tolerance	Dr. A. P. Italiya	<ul style="list-style-type: none"> • Initially, take germination test and screen varieties. • Add best available water irrigation treatment. • Carry out chemical analysis of sea water. • Observation on periodical soil salinity is to be recorded. • Take five replications. • Add observation of Na:K ratio of shoot and root. • Record seed and stalk yields. • Consultation CSSR centre, Bharuch 	Approved

NRM, ACHF, Navsari				
10.6.25	Assessment of impacts of air pollution on Mango	Dr. S. V. Viyol	<ul style="list-style-type: none"> • Instead of FRBD, go for survey and tabular analysis. • Soil and water sample analysis • Heavy metal analysis in soil, air and water • Record SPM and RSPM observations. • Take only Vapi location and increase frequency of observation and sampling • Wind direction should be recorded. 	Approved
10.6.26	Estimation of Green House Gases (GHGs) emission from paddy fields	Dr. S. V. Viyol	<ul style="list-style-type: none"> • Delete observation on soil physical parameters. 	Approved
10.6.27	Assessment of impacts of air pollution on paddy	Dr. S. V. Viyol	<ul style="list-style-type: none"> • Accepted as feeler trial. 	Feeler trail
FQTL, Navsari				
10.6.28	Study of water quality effected by Agnihotra	Dr. K. G. Patel	<ul style="list-style-type: none"> • Accepted as feeler trial. 	Feeler trail
College of Agriculture, Waghai				
10.6.29	Integrated weed management in finger millet (Nagli)	Dr. H. H. Patel	<ul style="list-style-type: none"> • Recast the treatments in consultation with Dr. M. K. Arvadia, Dr. R. G. Patil, and Dr. J. D. Thanki. 	Approved
10.6.30	Impact of phosphorus and zinc nutrition in finger millet	Dr. V. J. Zinzala	<ul style="list-style-type: none"> • Recast the treatments. 	Approved
10.6.31	Present status of nitrate and fluoride content in irrigation water of Dangs district	Dr. V. J. Zinzala	<ul style="list-style-type: none"> • Accepted as feeler trial. • Analyse drinking water also. 	Feeler trail
10.6.32	Fertility status of Dangs District	Dr. V. J. Zinzala	-	Approved
Main Sorghum Research Station, Surat				
10.6.33	Refinement of sowing date, spacing and fertilizer dose in <i>kharif</i> grain sorghum GJ-42 under changing climate of South Gujarat	Prof. S. J. Trivedi	<ul style="list-style-type: none"> • Recast treatments • Take four varieties and four dates of sowing at 15 days interval from onset of monsoon. • Collaborative work with Mangrol centre for demonstration at Mangrol during <i>rabi</i>. 	Approved

KVK, Navsari				
10.6.34	Effect of foliar spray of silicic acid on growth and yield of paddy	Dr. K. A. Shah	<ul style="list-style-type: none"> Recast treatments in consultation with Dr. K. G. Patel and Dr. Hemant Patel. 	Approved
10.7	MODIFICATION IN ONGOING PROGRAMMES			
Dept. of SSAC, NMCA, Navsari				
10.7.1	Survey of nitrate (NO ₃ ⁻) levels and heavy metals in different vegetables available in Navsari market.	Dr. Sonal Tripathi	<ul style="list-style-type: none"> Due to frequent drying of electrode and fluctuation in reading of Ion Analyzer, analysis of NO₃⁻ content in the sample by ion analyzer is replaced with Phenoldisulphonic acid method of nitrate determination. 	Accepted
Dept. of Agronomy, NMCA, Navsari				
10.7.2	Weed and fertilizer management in aerobic rice	Dr. T.U. Patel	<ul style="list-style-type: none"> Butachlor is not available in market. Hence, butachlor is replaced with pendimethalin. 	Accepted.

10.8 General suggestions

10.8.1 A committee of the following professors/scientists was formulated to frame out new technical programmes for Paria, Achhalia, Tanchha, Bardoli, Agronomy-ACHF, Meterology ASPEE, Agri. Polytech., Vyara, KVK-Waghai, KVK-Surat centres.

1) Dr. J. D. Thanki, Convener and Professor & Head

2) Dr. R. Patil, Research Scientist (Soil & Water)

3) Dr. A. M. Bafna, Professor & Head (SSAC)

It was decided to call a meeting with scientist of respective centre.

10.8.2 Private company products must not be tested under technical programmes of the university.

The meeting ended with vote of thanks proposed by Dr. J.D. Thanki, Convener and Professor & Head, Dept. of Agronomy, NMCA, Navsari.

Convener and Professor & Head
Department of Agronomy
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