

Proceedings of the 12th meeting of Horticulture and agro-forestry research subcommittee, NAU, Navsari, Held on 10-12 march 2016

Inaugural session

The inaugural function of 12th Horticulture and Agro Forestry Subcommittee Meeting was held at Swami Vivekanand Hall, ACHF at 9 AM on 10th March 2016.

The programme started with the floral welcome by Dr. B.R. Parmar to all the guests and lighting the lamp of wisdom by the dignitaries Hon'ble Vice Chancellor Dr. CJ Dangaria, Director of Research and Dean PG Studies, Dr. A. N. Sabalpara, Principal and Dean, ACHF, Dr. B N Patel, Principal of Forestry College, Dr. PK Shrivastav and Convener and Professor and Head, Horticulture Dept, NMCA, Dr. B R Parmar. The inaugural session was presided over by the Hon'ble Vice Chancellor, Dr. C J Dangaria.

Principal and Dean, ACHF, Dr. B N Patel welcomed the guests and extended a warm welcome to Hon'ble Vice Chancellor, Director of Research and Dean PG Studies, Convener of the committee, Principal, College of Forestry, as well all the professors, scientists, faculty and staff. Extending a warm welcome to everyone, he gave a brief account of the number of recommendations and New Technical Programmes which would be presented in the technical sessions of AGRESCO meeting. Presenting scenario of Horticulture in the country, he emphasized upon the need for advancing research in different aspects of horticulture for the betterment of the farming community and uplifting their economic status. He expressed his warm wishes for a fruitful discussion and deliberation in the meeting.

Dr. A N Sabalpara, Director of Research and Dean PG Studies in his inaugural address gave brief account of the research achievements made in the field of horticulture. He expressed his appreciation and acknowledged the efforts of the NAU scientists in promoting horticulture. He further emphasized the need to strength the research in the field of organic farming in horticultural crops and to initiate research in the indigenous native plant species. He extended his best wishes to the entire scientist for concrete outcome in the AGRESCO meeting.

Hon'ble Vice Chancellor, Dr. C. J. Dangaria, In his presidential address, extended his appreciation and congratulated the NAU scientists for their contribution in horticulture and gave a brief account of challenges in horticulture, detailed the various approaches being made at National level and briefed about the scope of horticulture in the GDP in the country. He emphasized on the need of concrete and focused research by the scientific community and

further publicity and transfer of technology to reach large mass of rural areas. He outlined areas of primary research for protected cultivation, medicinal crops and secondary farming based on postharvest technology and value addition for new products and upgrading quality oriented technology. He further emphasized on the need of strengthening further research in plant breeding and towards integrated multidisciplinary research programmes to further explore its potential for the development of horticulture sector. He suggested that mix of traditional knowledge and modern innovations should be used for addressing challenges to achieve the targeted result in horticulture. He extended his warm greetings to all the scientists.

Followed by the addresses of the dignitaries, Dr. B R Parmar, Convener of the committee briefly presented the action taken report of the 11th AGRESCO Meeting and further extended his warm wishes for productive discussions and outcomes in the 12th AGRESCO Meeting. Dr. Alka Singh, Associate Professor (Floriculture) proposed vote of thanks by the end of the inaugural session.

Technical Session I Recommendations:**Chairman: Dr. A. N. Sabalpara, Hon. Director of Research & PG Dean, NAU, Navsari****Co-chairman: Dr. B.N. Patel, Dean, ACHF, NAU, Navsari****Reporters: Dr. Alka Singh, Asso. Professor and Dr. Dr. T.R. Ahlawat, Asso. Professor and Dr. R. Gunaga, Asso.Professor**

Sr. No.	Experiment Title	Suggestion
FRUIT SCIENCE		
1.	Effect of heading back and training on growth, flowering, yield and quality in old orchard of mango cv. Rajapuri	Approved with the following suggestions <ul style="list-style-type: none">• Table 1-Calculate days (months) taken for flowering initiation along with date of flowering initiation after heading back• In table 1, give yield as yield of green wood• Mention tool/equipment used for cutting wood, mention age of tree -30 years in the recommendation• Mention dose of copper fungicide application on slant cut as note in recommendation (Action to be taken by Dr. S J Patil)
2	Study on seasonal variation in fruit growth of sapota cv. Kalipatti Dr. Y N Tandel	Concluded
3	Standardization of organic nutrient schedule in banana cv. Grand Naine	Approved with the following suggestions: <ul style="list-style-type: none">• Table 8. treatment 3 –recalculate expenditure details (Action to be taken by Dr. A.N. Patel, Gandevi)
4	Macro propagation technique for Banana	Approved with the following suggestions: <ul style="list-style-type: none">• Provide methodology in the form of note in the recommendation• Prepare Recommendation for the farmers• Include both the varieties in conclusion as well as recommendation and mention planting media (sawdust) (Action to be taken by Dr. A.N. Patel, Gandevi)
5	Evaluation of promising varieties of Papaya by Dr. A.N. Patel, Gandevi	Concluded

