

## **CIRCULAR**

All members of Board of Studies for Fruit Science and Plantation Crops, Spices, Medicinal & Aromatic Crops are hereby informed that a meeting is scheduled on 25-26<sup>th</sup> September at 8.30 am in the Swami Vivekanand Hall of ASPEE College of Horticulture and Forestry, NAU, Navsari to discuss following agenda. Therefore, all the members of Board of Studies for Fruit Science and PSMA are requested to make it convenient to remain present.

### **AGENDA**

1. Confirmation of proceeding of the 3<sup>rd</sup> meeting of Fruit Science and PSMA Board of Studies.
2. To discuss the New Technical Programmes of Department and Post Graduate students.
3. To discuss the Academic, Research and Extension activities related issues.
4. Any pointes raised by the Chair.



Chairman

No. ACHF/SJP/Fruit Sci./18836-46 /2014  
Navsari, Date: 3/9/2014

Board of Studies for Fruit Science & PSMA  
ASPEE College of Horticulture and Forestry  
NAU, Navsari

Copy with respect To,

1. PS to VC, NAU, Navsari
2. Director of Research & Dean, PG studies, NAU, Navsari
3. Dean, ASPEE College of Horticulture and Forestry, NAU, Navsari

Copy To,

1. All members of the Board of Studies for Fruit Science & PSMA
2. Head of the Departments – Vegetable Science, Floriculture, Post Harvest Technology, Horticulture Entomology, Horticulture Pathology, Horticulture Soil Science & Agril. Chem. and Biotechnology to make it convenient to remain present.
3. PG Notice Board

## Members of Board of Studies for Fruit Science, Plantation, Spices, Medicinal & Aromatic Crops

Sr. No.	Name	Designation
1	Dr. S. J. Patil	Professor and Head (Fruit Sci.), ACHF, NAU, Navsari
2	Dr. B. N. Patel	ADR, NAU, Navsari
3	Dr. R. M. Patel	Principal, Biotechnology College, Surat
4	Dr. B. R. Parmar	Prof. (Hort.), NMCA, Navsari
5	Dr. N. I. Shah	Res. Sci. (Hort.), AES, Paria
6	Dr. A. N. Patel	Assoc. Res. Sci. (Fruit Sci.), FRS, Gandevi
7	Dr. D. K. Sharma	Assoc. Res. Sci. (Fruit Sci.), AES, Paria
8	Dr. T. R. Ahlawat	Assoc. Prof. (Fruit Sci.), ACHF, Navsari
9	Dr. R. V. Tank	Assoc. Prof. (Fruit Sci.), ACHF, Navsari
10	Dr. S. S. Gaikwad	Assoc. Prof. (Hort.), Hort. Poly., ACHF, Paria
11	Dr. M. M. Patel	Assoc. Prof. (Fruit Sci.), ACHF, Navsari
12	Dr. Virendra Singh	Assoc. Prof. (Hort.), COA, Bharuch
13	Dr. Sanjay Attar	Asst. Prof. (Fruit Sci.), ACHF, Navsari
14	Dr. C. R. Patel	Asst. Prof. (Fruit Sci.), ACHF, Navsari
15	Dr. Y. N. Tandel	Asst. Prof. (Fruit Sci.), ACHF, Navsari
16	Dr. Bimal Desai	Asst. Prof. (Botany), ACHF, Navsari
17	Prof. Nanubhai B. Patel	Asst. Prof. (Hort.), RHRS, Navsari
18	Prof. B. M. Tandel	SMS (Hort.), KVK, Navsari
19	Dr. Vimlesh Patel	Asst. Res. Sci. (Hort.), AES, Paria
20	Dr. P. P. Bhalerao	Asst. Prof. (PSMA), ACHF, Navsari
21	Prof. K. A. Patel	Asst. Prof. (Hort.), ACHF, Navsari
22	Dr. N. S. Thakur	Asst. Prof. (PSMA), ACHF, Navsari
23	Prof. Amrutbhai Patel	Asst. Prof. (Hort.), FRS, Gandevi
24	Prof. Pravin Modi	SMS (Hort.), KVK, Vyara
25	Prof. H. N. Chhatrola	Asst. Prof. (Statistics), ACHF, Navsari
26	Dr. B. V. Padhiar	Retd. Professor and Head (Fruit Sci.), ACHF, NAU, Navsari

Dear Members,  
Board of Studies- Fruit Science & PSMA

As per the attached Proceeding of 3<sup>rd</sup> Board of Studies, kindly send the action taken report to [goldmedalist@nau.in](mailto:goldmedalist@nau.in) and [tank.ramesh@yahoo.in](mailto:tank.ramesh@yahoo.in) on or before September 15, 2014.

