

#### REGIONAL HORTICULTURAL RESEARCH STATION ASPEE COLLEGE OF HORTICULTURE & FORESTRY, NAVSARI AGRICULTURAL UNIVERSITY NAVSARI – 396 450



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/2014

Dt. 26/03/2014

## CIRCULAR

All the members of Horticulture and Agro-Forestry Research Sub Committee are here by informed that go through the proceedings (available on web site) of 10<sup>th</sup> AGRESCO subcommittee meeting of ASPEE College of Horticulture & Forestry, NAU, Navsari. According to the suggestions, correct your recommendations, new technical programmes and concluded experiments. Head of the Departments/ Unit heads are requested to compile the corrected copy of recommendations, new technical programmes and concluded experiments and send to the convener in soft copy, power point presentation and in hard copy (M.S.word format) on or before 27.03.2014 without fail for Combine Joint AGRESCO. If there is no any suggestions, then also submit the same. Please do not send the same individually, otherwise it will not accepted.

> (B. V. Padhiar) Research Scientist and Convener, Horti. & Agro-Forestry Res. Sub-committee ACHF, NAU, Navsari

Proceedings of 10<sup>th</sup> Meeting of Horticulture And Agro-Forestry Sub-Committee Research Council Of Navsari Agril. University held at Navsari During March 6-7, 2014

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#### **Inaugural Session**

10<sup>th</sup> meeting of Horticulture and Agro-forestry Sub-committee of Research Council of Navsari Agricultural University was held at Navsari during 6-7 March, 2014 at Swami Vivekanand Hall of ASPEE College of Horticulture and Forestry.

Convener of the committee Dr. B. V. Padhiar, Research Scientist, RHRS, Navsari, welcome Dr. A. R. Pathak, Hon. Vice-Chancellor, Dr. A.N. Sabalpara, Director of Research, Dr. N. L. Patel, Principal and Dean A.C.H.F., Dr. B. N. Patel, ADR, and all committee members. Then the meeting was started under the chairmanship of Dr. A. R. Pathak, Hon. Vice Chancellor and the session was co-chaired by Dr. N. L. Patel, Principal and Dean A.C.H.F., N.A.U., Navsari.

Dr. N. L. Patel, in his speech focused on new vista for the research in horticulture industry. He emphasized on conducting research programme related to leaf tissue based analysis, ultra high density planting, rejuvenation and use of PGRs standardization of fertigation schedule, waste utilization, minor crops, urban and peri-urban horticulture and climate change.

Dr. A. N. Sabalpara, Director of Research, NAU stressed the need for research on climate change, bio-control, waste management of horticulture produce and value added products of horticultural crops. He also outlined the need for development of entire package of practices for organic cultivation of horticultural crops. Similarly in case of protected cultivation, scientists should develop modules for cultivation of different high value vegetable or flower crops which include planting, fertigation, training, pruning, plant protection, harvesting and post harvest handling. He urged the scientific community to produce and provide good quality planting material to the growers. He emphasized the need for conserving local germplasm in crops like chilli, brinjal and tomato. He suggested scientists to reframe PG research trials after refinement as New Technical Programs in AGRESCO. If the findings of PG research is very encouraging, then such work should be placed before the house only after the submission of thesis by the respective guide through HODs.

Dr. B. V. Padhiar, Convener, Horticulture and Agroforestry Sub-committee of Research Council presented the Action Taken Report before the House. The suggestions were made by the house with regard to the ATR. The members of the house have suggested few points for necessary action to the respective scientists.