6	Response of different mango cultivars and root stocks to stone grafting techniques	Approved with the following suggestions: <ul style="list-style-type: none"> • Use recommended instead of recommending • Provide interaction data only for pool data • Confirm the unit for girth scion and taproot (cm or mm?) • Consider the success rate of graft while calculation of economics and recheck the economics Table • Check the miscellaneous column in the economic table • Final draft to be discussed with Dr. B N Patel (Action to be taken by Dr. Virendra Singh)
	Vegetable Crops	
7	Proposal for endorsement of orange fleshed sweet potato CIP-440127 (proposed name Purna)	Approved with the following suggestions: <ul style="list-style-type: none"> • Suggestion made in the crop improvement sub- committee should be discussed in the joint agresco and modified / incorporated (Action to be taken by Dr. K D Desai)
8	Proposal for release of brinjal variety Gujarat Brinjal 1 (GNB 1) by Dr. KN Chaudhari	Accepted as such (Action to be taken by Dr. K.N. Chaudhari)
9	Effect of rhizome size on growth and yield of turmeric cv. GNT-1	Approved with the following suggestions: <ul style="list-style-type: none"> • Mention CD value for YxT • Continue for one more year and add observation of direct field germination as well as with transplanting • Mention Seed rhizome size • Economics-mortality percentage (Action to be taken by Dr. B N Patel)
10	Effect of different planting material and nitrogen fertilizer on growth and yield of spine gourd cv. Local	Approved with the following suggestions: <ul style="list-style-type: none"> • Data differs from previous year • Fruit yield data (avg fruit wt and yield per hectare) • Only half dose of nitrogen should be mentioned in the cultural practices (remove the 37.5 kg/ha) • Data to be rechecked and represented in the same committee • PI- N. K. Patel, Co-PI Dr. GD Patel and Dr Bhanderi, Associate: Dr. SY Patel and SN Sarvaiya (Action to be taken by Dr. N K Patel)
11	Standardization of Fertigation and methods of training in	Approved with the following suggestions:

	cucumber under naturally ventilated polyhouse	<ul style="list-style-type: none"> • Provide details of common application in the recommendation and methodology • Verify data in tables and represent again • Fertilizer application should be given based on m2 instead of hectare • Remove the name of the variety and agro-climatic base <p>Action taken by Dr. Sanjeev Kumar : Represented the data/ recommendation with modification as per suggestion</p>
12	Site specific nutrient management study of Elephant foot Yam	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Add cultivar in the title • Observation-Remove pest and disease • Economics table-Variable cost –remove decimal • Statistical re-analysis for pooled data in consultation with Dr. B K Bhatt • Recommendation-remove basal dose • Recast the recommendation in consultation with Dr Usdadiya and Dr. KG Patel based on soil test and expand DAP <p>(Action to be taken By Dr. K D Desai)</p>
	Natural Resource Management	
13	Feasibility of Papaya banana sugarcane relay cropping under organic farming	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Recasting of recommendation for relay cropping giving sequence basis as crop model for three crops and consult Dr. B K Bhatt <p>(Action to be taken By Dr. A R Kaswala)</p>
14	Evaluation of <i>in situ</i> crop residue management on quality and productivity of banana cultivated under organic farming	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Recasting the recommendation on the basis of T2, plant residue word should be replaced with farm residue. <p>(Action to be taken By Dr. A R Kaswala)</p>
15	Effect of Land configuration and integrated nutrient management on growth, quality and yield of tuberose (<i>Polinathus tuberosa</i> var. Prajwal)	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Remove per plot analysis • Reanalyzed the data on split-plot basis with Mr. H.N. Chhatrola and re present it • Recast the recommendation, clarifying time of fertilizer application every year <p>(Action taken: Dr. S L Chawla)</p>
16	Effect of bio fertilizers and chemical fertilizers on growth and yield of gladiolus cv. Psittacinus hybrid	<p>(Asked for re-presentation but not yet done) Check the data</p>