Thanking you.

**PROCEEDINGS OF 3<sup>rd</sup> MEETING OF RESEARCH APPROVAL COMMITTEE (RAC)  
FACULTY OF FRUIT SCIENCE AND PSMA**

**Venue: Conference hall, ASPEE College of Horticulture & Forestry, N. A. U., Navsari**

**Date: 10-10-2013**

**Time: 9.30 a.m.**

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The 3<sup>rd</sup> meeting of Research Approval Committee (RAC) for Fruit Science and PSMA was held on 10<sup>th</sup> October, 2013 to discuss the academic, research & extension activities related issues and to discuss the technical research programmes of PG students for approval at Conference Hall, ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari.

The meeting was chaired by Dr. N. L. Patel, Principal and Dean of ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari. Dr. B. V. Padhiar, Chairman and Convener of the RAC of Fruit Science and PSMA, has welcomed all the members as well as invited members. He summarized various academic research and extension activities carried out in the department and reviewed the suggestions and action taken report of 2<sup>nd</sup> RAC meeting held on 18<sup>th</sup> October, 2012 as well. Dr. B. R. Parmar and Dr. Y. N. Tandel were as rapporteurs in the meeting.

Seven Ph.D. and Eighteen M.Sc. students have presented their technical programme of PG research to be conducted. All the members have exchanged their views and made valuable suggestions for the quality research (Appendix).

Dr. N. L. Patel, Principal and Dean of ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari gave following valuable suggestions:

- Ph. D. student should have on needbase or in problematic area, experiments so department can take this experiment after two years of his/ her study and we will get some good recommendation for farming community.

Dr. B. N. Patel, Associate Director of Research gave valuable suggestions in all the new technical programs. All the mango trees of more than 25 years age at RHRS Farm, so it is intimated to all major advisors and students that experiments on mango should be taken at different research stations of our university according to availability of tree. The experiments which were reformed and/or advised to reform under the guidance of formed committee should be submitted to the Chairman, Board of Studies, Fruit Science before start of experimentation.

**Specific Suggestions made by the house:**

- In all the PG experiments, students must take the observation on shelf life of fruit, wherever it is needed.

**P.T.O.**

- Materials generated by the PG students must be submitted to the respective core scientists after completion of experiment.

A meeting was ended with vote of thanks proposed by Dr. B. V. Padhiar, Professor, Department of Fruit Science & PSMA of ASPEE College of Horticulture & Forestry, NAU, Navsari.

No. ACHF/FRUIT/RAC Proceeding/2458/2014  
Navsari. Dt. 28 /01/2014

Sd/-  
Chairman  
Board of Studies  
Fruit Science & PSMA  
ACHF, N. A. U., Navsari

Copy f. w.cs. to:

- 1) PS to Hon'ble Vice-Chancellor, N.A.U., Navsari.
- 2) The Director of Research, N.A.U., Navsari.
- 3) The Dean, ACHF, N.A.U., Navsari.
- 4) The Associate Director of Research, N. A. U., Navsari.
- 5) The Registrar, N. A. U., Navsari.
- 6) All the members of Board of Studies- Fruit Science & PSMA.
- 7) PG I/c of this college.