Dr. A. R. Pathak, Hon. Vice Chancellor, Navsari Agricultural University, Navsari congratulated the Dean, ASPEE College of Horticulture and Forestry and his team for their effort. He extolled the scientific community to work for the betterment of Horticulture and to ensure nutritional security for the nation. He emphasized the need to study change in cropping systems in horticultural crops. He urged the need to develop farmer friendly recommendations particularly in reference to water scheduling and fertigation. He advocated the adoption of

drip irrigation in all farms under NAU jurisdiction working on horticultural crops. He outlined the need to identify the contribution of different components (tissue cultured plantlets, planting density, fertigation, and other technologies developed) in the overall yield of banana as well in other crops too. He asked the scientists to focus on ways to reduce labour requirement and on ultra high density planting in horticultural crops. He suggested plant breeders and horticulturists working on plant improvement to register their developed material with PPV & FR authority and vegetable scientists to release new varieties for the benefit of farmers in South Gujarat region.. He appreciated the work done on mango rejuvenation and the training program on protected cultivation. There is a good demand for tissue cultured plantlets of banana and parwal (pointed gourd) among the farming community and he asked the Biotechnology Dept. to fulfill this demand. Further, he instructed the scientists that the ATR should be very specific and that vague statements should be avoided. Also approved programs should not figure in the New Technical Program of ATR. An issue regarding sell of coconut seedling was also discussed that coconut seedlings should not be sold as F<sub>2</sub> seedlings. Price should be fixed for such seedlings and they should be sold as high yielding country seedlings. Another issue on the renovation of polycarbonate house, a committee should be constituted comprising of Dr. B. N. Patel, ADR; Dr. P. K. Srivastava, Professor and Head, Dept. of NRM, ACHF and Dr. C. R. Patel, Assistant Professor, Dept. of Fruit Science, ACHF to look into this matter.

# Proceeding of 10<sup>th</sup> AGRESCO of Horticulture and Agro-Forestry Sub Committee <u>Technical Session I- Recommendations</u>

Chairman: Dr. A. R. Pathak, Hon. Vice-Chancellor, NAU, Navsari

Co-chairman: Dr. N. L. Patel, Dean, ACHF, NAU, Navsari

Rapporteur: Dr. S. J. Patil, Associate Professor and Dr. N. S. Thakur, Assistant Professor

SN	Title	Suggestions	Action to be taken
A	Fruit Science		
1	Effect of foliar application of Ca, Zn, Fe and B on growth, yield and quality of papaya ( <i>Carica papaya</i> L.) cv. Taiwan Red Lady	<ul> <li>Approved with following suggestions</li> <li>Include spraying charges in economics</li> <li>Removes values from recommendation</li> <li>Insert 'should be' instead of 'were' in recommendation</li> <li>Include leaf nutrient status of two years data</li> <li>Acknowledge the staff involved in research.</li> </ul>	Research Scientist, RHRS, ACHF, NAU, Navsari
2	Feasibility of organic farming in Mango cv. Kesar	<ul> <li>Approved with following suggestions</li> <li>Present the data of pooled analysis of growth characters.</li> <li>Check the data of Ec and yield and recast the economics.</li> <li>Check the yield data with State average</li> <li>Add the age of tree in recommendation</li> <li>Use word 'intend to grow' instead of 'growing' in recommendation.</li> <li>Check the percentage value tables for transformation.</li> </ul>	Research Scientist, RHRS, ACHF, NAU, Navsari
3	Standardization of preservative solution for different fruits as sample	Approved for scientific community	Research Scientist, RHRS, ACHF, NAU, Navsari
4	Pruning for rejuvenation of over crowed orchards cv. Alphonso.	<ul> <li>Approved with following suggestions</li> <li>Pool the data of 2008 to 2013.</li> <li>Analyze the data with factorial concept.</li> <li>Compare control vs rest.</li> <li>Check the shelf life pooled data.</li> <li>Incorporate occurrence of pest and disease data, if any.</li> </ul>	Research Scientist, AES, Paria