		<p>Table 5 is incomplete Two way table is required for yield Table 9 is incomplete and not clear Table 10- soil based analysis is improper, provide unit for NPK Mention units where required Mention rate, method and time of application of bio-fertilizers Recommendation-recast Include Zone-I before AES-III (Action to be taken By Mr. M.A. Ahir)</p>
	Biotechnology	
17	Refinement of sucker tip decontamination technique for mass multiplication of banana through tissue culture by	<p>Extended for one year with the following suggestions:</p> <ul style="list-style-type: none"> • Tables should be produced in hard copy of agresco report • Provide SEM, CD values for Arc-sine transformed value • Mention recommendation for scientific community • Recast the recommendation (language) • Reduce the decimal of SEM, CD to two digit • Repeat the experiment with the consultation of Statistician <p>(Action to be taken by Dr. Chintan Kapadia)</p>
18	Development of low cost technology for <i>in vitro</i> mass multiplication of banana	<p>Extended for one year with the following suggestions:</p> <ul style="list-style-type: none"> • Provide tables at appropriate places in hard copy of Agresco report • Add unit for cost • Repeat the experiment with the consultation of Statistician <p>(Action to be taken by Dr. Chintan Kapadia)</p>
19	<i>In vitro</i> regeneration protocol for spine gourd (<i>Momordica dioica Roxb.</i>) By Dr. Chintan Kapadia	<p>Extended for one year. (Action to be taken by Dr. Chintan Kapadia)</p>
	Postharvest Technology	
20	Development of technology for dehydration of onion rings for adoption at commercial scale	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Table 1.28-recalculate economics • Mention time taken for drying for each treatment • Table 1.24-statistical errors Contact Mr. Chhatrola and reanalyse the data • Mention red onion and total drying time <p>(Action to be taken by Dr. Dev Raj)</p>
21	Development of technology for dehydration of okra slices for adoption at commercial scale	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Recalculate the economics table

		<ul style="list-style-type: none"> • Mention the quantity in sale price • CD /SEm value should be restricted two decimal • Produce two way table • Remove onion term and add okra slice • Check the statistical error <p>(Action to be taken by Dr. Dev Raj)</p>
22	Development of technology for dehydration of cauliflower for adoption at commercial scale	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Use the word cut segment instead of floret • Recalculate the economics table • Mention the quantity in sale price • CD /SEm value should be restricted two decimal • Produce two way table • Remove onion term and add okra slice • Check the statistical error • New technical programme based on quality aspects of rehydrated product (okra, onion and cauliflower) <p>(Action to be taken by Dr. Dev Raj)</p>
23	Development of technology for utilization of banana peel for preparation of sevian	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • CD /SEm value should be restricted two decimal • Use the word sev instead of sevian through out the experiment • Use initial reading at 0 hours in all the tables • Table 4.3, 4.2, 4.1, 4.4-check statistical analysis • Recommendation-instead of farmers women <p>(Action to be taken by Dr. Dev Raj)</p>
24	Standardization of method for extraction of Noni (<i>Morinda citrifolia</i>) fruit juice	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Mention treatment percentage in Table 5.1 • Use initial reading at 0 month in all the tables • Verify the data of table 5.7 (error and cv) <p>(Action to be taken by Dr. Dev Raj)</p>
25	Standardization of formulations for preparation of noni mango nectar from Noni juice	<p>Approved with the following suggestions:</p> <ul style="list-style-type: none"> • Economics-recalculate (consider only above 6 hedonic scale range) • Check the data of cost of bottle in economic table <p>(Action to be taken by Dr. Dev Raj)</p>

26	Evaluation and modification of banana comb cutter	Approved with the following suggestions: <ul style="list-style-type: none"> • Provide data of economics table and other important tables in the report of Joint Agresco • Video clips may be presented at Joint Agresco • (Presented suggestions made in the sub-committee of Agril. Engg.) (Action to be taken by Er. A. K. Senapati)
27	Standardization of method for preparation of candy from bitter gourd (<i>Momordica charantia</i> L.)	Approved with the following suggestions: <ul style="list-style-type: none"> • Table 8.4 check the pooled data • Delete treatment wise mean in all the tables • Give data of single factor and where interaction effect is significant, give two way table • Recommendation-recast (add sugar syrup) (Action to be taken by Jilen Patel)
28	Effect of different types of processing on the nutritional quality of green gram, kidney bean and chick pea	Accepted (Action to be taken by Dr. K.G. Patel)
	Agroforestry	
29	Investigation on tree ring analysis (Dendrochronology) to monitor radial growth responses of teak to climate in South Gujarat	Approved with the following suggestions: <ul style="list-style-type: none"> • Recommendation-recast-based on dendrochronology study for last ..years, if irrigation is given the growth... (Action to be taken by S K Sinha)
30	Evaluation of <i>Melia composite</i> families for germination traits and growth at nursery stage	Extended for one more year with the following suggestions <ul style="list-style-type: none"> • This experiment should be continued for one more year after procuring different families. (Action to be taken by R. S. Chauhan)
31	Mass propagation of <i>Acacia mangium</i> through axillary buds	Extended for one more year with the following suggestions <ul style="list-style-type: none"> • Repeat the experiment for one more year. (Action to be taken by R. S. Chauhan)
32	Performance of turmeric (<i>Curcuma longa</i>) grown as an intercrop under different tree species in South Gujarat conditions	Approved with the following suggestions: <ul style="list-style-type: none"> • Recast the recommendation in Gujarati • Remove additional income from the recommendation. • Do not mention individual years for economics table. It should be on pooled data.