## APPENDIX

### Proceedings of Third Research Approval committee (RAC), ASPEE College of Horticulture and Forestry, NAU, Navsari held on 10-10-2013

Technical programs of Ph.D. (Fruit Science)

Department: Fruit Science

Sr. No.	Name of the Student	Name of the Guide	Title of Research	Suggestions
1.	Patel Bijalkumar Bharatbhai	Dr. T. R. Ahlawat	Effect of GA <sub>3</sub> and CPPU on fruit size and quality in mango ( <i>Mangifera indica</i> L.) cv. Kesar	<ul style="list-style-type: none"> <li>• Change experiment with committee viz., Dr. TRA, Dr. NIS, Dr. SJP, Dr. BVP</li> <li>• Take this experiment as departmental experiment after removing T3, T6, T9, T12, T15, T18.</li> <li>• Spray GA @ 75, 100, 125 ppm.</li> </ul>
2.	Mr. Hiray Sachin Ashokrao	Dr. B. N. Patel	Effect of foliar spray of fertilizers and stages of application on yield and quality of mango ( <i>Mangifera indica</i> L.) cv. Kesar	<ul style="list-style-type: none"> <li>• Reform 3<sup>rd</sup> objective (To work out economics)</li> <li>• Spray all treatments at 50% egg stage of fruit</li> <li>• Take observation on Phytotoxic effect</li> </ul>
3.	Kavita Leishangthem	Dr. B R. Parmar	Role of biofertilizers on the growth, yield and nutrient uptake in banana	<ul style="list-style-type: none"> <li>• Change title of experiment like “Integrated nutrient management in banana cv. Grand Nain”</li> <li>• Take 100, 80 and 60% RDF individually and along with biofertilizers in treatments.</li> <li>• Mention size of net and gross plot, dose and time of biofertilizers application</li> <li>• Take observation on microbial count before and after application of biofertilizer, individual fruit wt. (g), Total sugar (%)</li> </ul>
4.	Mr. Ghadage Nitish Jagannath	Dr. N. I. Shah	Effect of time and width of girdling on flowering, yield and quality of mango ( <i>Mangifera indica</i> L.) cv. Alphonso	<ul style="list-style-type: none"> <li>• Correct name of variety in title</li> <li>• Put month July, Aug. and Sept. in detail treatments</li> <li>• Give detail methodology of girdling and selection of branches.</li> <li>• Take observation on C:N ratio, disease/ pest infestation, wt. of pulp.</li> </ul>
5.	Mr. Vishal Ramchandra Ghadage	Dr. T. R. Ahlawat	Effect of plant growth regulators on flowering, fruiting and quality of cashew ( <i>Anacardium occidentale</i> L.) cv. Vengurla-4 in south Gujarat.	<ul style="list-style-type: none"> <li>• Reform experiment with Dr. NIS, Dr. TRA, Dr. BVP.</li> <li>• Show your detail methodology about age of tree, spraying time, total tree/ replication, no. of flushes etc.</li> </ul>

Sr. No.	Name of the Student	Name of the Guide	Title of Research	Suggestions
				<ul style="list-style-type: none"> <li>• Take observation on acidity (%), Recovery (%), nut wt.</li> </ul>
6.	Mr. Rahul Pandey	Dr. N. L. Patel	Integrated weed management in mango root stock nursery ( <i>Mangifera indica</i> L.) under south Gujarat agro climatic conditions	<ul style="list-style-type: none"> <li>• Mention size of net and gross plot.</li> <li>• Take observation germination (%) at 40 and 60 DAS, dry wt. from 3 MAS to uprooting stage, RGR, Bending (%)</li> <li>• Sow stones at 45 x 10-15 cm spacing on raised bed and apply paddy straw at intra row (T<sub>7</sub>).</li> </ul>
7.	Mr. Chirag D. Desai	Dr. B. V. Padhiar	Effect of color shade nets on biomass yield and quality of fenugreek, coriander and garlic.	<ul style="list-style-type: none"> <li>• Select popular varieties of crops e.g. GG-3 of Garlic.</li> <li>• Give banana sap treatment to whole experiment</li> </ul>