5	Effect of different chemicals on	Approved with following suggestions	Research Scientist, AES,
	regulation of flowering and fruiting in	Correct the planting distance.	Paria
	mango cv. Kesar	• Incorporate the date of panicle initiation.	
6	Qualitative analysis of mango	Approved with following suggestions:	Professor (FQTL)
	varieties, Kesar and Alphonso	• Check all the data.	NAU, Navsari
		• Mention sample size in report.	
		Correct the spelling of Alphonso.	
		• Recast the scientific information in detail.	
B	Vegetable Science		
7	Release proposal of Pointed gourd	Approved with following suggestions:	Professor (Vegetable
	PG-2	• In wilt damage mention moderate/resistance/susceptible.	Science), ACHF, NAU,
		Remove statistical data.	Navsari
		• Write incidence instead of damage.	
8	Effect of different organics on	Continue for another one year.	Professor (Vegetable
	growth, yield and fertility of soil on		Science), ACHF, NAU,
	brinjal Surti Ravaiya (Pink)		Navsari
9	Effect of plant density and set size on	Approved with following suggestions:	Professor (Vegetable
	growth and dry matter partitioning of	• Consult Dr. B. N. Patel to calculate the economics on the	Science), ACHF, NAU,
	Elephant Foot Yam	basis of individual parameters.	Navsari
		Initiate new trial on set size	
10	Effect of banana pseudostem sap and	Approved with following suggestions:	Professor (ACSS),
	vermiwash spray on organically	• Incorporate the recommended dose of onion in this	ACHF, NAU, Navsari
	grown onion	recommendation.	
		• Recalculate the economics with considering selling price of	
11		onion @ Rs 10/- and recent price of inputs.	
11	Feasibility of organic farming in	Approved with following suggestions:	Professor (ACSS),
	tomato cv. Junagdh Tomato -3	• Correct the spelling of Neem cake and write GT-3 in recommendation.	ACHF, NAU, Navsari
		• Remove last line of recommendation and give in bullet form.	
12	Nutritional evaluation of Okra and	Continue with collecting the samples from RHRS farm.	Professor (FQTL)
	Brinjal		NAU, Navsari

С	Floriculture and landscape architecture				
13	Integrated weed management in	Approved with following suggestions:	Professor (Floriculture),		
	gladiolus (Gladiolus grandiflorus) var.	• Recast the economics with committee members as under: Dr.	ACHF, NAU, Navsari		
	American Beauty.	B. N. Patel and Dr. B. R. Parmar.			
		• Add CV % in Table 4.			
14	Effect of plant growth regulators and	• Go through previous AGRESCO reports and minutes, weather	Professor (Floriculture),		
	cow urine on growth and flowering of	it was proposed or not. If no, then conclude the same or if yes,	ACHF, NAU, Navsari		
	Rose ( <i>Rosa hybrida</i> ) cv. Poison in poly	then below mention committee will decide about the			
	house condition.	recommendation.			
		• Committee members:- Dr. B. N. Patel, Dr. S. L. Chawla, Dr.			
		B. R. Parmar and Dr. B. V. Padhiar			
		• Grade wise economics should be calculated.			
D	Post Harvest Technology				
15	Standardization of banana pseudostem	Approved with following suggestions:	Professor (PHT), ACHF,		
	central core candy processing	• Use technical word instead of Chokatha in recommendation.	NAU, Navsari		
		Quantify Basil juice on weight base.			
		• Add general data of candy self life in recommendation.			
16	Standardization of pickle from central	Approved with following suggestions:	Professor (PHT), ACHF,		
	core of banana pseudostem	• Write all the ingredients on per cent basis.	NAU, Navsari		
		• Mention the size of central core cube in recommendation.			
17	Effect of pre-cooling treatments and	Approved with following suggestions:	Professor (PHT), ACHF,		
	packaging materials for extending the	• Check all the data and correct it.	NAU, Navsari		
	initiation of ripening and shelf life of	• Calculate the economics of best treatment.			
	mango cv. Alphonso.	• Mention sample size.			
18	Study on ripening of banana using	Approved with following suggestions:	Professor (PHT), ACHF,		
	ethylene gas.	• Check all the data and correct it.	NAU, Navsari		
		• Modify the sentences in recommendation.			
		• Mention sample size.			
Ε	Agro-Forestry				
19	Study on roof water harvesting to tackle	Approved			
	the problem of drinking water scarcity				
	in rural areas of South Gujarat				
20	Assesment of pollution tolerance index	Concluded the experiment	Professor (Agro		
1	of some plants		Forestry), ACHF, NAU,		
			Navsari		