		(Action to be taken by Dr. M. B. Tandel)
33	Effect of different tree species leaf leachate on germination and seedling growth of some vegetable crops by Dr. M. B. Tandel	Accepted for scientific community.
34	Selection of <i>Terminalia chebula</i> for higher tannin content By HT Hegde	The experiment is concluded
35	Standardization of the recipe for the preparation of candy from the fruits of Palmyra palm	Approved with the following suggestions: <ul style="list-style-type: none"> • Mention size of candy, time of steeping • Recast the recommendation with recipe (Action to be taken by Jilen Patel)
36	Standardization of the recipe for the preparation of jam from the fruits of Palmyra palm	Approved with the following suggestions: <ul style="list-style-type: none"> • Statistical analysis- give Sem for all tables • Give the recipe • Recast recommendation (Action to be taken by Jilen Patel)
37	Standardization of the recipe for the preparation of jelly from the Neera of Palmyra palm	Approved with the following suggestions: <ul style="list-style-type: none"> • Calculate economics for the best treatments • Recast recommendation (Action to be taken by Jilen Patel)

Note: For all recommendations made there should be only one P I, 1 or 2 Co-PI and 1 or 2 associates (if required for bio-chemical, physiological or soil analysis work)

Write Zone-I before AES-III for all recommendations

Technical Session II NEW TECHNICAL PROGRAMMES & CONCLUDED EXPERIMENTS

Chairman: Dr. A. N. Sabalpara, Hon. Director of Research & PG Dean, NAU, Navsari

Co-chairman: Dr. R.M. Patel, Dean, GABI, NAU, SURAT and Dr. P. Srivastava, Principal, Forestry , Navsari

**Rapporteurs: Dr. M.M. Patel, Asso. Professor and Dr. A.R. Kaswala, Asso. Professor ,Dr. Bimal Desai, Asstt. Professor,
Dr. A.I. Patel Asstt. Professor and M.A. Patel, Asstt . Professor**

Sr. No.	Title	Suggestions	Action taken
	Fruit Science		
1	Pheno-physiological studies on regular and biennial bearing of mango	Mention age of the tree Trial should be taken for four years Consult Statistician for design Dashehari should be added as biennial bearer Mention time of data collection for biochemical observation 10 shoots on each direction to be taken. Delete leaf area, correlate with weather parameters	Assistant Res.Sci. RHRS, Navsari
2	Development of meadow orchard in Guava cv. Lalit	Recast title as Feasibility of planting and pruning intensity of meadow orchard in guava Mention time of pruning Recast objective Specify No. of plants per plot Consult Statistician for design, Vita. C	Assistant Res.Sci. RHRS, Navsari
3	Effect of growth hormones on flowering and yield of sapota cv. Kalipatti	Recast treatments in consultation with Dr.A. N. Patel, Sagar Patil, Jimmy Vashi and Dr. B.K. Bhatt	Associate Res.Sci. RHRS, Navsari
4	Response of media, fertilizer and chemicals application on growth of mango rootstock	Analyse media- physico-chemical property of media Bending percentage should be added in observation Take two factor only and total treatments combinations should be 15.	Associate Res.Sci. RHRS, Navsari

		Take C:N ratio, Germination %, Days to germination	
5	Effect of foliar application of fertilizers on yield and quality of sapota cv. Kalipatti under ultra high density plantation	Recast title as Effect of foliar application of fertilizers on yield and quality of sapota cv. Kalipatti. Dr. D.P. Patel should be one of the scientist. Dr. K.G.Patel should be consulted for methodology	Assistant Res.Sci. RHRS, Navsari
6	Response of fertilizer application and chemicals on growth ,yield of papaya var. Red lady		Not Approved
7	Response of paclobutrazole and KNO ₃ on top working mango		Not Approved
8	Evaluation of different bio fertilizer with graded chemical fertilizers for nutrient management in Papaya	Take variety Red Lady Take observation on disease incidence Plot size should be square Delete name of Dr Lalit Mahatma Include economics	Professor and head Fruit Sci. ASPEE Navsari
9	Impact of presoaking treatments on germination and growth of mango stone	Modify objective Modify treatment as follow GA3 50,100,150 ppm Novel organic 1and 2% Carbondazin 1% 10 minute dipping Control water dipping Absolute control Dipping time- 24 hr	Professor and head Fruit Sci. Navsari
10	Response of paclobutrazole on flowering and yield of headed back mango cv. Rajapuri		Not Approved
11	Effect of organics on productivity and quality of mango cv. Kesar		Not Approved
12	Effect of husking and pre soaking treatments on seed germination and seedling growth of different mango varieties	Filler trial	Assistant Prof. NMCA
13	Effect of different organic sources on yield quality of banana under certified organic farm	Add observation on duration of flowering Flowering to maturity	Associate prof.NRM