#### Technical programs of M. Sc. (Fruit Science)

#### Department: Fruit Science

Sr. No.	Name of the Student	Name of the Guide	Title of Research	Suggestions
1.	Parmar Hardik Bipinbhai	Dr. S. J. Patil	Response of density and type of girdling on mango ( <i>Mangifera indica</i> ) cv. 'Kesar'.	<ul style="list-style-type: none"> <li>• Recast this technical program with Dr. BNP, Dr. BVP, Dr. SJP and Dr. TRA</li> <li>•</li> </ul>
2.	Patel Roshankumar Rameshbhai	Dr. R. V. Tank	Effect of location of girdling on flowering, yield, and quality of Mango varieties	<ul style="list-style-type: none"> <li>• Recast this technical program with Dr. BNP, Dr. BVP, Dr. RVT and Dr. BRP</li> <li>•</li> </ul>
3.	Patel Ashishkumar Hasmukhbhai	Dr. Y. N. Tandel	Effect of different chemicals on flowering and fruiting of mango cv. Kesar	<ul style="list-style-type: none"> <li>• Take your experiment at College Farm, NMCA, NAU</li> <li>• Remove CCC @ 400 ppm and replace with 0.5% KNO<sub>3</sub></li> <li>• Record no. of shoots at vegetative and flowering stage both.</li> </ul>
4.	Chirag Gohil	Dr. D. K. Sharma	Effect of season and growing environment on success of soft wood grafting in Chironji ( <i>Buchanania lanzan</i> )	<ul style="list-style-type: none"> <li>• Change design of experiment as FCRD</li> <li>• In growing condition, Take E1 as Open condition, E2 as Net house, E3 as in situ raised rootstock and remove rest.</li> <li>• Use uniform age of rootstock and scion sticks (pencil thickness)</li> </ul>
5.	Chaudhari Gavri V.	Dr. T. R. Ahlawat	Effect of putrescine on the shelf life & quality of mango cv. Kesar	<ul style="list-style-type: none"> <li>• Take this experiment in cold storage as well as room temperature also.</li> <li>• Add observation on pulp: peel ratio and all observation would be taken at alternate day only.</li> </ul>

Sr. No.	Name of the Student	Name of the Guide	Title of Research	Suggestions
6.	Momin Saeedanavar Kasambhai	Dr. S. S. Gaikwad	Effect of foliar application of chemicals and sorbitol on fruit set, yield and quality of mango cv. Kesar	<ul style="list-style-type: none"> <li>Recast objectives with Dr. NIS and Dr. SSG</li> <li>Change concentrations of all treatments with reference last experiments done at AES, Paria</li> </ul>
7.	Ramani Manish Mukeshbhai	Dr. C. R. Patel	Effect of shoot thinning and 28-homobrassinolide spray on growth, flowering, yield and quality of mango cv. Kesar	<ul style="list-style-type: none"> <li>In shoot thinning factor, take treatments as retain shoots 1, 2 and without thinning</li> <li>Remove observation on 50% flowering</li> </ul>
8	Amarcholi Jaykishan Jivraj	Dr. Virendra. Shingh	Induction of flowering and fruiting through foliar application of chemicals in semi productive 'Kesar' mango orchard	<ul style="list-style-type: none"> <li>Remove "semi productive" word from title and first two objectives</li> <li>Spray all chemicals @ 2% in Nov. and Dec.</li> <li>Remove Paclobutrazol treatment and replace with <math>K_2HPO_4</math> @ 0.5, 1.0 and 1.5%.</li> <li>Take observation on phytotoxic effect, shelf life and calculate economics.</li> </ul>
9.	Mr. Kapil Mohan Sharma	Dr. Virendra Singh	Effect of foliar application of water soluble fertilizers on flowering, yield and quality of Sapota [ <i>Manilkara achras</i> (Mill.) cv. Kalipatti	<ul style="list-style-type: none"> <li>Remove "Foliar application of water soluble fertilizers on flowering" from title and replace with "Chemical sprays"</li> <li>Remove 1<sup>st</sup> objective, flowering parameters and take days to harvest parameter.</li> <li>Change treatments like Urea and Micronutrient Grade-4 @ 1, 1.5 &amp; 2%; 13:00:45 @ 1 &amp; 2% and Control and spray in Oct. &amp; Nov.</li> </ul>
10.	Patel Ronakbhai Jayantilal	Dr. T. R. Ahlawat	Impact of pre-soaking on growth and vigour of mango ( <i>Mangifera indica</i> L.) stones	<ul style="list-style-type: none"> <li>Delete "growth and vigour" word from title and replace with "Germination and growth".</li> <li>Take presoaking treatments like GA3 @ 100 &amp; 200; Beejamruth @ 2 &amp; 3 %; Thiourea @ 1 &amp; 2% and Control while duration will remain same. Give Bavistin 500 ppm treatment to whole experiment.</li> <li>Take days taken for germination instead of sprouting.</li> </ul>
11	Sen Dipakkumar Kaluram	Dr. R. M. Patel	Micro-propagation in Fig var. Poona Fig	<ul style="list-style-type: none"> <li>Accepted by house.</li> </ul>
12.	Patel Kalindi Sureshbhai	Dr. S. J. Patil	Effect of different organics on post-harvest quality and shelf life of Mango cv. Kesar	<ul style="list-style-type: none"> <li>Recast this technical program with Dr. BNP, Dr. CRP, Dr. SJP and Dr. BVP</li> </ul>