## **Technical Session II- New Technical Programmes**

Chairman : Dr.A.N. Sabalpara, ,Director of Research, NAU, Navsari
Co-Chairman : Dr. B.N. Patel, , Associate Director of Research, NAU, Navsari.
Rapporteur: Dr. Alka Singh, Assoc. Prof. ACHF, Navsari and Dr. M.B. Tandel, Asst. Prof., ACHF, Navsari

Discipline	No. of Experiment	Accepted
Fruit Science	10	7
Vegetable Science	19	18
Floriculture	4	4
PHT	7	7
Biotechnology	7	7
Forestry/NRM	5	5
Horticulture Entomology	2	2
Horticulture Pathology	1	1
TOTAL :	55	51

Following experiments were presented in 10<sup>th</sup> Agresco sub committee

Sr.	Titles	Suggestions	Action taken
No			
Frui	it Science		
1	Effect of GA <sub>3</sub> and CCPU on yield	Accepted with the following suggestions	Dr. S.J.Patil, Asso Prof. Regional
	and quality of mango (Mangifera	Add foliar word in title	Horticulture Research Station,
	<i>india</i> L.) cv. Kesar	In Observation:	ACHF. NAU, Navsari
		-add fruit retention and Days to maturity	
		-The observation on vegetative flush due to GA <sub>3</sub> in	
		subsequent year	
2	Use of Pellet form of fertilizer- a new	Accepted with the following suggestions	Dr. B.M. Tandel, SMS., KVK.,
	approach in sapota	Modify title and objectives as per the suggestions of the	Navsari
		house	
		-suitable word in place of optimum-objective	
		-Take only two locations (Farmers of different villages)	
		-Initial data of soil, water and plant should be taken	
		-Count number of pellets in respective treatments	

3	Comparative assessment of some Jamun genotypes under South Gujarat agro-climatic conditions	<ul> <li>-Specify method of pellet application</li> <li>-Analysis of pellets</li> <li>-Mix all N P and k nutrients in one pellet</li> <li>-Add quality parameters viz., shelf life, pest and disease infestation.</li> <li>Accepted with the following suggestions</li> <li>-In treatment Use Selection word instead of Local</li> <li>-Add more genotypes (collected from Junagadh, Anand and Godhra</li> <li>-Use 10 plants/block (Treatment).</li> </ul>	Dr. D.K.Sharma, Assoc. Res. Sci., Agriculture Experiment Station, NAU, Paria
4	Canopy management in rejuvenated high density mango orchard cv. Kesar	Not Approved. This plot should be converted in 5X5 m spacing as per discussion in house.	Dr. H.N.Leua, Asst Porf.Agriculture Experiment Station, NAU, Paria
5	Intercropping of different vegetables in rejuvenated mango orchard	Accepted with the following suggestions -Correct the copy and submit to convenor and Director of Research, NAU,Navsari -Crops should be decided in -consultation with Research scientist, AES, Paria -Remove biomass above ground from observation -Add Sole crop treatment -Consult the statistician for layout and design - Keep Green manuring as Control.	Dr. S.S.Masaye, Asst.Prof.,Agriculture Experiment Station, NAU, Paria
6	Nutrient Management for yield maximization in Cashew	Accepted with the following suggestions: -Take Only V-7 variety. -Leaf tissue analysis based treatment should be decided -Observation-Apple fruit yield should be added	Dr. J.P.Makati, Asst.Res. Sci., Agriculture Experiment Station, NAU, Paria
7	Evaluation of production potential of newly developed variety Jhargram-2 at different spacings	Accepted with the following suggestions: -Consult with statistician for layout -Include the variety V-7. -Add spacing 7x7 m as treatment no. 5	Dr. J.P.Makati, Asst.Res. Sci., Agriculture Experiment Station, NAU, Paria
8	Rooting response of Pomegranate ( <i>Punica granatum</i> L.) cv. Bhagwa to different rooting media and plant growth regulators	<b>Not accepted</b> Work according to previous work (9 <sup>th</sup> Agresco)	Dr. Virendra Singh, Assoc. Pro., College of Agriculture, NAU, Bharuch