		Self life of banana Remove Beta carotene	
14	To recommend the suitable rootstock for region specific problematic soils	Take observation on ESP and SAR Experiment should be taken preferably on NAU farm othwerwise of farmers field with MOU	Research Scientist Paria
15	Varietal evaluation of different pineapple varieties under South Gujarat condition	Correct plot size	Research Scientist Paria
16	Standardization of stage wise requirement of nutrients in Sapota cv. Kalipatti	Accepted	Associate Res. Sci Gandevi
17	Enhancing yield and quality of Sapota using different organic fertilizer treatment	Modify experiment with consultation with Dr. A. Das and Dr.B.K.Bhatt Recast title,Soil nutrient analysis	Associate Res. Sci Bharuch
18	Effect of tip pruning and foliar application of KNO ₃ on early flowering and yield of mango cv. Kesar	Remove point 3 of note	Horti. poly .Navsari
19	Effect of herbal oil spraying in mango cv. Kesar	Filler trial	Assistant Professor Waghai
	AICRP on Coconut		
20	Intercropping studies under coconut orchard	Record light intensity Consult statistician Mr.H. N. Chhatrola and Dr.B . N. Patel for design and plot size	Assistant Res.Sci. AICRP on Coconut
21	Effect of foliar application of plant growth regulators on growth, yield and quality of garlic var. GG3	Modify treatments as fallow GA3 100,150 ppm, Novel 1&2 % NAA 50,100 ppm, control Cycocel 1000 ppm at 60 days common for all treatment, Recast title Add observation on sprouting, disease and pest	Asistant Res.Sci. AICRP on Coconut
	AICRP ON TUBER CROPS (B. H. 2006-3)		
22	Assessment of Genetic diversity in sweet potato [<i>Ipomoea batatas</i> (L.) Lam.]	Record leaf area, Weevil infestation, Add quality parameters like starch, Beta carotene and fiber	Assistant Res. Sci Tuber crop
23	Genotypic × environment interaction and stability analysis for yield and quality components in Greater Yam (<i>Dioscorea alata</i> L.)	Take experiment at three locations Navsari, Waghai and KVK Abhethi Tuber yield/plant, mention quality	Assistant Res. Sci Tuber crop

		parameter	
	VEGETABLE IMPROVEMNT PROJECT, NAVSARI (AICRP (VC) BH-2058)		
24	Okra (YVMV) IET	Take of YVMV at30,45, 60 ,75 and 90 days	Assistant Prof. Vegetable
25	Tomato (Determinate) AVT-I	Fruit borer Maintain Plant Population	
26	Tomato (Determinate) AVT-II	Accepted	
27	Tomato (Indeterminate) IET	Accepted	
28.	Chillies AVT-II	Observation of Leaf curl and wilt Take Growth habit instead of branching habit	
29	Pumpkin AVT-I	Accepted	
30	Bitter Gourd Hybrid- IET	Accepted	
31	Bitter Gourd Hybrid- AVT-I	Accepted	
32	Feasibility of tomato cultivation through grafting during rainy season	Accepted	Assistant Professor Veg. Sci
32.1	Evaluation of grafting in tomato under NVPH	Specify grafting stage, Age of the seedling ,thickness Specify Design, Remove checks	
32.2	Comparative performance of grafts and non grafts on tomato for growth, yield and related traits during rainy season	Accepted	
33	Response of muskmelon to different level of N and K Fertigation for yield and other horticulture traits under NVPH	Take control NPK check	Assistant Professor Veg. Sci.
34	Organic farming in capsicum under protected condition	Accepted	Associate prof. Agril.Chem
35	Organic farming in pointed gourd	In Treat. L3 take 3000 l/ha banana sap instead of 30 l/ha	Associate prof. Agril.Chem. and Soil sci.
36	Assessment of bush type French bean varieties suitable for the Dang district	Remove var.8, 9, 10	SMS Horticulture KVK Waghai
37	Collection and evaluation of cucumber genotypes suitable for cultivation in Southern Gujarat region	Add fruit firmness Delete fruit crispiness	Assist. Prof HMRS Waghai
38	Collection and maintenance of elephant foot yam genotypes for evaluation as well as selection of superior genotypes suitable	Fragment location wise PI and Co PI Characterization of genotypes	Assist. Prof HMRS Waghai