Sr. No.	Name of the Student	Name of the Guide	Title of Research	Suggestions
13	M. Spandana	Dr. D. K. Sharma	Effects of fruiting maturity and ethereal on ripening, quality and shelf life of mango fruit in low cost ripening chamber.	<ul style="list-style-type: none"> <li>• Change design as CRD in factorial concept.</li> <li>• Take observations on PLW, marketable fruits, shriveling in per cent and abnormalities</li> <li>• Take all periodical observation at 2 days interval</li> </ul>
14.	Gamit Ankita U.	Dr. Nitin. I. Shah	Effect of fruit thinning on fruit size and quality of some mango ( <i>Mangifera indica</i> ) varieties	<ul style="list-style-type: none"> <li>• Remove T1 and add 1 month after marble stage.</li> <li>• Take observation on No. of fruits, yield (kg/tree), PLW (%), marketable fruits (%), shelf life, ascorbic acid and peel (%), pulp (%), stone (%)</li> </ul>
15.	Parekh Bhaminiben Vasantkumar	Dr. N. L. Patel	Studies on physico – chemical changes during fruit growth of some mango ( <i>Mangifera indica</i> L.) cultivars	<ul style="list-style-type: none"> <li>• Delete second objectives, it is same as first objective</li> </ul>
16.	Falguni Champakbhai Patel	Dr. B.R. Parmar	Effect of pre – soaking treatment on seed germination & seedling growth of jack fruit	<ul style="list-style-type: none"> <li>• Add Beejamrut treatment and take T1 as Cow dung slurry, T2 as cow urine @ 3%.</li> <li>• Take 30 seeds/ replication and record periodical observation at 60, 90 &amp; 12 days interval</li> <li>• Take leaf area (cm<sup>2</sup>)</li> </ul>
17.	Anand Ananya Manojkumar	Dr. B. V. Padhiar	Effect of different propagation methods and use of growth regulators in long pepper ( <i>Piper longum</i> ) under protected condition	<ul style="list-style-type: none"> <li>• Change title of experiment as “Effect of PGRs on rooting of cuttings of long pepper”</li> <li>• Recast objectives</li> <li>• Take treatment T<sub>0</sub> as control and T<sub>3</sub> as NAA 500 mg/l in factor: growth regulator</li> <li>• Record periodical observation at 30, 60, 90 &amp; 120 days and also take observation on diameter of longest shoot and survival (%)</li> </ul>
18.	Prajapati Nikita Harshabhai	Dr. B. V. Padhiar	Effect of different propagation methods and use of growth regulators in long black pepper ( <i>Piper nigrum</i> ) under protected condition	<ul style="list-style-type: none"> <li>• Change title of experiment as “Effect of PGRs on rooting of cuttings of long pepper”</li> <li>• Recast objectives</li> <li>• Take treatment T<sub>0</sub> as control and T<sub>3</sub> as NAA 500 mg/l in factor: growth regulator and take semi-hardwood cutting of 3, 2 &amp; 1 node in second factor:</li> <li>• Record periodical observation at 30, 60, 90 &amp; 120 days and also take observation on diameter of longest shoot and survival (%)</li> </ul>



Chairman  
Research Approval Committee  
Department of Fruit Science & PSMA  
ACHF, N. A. U., Navsari