9	Effect of different polyamines on postharvest quality in mango under ambient storage condition	Accepted with the following suggestions: -Take 5 kg of fruits per treatment. -Remove storage days from treatment -Instead of 5 days interval take three days interval -Add marketable fruit (%), fruit firmness Remove observation 10 and 11 Change variety and mention name of variety Take mature and uniform fruits -Not accepted.	Dr. Binayak Chakraborty, Asst. Prof., College of Agriculture, NAU, Waghai Dr. Binayak Chakraborty,
	availability of underutilized fruits and vegetables grown locally in Dangs district of Gujarat	but needs to do prior survey and present it in next Agresco	Asst.Prof., College of Agriculture, NAU, Waghai
VE	GETABLE SCIENCE	1	
1	Response of Okra to foliar application of Silicon	Accepted with the following suggestions: Mention application time(30,40 and 60 days after sowing) -Add observation on Plant height, intermodal length, crude fibre, Modify plot size, Make four replication Mr. B M Tandel should also work as Co-PI	Prof. J M Vashi, Astt. Prof, Vegetable Research Scheme, Regional Horticulture Research Station, ACHF,NAU, Navsari
2- 11	<ul> <li>AICRP on Vegetable</li> <li>1. Tomato (Determinate) IET</li> <li>2. Tomato (Determinate) AVT-I</li> <li>3. Tomato (Indeterminate) IET</li> <li>4. Tomato (Indeterminate) AVT-I</li> <li>5. Chillies IET</li> <li>6. Chillies AVT-I</li> <li>7. Chillies AVT-II</li> <li>8. Pumpkin IET</li> <li>9. Ash Gourd IET</li> <li>10. Ash Gourd AVT-II</li> </ul>	All accepted Add Capsaicin content in chilli trial only.	Dr. S. N. Sarvaiya, Dr. G. D. Patel, Dr. S. Y. Patel, Mr. N. K. Patel, Vegetable Res. Scheme, Regional Horticulture Research Station, ACHF,NAU, Navsari
12	Seasonal Influence on flowering and fruiting dynamics in brinjal ( <i>Solanum</i> <i>melongena</i> L.)	Accepted with the following suggestions Modify experiment and submit to the Convener Compare seedlings against grafted plants Reduce number of treatments (Take Gulabi and Jambli-	Dr. Sanjeev Kumar, Astt. Pro., Vegetable Research Scheme, Regional Horticulture Research Station, ACHF, NAU, Navsari

		Surati-Ravaiya)	
		Keep only one season-June	
		Maintain plant stand	
		Include all weather parameters-rainy days, windvelocity	
13	Multi location evaluation of Ravaiya	Accepted with the following suggestions	Dr. K.N.Chaudhari, Assoc. Pro.,
	type Brinjal (Solanum melongena L.)	-Include stability in objectives	Vegetable Research Scheme,
	under South Gujarat condition	-Add economics and luster in observations	Regional Horticulture Research
		-Replication should be 3	Station, ACHF, NAU, Navsari
		-Maintain final Plant stand	
14	Standardization of growing media for	Accepted with the following suggestions:	Dr. Sunila Kumari, SMS, KVK,
	terrace gardening for brinjal and	-Describe Methodology	NAU, Surat
	tomato.	-Fix material and Size of bag	
		Add variety	
		Modify treatments as per suggestion (Dr. Y N Tandel)	
		Mention recommended dose of fertilizer application	
		Observation-Add pest and disease infestation	
15	Influence of chitosan germination,	Accepted with the following suggestions:	Dr. Sunila Kumari, SMS, KVK,
	growth, vigor, and disease and pest	-Decide sample size, Seed dipping/soaking time, use 48	NAU, Surat
	attack in vegetable seedling (brinjal,	to 50 plug tray	
	capsicum, cucumber and tomato)	To take observation on field survival	
		Incidence of pest and disease	
		Remove scoring	
16	Effect of IBA and its combinations	Accepted with the following suggestions:	Dr. P.K.Modi, SMS, KVK, NAU,
	with NAA on propagation of Pointed	Specify selection of cutting (type)-	Vyara
	Gourd in Plug trays	Mention length and use 3 nodes/cutting	
		Variety-GNPG- 1	
		Reduce conce250, 500, 750 and 1000 of IBA	
17	Effect of IBA and its combinations	Accepted with the following suggestions	Dr. P.K.Modi, SMS, KVK, NAU,
	with NAA on propagation of Little	Modify treatments as per pointed gourd-	Vyara
	Gourd in Plug trays		
18	Effect of stages and levels of growth	Accepted with the following suggestions	Dr. P.K.Modi, SMS, KVK, NAU,
	hormones on vegetative growth, sex	Correct stages as Two and four leaf stage	Vyara
	expression and yield of Bitter gourd	Observation on No.of flowers/vine at periodical level,	
		Fruit drop	