	for cultivation in Southern Gujarat region	Mention unit of quality parameters	
39	Standardization of soil test media for brinjal plug tray nursery	Days to germination Delete treat.T17 Mention grade of vermiculite Take observation for 3 week	Associate prof. Horti. Poly. Paria
Vegetable Breeding			
40	Preliminary Evaluation Trail on Tomato	Remove word 2015-16 from title.	Associate Prof. Veg. Breeding
42	Preliminary Hybrid Trial on Tomato-I	Remove word 2015-16 from title and put I instead of 2015-16.	
43	Preliminary Hybrid Trial on Tomato-II	Remove word 2016-17 from title and put II instead of 2015-16.	
44	Multilocation Trial on Tomato	Remove word 2015-16 from title.	
45	Preliminary Evaluation Trial on Brinjal	Remove word 2015-16 from title.	
46	Preliminary Hybrid Trial on Brinjal	Remove word 2015-16 from title.	
47	Collection, Evaluation and Improvement of Pointed gourd.	Remove collection of genotype from objective.	Not Approved
48	Preliminary Hybrid Trail of Okra.	Remove word 2016-17 from title.	
Plant Pathology			
49	Management of leaf blight of gerbera under polyhouse condition	Experiment should be taken on new plantation Repetition -five	Associate prof. Plant pathology
Food Quality			
50	Determination of nutritional composition of minor fruits	Add tamarind, jack fruit, Chironji Rayan and Black jamun	Associate Prof. Food Quality
Floriculture and Landscape Architecture			
51	Induction of variability in spider lily (<i>Hymenocallis littorallis</i>) through chemical mutagens	<ul style="list-style-type: none"> • Use “Mutant” instead of “genotypes” in objective No.2. • Add treatments of 0.1% EMS and 0.1% DES • Mention observation no. 14 as ‘Shelf life of flower bud’ • Give methodology of application and duration of dipping. 	Assistant prof. Floriculture
52	Induction of variability in spider lily (<i>Hymenocallis littorallis</i>) through colchicine treatment	<ul style="list-style-type: none"> • Mention observation no. 14 as ‘Shelf life of flower bud’ 	Assistant prof. Floriculture

		<ul style="list-style-type: none"> • Give methodology of application and duration of dipping. 	
53	Integrated nutrient management in rose (<i>Rosa chinensis</i> L.)	<ul style="list-style-type: none"> • Mention soil properties instead of soil health in objective no. 2 • Finalize the methodology with Dr. S. L. Chawla 	Not Approved
54	Collection and evaluation of local turf grass germplasm of the South Gujarat region	<ul style="list-style-type: none"> • Modify the title as ‘Collection and evaluation of local turf grass germplasm of Gujarat’ • Remove observation on Number of florets per spikelet. • Add observation on chlorophyll content • Add observation on disease and pest incidence • Increased plot size • Replication four 	Assistant prof. Floriculture
55	Testing of new genotypes of China aster	<ul style="list-style-type: none"> • Correct the size of net plot 	Assistant prof. Floriculture
56	Standardization of packing techniques for flower strings of marigold	<ul style="list-style-type: none"> • Accepted 	Associate Prof Floriculture
57	Standardization of post harvest treatment using boric acid and sodium benzoate for improving postharvest life of loose flowers of tuberose	<ul style="list-style-type: none"> • Design will be CRD instead of FCRD 	Associate Prof Floriculture
58	Studies on use of food dyes for tinting in tuberose stems	<ul style="list-style-type: none"> • No. of flowers per treatment should be 5 • Record colour intensity by using RHS Colour chart 	Associate Prof Floriculture
59	Standardization of soilless based growing media for different varieties of potted <i>Euphorbia milli</i>	<ul style="list-style-type: none"> • Increase number of plants per treatment- 20 • Mention size of pot • Quantify media 	Associate Prof Floriculture