		Take in <i>Rabi</i> season-sowing month –October Do not mention variety	
19	Effect of foliar spray of salicylic acid on growth and yield of okra.	Not accepted. This experiment will be taken by Res. Sci. (Vegetable), RHRS., Navsari	Res. Sci ( Vegetable), ACHF.,RHRS., Navsari
	Floriculture		
1	Influence of various media on growth and flowering parameters in gerbera under naturally ventilated poly house	Accepted with the following suggestions -Specify Methodology and application of fertilizer schedule-alternate day- as per govt. agency Correct and add the objective In Observation- Include no. of suckers Add one best treatment from earlier work	Dr. H.P. Shah, Asst Prof., ACHF,NAU, Navsari
2	Assessment of Genetic diversity in gladiolus	Accepted with the following suggestions Take all available varieties/genotypes, which were previously tested at Floriculture Farm	Dr. Sudha Patil, Asst.Prof., Floriculture Farm, ACHF,NAU, Navsari
3	Response of gladiolus cv. Sancerre to different levels of fertilizer (N & P) and spacing in respect to growth and yield parameters	Accepted with the following suggestions -Include plot size details Treatments modify as N- 150, 175, 200, 225 and 250 kg/ha P-50, 75, 100, 125 and 150 Fix dose of K <sub>2</sub> O -200 kg/ha Remove Spacing treatment Leaf tissue analysis Estimate Total leaf area	Dr. Sudha Patil, Asst.Prof., ACHF,NAU, Navsari
4	Standardization of nitrogen and phosphorus in Chrysanthemum var 'Ratlam Selection'	- Accepted with the following suggestions Decide plot size with statistician (3X1.8m) Mention-Time of application for nitrogen/apply through drip(fertigation)	Mr.R.A.Gurjar, Asst.Prof., Floriculture Farm, ACHF,NAU, Navsari