		<ul style="list-style-type: none"> • Add observation on economics 	
60	Influence of different seasons on plant growth, flower production and flower quality in rose variety “Top Secret” in soilless culture under protected condition	<ul style="list-style-type: none"> • Remove objective No. 3 • Mention time of observations on plant height and plan spread 	Associate Prof Floriculture
61	Standardization of Grafting Technique in Adenium	<ul style="list-style-type: none"> • Mention time of grafting • Mention portion and thickness of scion 	Associate Prof Floriculture
62	Response of PGRs and cutting methods on growth of different varieties of bougainvillea	Accepted	Professor Horticulture NMCA
63	Response of alternative framing on growth and flowering of gladiolus with biofertilizers and growing media in plasticulture	Recast title, objective and experimental details in consultation with Dr S.L.Chawla	Associate prof. COA Bhruach
64	Response of vermicompost, FYM and fertilizers on growth, flower quality and yield of tuberose in Bharuch condition		Not Approved
65	Efficacy of humic acid on vase life of gerbera cut flower var. Tera juba	Delete silver nitrate treatment Design –FCRD Salicylic acid 50,100 ppm, sucrose 2% Recast title	Associate prof. Horti. Poly. Paria
	PHT		
66	Home scale ripening of banana cv. Grand Naine	Accepted	Assist. Prof Soil and Water Management
67	Effect of pre cooling on quality and shelf life of banana cv. Grand Naine	<ul style="list-style-type: none"> • Write ambient temperature 	Assist. Prof Soil and Water Management
68	Standardization of technology for preparation of Aloe Vera based vermicelli	<ul style="list-style-type: none"> • Mentioned the name of fruit for fiber • Add control treatment (Water) • Mention the remaining part (Wheat flour) 	Associate Prof. PHT
69	Standardization of technology for minimal processing of fresh cut cauliflower (<i>Brassica oleracea</i> var. botrytis L.).	<ul style="list-style-type: none"> • Take more samples of packages • Take absolute control • Instead of FCRD, take CRD • Best treatment should be taken for second experiment 	Associate Prof. PHT

		<ul style="list-style-type: none"> • Two lots should needed for first exp. 	
70	Standardization of technology for minimal processing of fresh cut potatoes (<i>Solanum tuberosum</i> L.).	<ul style="list-style-type: none"> • Add starch content in observation instead of fibre content 	Associate Prof. PHT
71	Standardization of technology for preparation of candy from ripe papaya (<i>Carica papaya</i> Linn.) fruits.	<ul style="list-style-type: none"> • Candy size should be mentioned • Sample size/Bag size should be increased 	Associate Prof. PHT
72	Standardization of technology for preparation of Tomato (<i>Solanum lycopersicum</i> L.) powder for home scale adoption.	<ul style="list-style-type: none"> • Add recovery per cent in observation • Recast treatment combination • Take varieties as a third factor 	Associate Prof. PHT
73	Development of technology for preservation of tender coconut water	<ul style="list-style-type: none"> • Take WCT as a variety 	Associate Prof. PHT
74	Development of technology for health based digestive tablets from noni pomace powder.	<ul style="list-style-type: none"> • Chemical composition of table should be analyzed and mention before recommendation 	Associate Prof. PHT
75	Characterization of the sapota seed oil for extraction and value addition	<ul style="list-style-type: none"> • Varieties can be changed as per the availability • Recast the first objective (Remove value addition) • Mentioned flow chart of methodology 	Associate Prof. PHT
	Forestry		
76	Determination of critical limit of water salinity for <i>Ailanthus excelsa</i> Roxb. Seedlings	<ul style="list-style-type: none"> • Water salinity level (Revised treatment) 0.5,2.0,4.0,6.0,8.0,10.0 • Compare control with best available water • 10 pots per replication used for exp. • 10kg pots were used for experiment 	Approved with suggestion Action: PI

77	Ecological studies on selected horticulture - based agroforestry systems in South Gujarat	Not Accepted	Ph.D. trial Not Approved
78	Development of volumetric equation for Teak (<i>Tectona grandis</i> L.)	<ul style="list-style-type: none"> • Incorporate “South Gujarat “ in title 	Approved with suggestion Action: PI
79	Seed source variation for seed traits, germination and seedling vigour in <i>Cinnamomum verum</i>	Accepted	Approved
80	Metagenomic analysis of flooded rice ecosystem under climate change resilience	Accepted	Approved
81	Evaluation of various <i>Poplar</i> clones for early Growth and Establishment under South Gujarat condition	<ul style="list-style-type: none"> • Add in observation -Leaf area, • Carbon sequestration potential 	Approved with suggestion Action: PI
82	Evaluation of different <i>Salix</i> clones for early Growth and Establishment under South Gujarat condition	<ul style="list-style-type: none"> • Add in observation -Leaf area, • Carbon sequestration potential 	Approved with suggestion Action: PI
83	Emission of N ₂ O and CH ₄ from forests soils. (BH:12019)	<ul style="list-style-type: none"> • F1- Natural Forest, • F2 - Teak plantation • Design CRD • Take crown diameter instead of NS,EW • Add season in treatment 	Approved with suggestion Action: PI
84	Effect of different seed treatment and media on growth of Indian Cheese Maker - <i>Withania coagulans</i> (Stocks) Dunal	Accepted	Approved
85	Documentation of basic density and calorific value of different tree species of South Gujarat	<ul style="list-style-type: none"> • Add biomass in observation, • Add Local names in all species • Add <i>Ficus spp.</i> 	Approved with suggestion Action: PI
86	Growth assessment of various kinds of fishes in fresh water	<ul style="list-style-type: none"> • It should presented in Fisheries Research Committee • Add survival percentage in observations 	Approved with suggestion Action: PI
87	Establishment of plantations of minor fruit species for PG research	<ul style="list-style-type: none"> • Modification of earlier trial entitled “Reducing harvest age of <i>Terminalia</i> 	Approved with suggestion