	РНТ		
1	Development of protocol for preparation of Aonla candy	Accepted with the following suggestions -Concern with PHT Unit, AAU, Anand -Mention Control (Cooker)	Dr. Dev Raj, Assoc. Prof., PHT Department, ACHF, NAU, Navsari
2	Development and evaluation of the Machine for osmotic dehydration for Candy preparation	Accepted with the following suggestions Change the word machine and use process	Dr. Dev Raj, Assoc. Prof., PHT Department, ACHF, NAU, Navsari
3	Effect of pre treatments on quality attributes of dehydrated green chilli powder	Accepted with the following suggestions GVC instead of GBC -Add economics	F.M.Sahu, Asst.Prof, PHT Department, ACHF, NAU, Navsari
4	Preparation and standardized technique of guava and papaya blended RTS	Accepted with the following suggestions Corrected copy will be submitted to the convenor and Director of Research, NAU, Navsari -change objectives as suggested by Er. ParagPandit Add economics	Prof S.L.Sangani, Asst Prof. COA.,NAU., Bharuch
5	Evaluation of Nisin for Biopreservation of Mango Nectar	Accepted	Dr. Harish Sudhar, Asst. Prof., PHT Department, ACHF, NAU, Navsari
6	Effect of different types of processing on the nutritional quality of green gram, kidney bean and chick pea	Accepted with the following suggestions Remove brine solution Mention the soaking time	Dr. K G Patel, Asso.Prof.,Ag Chem. & Soil Science, ACHF, NAU, Navsari
7	Standardization of color extraction technique from <i>Butea monosperma</i> flowers for preparing herbal gulal	Accepted with the following suggestions Add recovery percentage	Dr. Sunila Kumari, SMS, KVK, NAU, Surat
	Biotechnology		· · ·
1	Refinement of sucker tip decontamination technique for mass multiplication of Banana	Accepted with the following suggestions Replication should be four	Dr. Chintan Kapadia, Asst. Pro., Bio technology Department, ACHF, NAU, Navsari
2	Analysis genetic fidelity of <i>in vitro</i> raised banana plantlets at different subculture level.	Accepted	Dr. Chintan Kapadia, Asst. Pro., Bio technology Department, ACHF, NAU, Navsari
3	Development of low cost technology for <i>in vitro</i> mass multiplication of banana	Accepted with the following suggestions Add sago (Sabudana) in treatment 5 g isabgol + 5 g sago, Delete set-3	Dr. Chintan Kapadia, Asst. Pro., Bio technology Department, ACHF, NAU, Navsari
4	In vitro regeneration protocol for spine gourd ( <i>Momordica dioca</i> Roxb.)	Accepted	Dr. Taslim Ahmed, Head of Department, Bio technology ACHF, NAU, Navsari

5	Micro propagation of Anthurium	Accepted	Dr. Chintan Kapadia, Asst. Pro., Bio technology Department, ACHF, NAU,	
6	Standardization of <i>in vitro</i> protocol for clonal propagation of orchid.	Accepted	Dr. Chintan Kapadia, Asst. Pro., Bio technology Department, ACHF, NAU, Navsari	
7	Development of EST-SSR markers in Chilli.	Accepted	Dr. Diwakar Singh, Asst. Prof., Bio technology Department, ACHF, NAU, Navsari	
	Forestry/ NRM			
1	Development of integrated rainwater resource management (iRaM) module for Coastal areas of South Gujarat	Accepted with the following suggestions Add economics	Dr. Dileswar Nayak, Asst. Prof., Forestry college, ACHF, NAU, Navsari	
2	Estimation of Green House Gases (GHGs) emission from paddy fields	Accepted	Dr. S.V.Viyol, Asst. Prof., Forestry college, ACHF, NAU, Navsari	
3	Assessment of impact of air pollution on mango	Accepted with the following suggestions Take observations two times Contact Bharatbhai Desai for site selection Take Panoli instead of Ankleshwar	Dr. S.V.Viyol, Asst. Prof., Forestry college, ACHF, NAU, Navsari	
4	Study of growth and bark biomass potential of Ashok ( <i>Saraca asoca syn. S.</i> <i>indica</i> spacing	Accepted	Dr. J.R. Manmohan, Forestry college, ACHF, NAU, Navsari	
5	Study of carbon sequestration potential of important tree species in NAU campus	Accepted with the following suggestions Remove NAU campus word from the title Include mango and sapota Observation-C content from all the species should be taken	Prof. Laxmikant Bahera, Asst.Prof., ACHF., NAU., Navsari	
	Horticultural Entomology	· · · ·	·	
1	Population dynamics of <i>Earias vittella</i> through pheromone trap in Okra	Accepted	Dr.H.V.Pandya, Assoc. Prof., ACHF, NAU, Navsari	
2	Population dynamics of fruit fly, <i>Dacus</i> <i>dorsalis</i> through Nauroji fruit fly trap in sapota	Accepted with the following suggestions Add Observation on no. of fruit damage	Dr.H.V.Pandya, Assoc. Prof., ACHF, NAU, Navsari	
	Horticultural Pathology			
1	Evaluation of chilli germplasms against anthracnose ( <i>Colletotrichum sp</i> ) and thrips under field condition	Accepted	Dr.P.R.Patel, Assoc.Prof. ACHF, NAU, Navsari	

## **Technical Session III- On going/Concluded experiments**

**Chairman :** Dr. B. V. Padhiar, Professor (Fruit science), ACHF, NAU, Navsari **Co-Chairman :** Dr. S. N. Saravaiya, Associate Professor (Veg. science) ACHF, NAU, Navsari.

Rapporteur: Dr. H. V. Pandya, Associate Professor (Entomology), ACHF, NAU, Navsari

Respective scientists of NAU presented the ongoing/ concluded experiments. Total two hundred ongoing experiments were discussed of which four experiments were decided to conclude in the house. The summary of ongoing as well as concluded experiments are as under.

### **SUMMARY:**

Sr.	Center	No. of ongoing	No. of concluded	Deferred
No.		experiments	experiments	
1	ACHF, NAU,	138	01	
2	AES Paria	36	01	
3	FRS Gandevi	15	00	
4	SWMRU	03	00	
5	Food quality	01	01	
6	College of Agri.	00	00	
	Waghai			
7	College of Agri.	03	01	
	Bharuch			
8	KVK, Navsari	00	00	
9	KVK, Waghai	04	00	
	Total	200	04	

### **Title of concluded experiments:**

Sr. No.	Title of concluded experiment	Center
1	Assessment of pollution tolerant index of some plants	Agro Forestry ACHF, NAU, Navsari
2	Nutritional evaluation of okra and brinjal	Food quality, NAU, Navsari
3	Management of bandha (Lauranthus) in mango and sapota	AES, Paria
4	Preservation of kair in brine and sea brine preservatives	COA, Bharuch

## Technical session IV - Plenary

Chairman: Dr. A. R. Pathak, Hon'ble Vice Chancellor, NAU, Navsari

Co-chairman: Dr. A. N. Sabalpara, Director of Research & PG Dean, NAU, Navsari

Rapporteurs: Dr. S. L. Chawla, Asso. Prof. and Dr. Y. N. Tandel, Asstt. Prof., ACHF, NAU, Navsari

In plenary session, Dr. S. J. Patil and Dr. Alka Singh, rapporteurs presented suggestions of recommendations and new technical programmes, respectively.

Hon. Vice Chancellor congratulated scientists who made recommendations for the farming community and also appreciated for touching major areas of horticulture as per farmer's demand. He urged to conduct research in unraveled field of medicinal and aromatic plants probably in potential areas like Waghai and Vansda. He suggested more breeding work on vegetables with respect to exploitation of local prominent selection and generate scientific data based information on sex ratio of flowers, yield, quality and environmental factors under poly house condition. Research papers of recommendation must be published in more than 4 NAAS rated journals through proper channel under information to DR office and popular articles related to nutritional security by horticulture should be published in vernacular news paper as well as in magazines.

Commercialization of tissue culture plantlets of banana and pointed gourd and set target of 50,000 banana plants for department of biotechnology.

Dr. A. N. Sabalpara, Director of Research and Dean PG Studies conveyed message to house by Convener that the concern of PG students must be taken when scientist use data of them for publication of papers and recommendation for scientific/ farming community.

Dr. N. L. Patel, Dean, Faculty of Horticulture & Forestry emphasized for increasing productivity of horticulture crops in the state through hi-tech interventions and imparted best wishes for work in favour of farming community.

Progressive farmer Shri Bharatbhai Desai and who were present during whole day and appreciated work of organic farming in mango and suggested to initiate same type of work in other fruit crops. He requested scientists to take initiative for effective preventive measures of blossom midge which is a new problem in Alphonso mango in Valsad district.

At last, vote of thanks was proposed by Dr. B. V. Padhiar, Convener, AGRESCO of Horticulture and Agro-Forestry Sub-committee.