		<i>chebula</i> and <i>T. bellerica</i> (chebulic and belleric myrobalans) for early return’ • Four species viz., <i>Garcinia indica</i> and <i>Sapindus</i> including <i>Terminalia chebula</i> and <i>T. bellerica</i>	Action: PI
	Biotechnology		
88	Isolation and characterization of PGPRs from different Banana cultivars	Use word “mother plant” instead of “pseudo stem”	Approved

	Concluded Experiments	Suggestions	Action taken
1.	Study the management efficiency of Mango and Sapota growers in Navsari district	Put the results in Social Science for further discussion	Dr. B. M. Tandel
2	Varietal trial on Katargam type papadi	On the basis of morphological group, the new experiment should be framed on next AGRESCO	Dr. K.N. Chaudhary
3	Preliminary Evaluation Trail of Spine Gourd	Frame new experiment based on this experiment	Dr. N.K. Patel
4	Induction of variability through mutagens in <i>Gladiolus</i> cv.American Beauty		CONCLUDED
5	Evaluation of coppicing ability and yield in different diameter classes of <i>Acacia mangium</i>		CONCLUDED
6	<i>In vitro</i> regeneration of <i>Eucalyptus</i> (<i>Eucalyptus tereticornis</i>)		CONCLUDED

Plenary session:

Chairman: Dr. C.J. Dangaria, Hon'ble Vice Chancellor, NAU, Navsari

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

Reporters: Dr. Dev Raj, Asso. Professor and Dr. R. V. Tank. Asso. Professor

The Plenary session of 12th meeting of Horticulture and Agro-Forestry Research Sub Committee was chaired by Hon'ble Vice Chancellor, Dr. C.J. Dangaria, Navsari Agricultural University, Navsari and Co-chaired by Dr. A.N. Sabalpara, Director of Research and Dean PG Studies on dated 12th March 2016 to discuss the outcomes of the three days meeting. At the outset, Dr. B. R. Parmar, Convener of the Meeting welcomed Hon'ble Vice Chancellor, Director of Research and Dean PG Studies, Principal and Dean (Horticulture), Principal (Forestry) and all committee members. During the plenary session, Dr. B.N. Patel presented the proceedings detail of the recommendations (25 for farmers and 3 for scientific community) presented by the scientists. Dr. M.M. Patel presented the proceedings detail of the New Technical Programmes (77 accepted out of 83) given by the scientist. In the third session, 6 concluded experiments were discussed. Out of that, three experiments were concluded while three were reformulated. Dr. B. R. Parmar, Convener of the subcommittee instructed that the new experiment submitted should have only One PI, two Co-PI and one associate scientist related to research programme. In the very beginning, Dr. A.N. Sabalpara, Director of Research and Dean PG Studies congratulated the faculty for their efforts in research and Following Director of Research remarks; Hon'ble Vice Chancellor congratulated the faculty for the acceptance of their recommendations and New Technical Programmes. They also appreciated the scientists for their significant contribution. They said that sub-committee should make all possible efforts to discuss the Recommendation as well as New Technical Programmes in an effective way to avoid the confusion in the Combined Joint AGRESCO. They suggested that at Department level the experiments should be discussed properly before being submitted to the sub-committee. They also said that new technical programmes should be executed properly to bring out better recommendations in future.

Lastly, Dr. S. J. Patil proposed Vote of Thanks. He very heartily thanked Hon'ble Vice Chancellor, Dr. C.J. Dangaria; Dr. A.N. Sabalpara, Director of Research and Dean PG Studies; Dr B.N. Patel, Principal and Dean, ACHF; Dr P.K. Srivastava, Principal (Forestry); Dr. R.M. Patel Principal, GABI, Surat, Dr. B.R. Parmar, Convener of the Meeting, Retd. Scientists, Progressive Farmers and all members of Horticulture and Agro-Forestry Research Sub Committee. They also thanked students and SRF/ RA involved in the meeting.