



N.M.College of Agriculture

Introduction

Navinchandra Mafatlal College of Agriculture popularly known as N. M. College of Agriculture, Navsari was established in May-1965. The college was affiliated to Gujarat University, Ahmedabad from 1965 to 1968 and from 1968 to 1972 to South Gujarat University, Surat. The N. M. College of Agriculture became the constituent college of Gujarat Agricultural University since June, 1972. Now it is a constituent college of Navsari Agricultural University since May, 2004. The institute has achieved the significant recognition for its high quality of standards of teaching, research and extension. The college is not only providing the trained human resources but also generate several technologies for the benefit of the end users (farmers).



The N. M. College of Agriculture presently follows course curriculum recommended by IV Deans Committee since 2008. The college consisting of 11 departments to impart quality level teaching to the students enrolled for undergraduate and post graduate degree programmes. As per the IV Deans committee recommendations, college offers 62 courses of 177 credits (104 Theory + 73 Practical's) including RAWE programme in B. Sc. (Hons.) Agriculture degree course. Moreover, college offers higher education leading to Masters' and Doctorate degree programmes in 13 and 11 subjects, respectively.

Total 73 undergraduate and 58 postgraduate students had obtained their respective degrees during the year from this college. Recently 18 research projects were funded by various agencies viz., GoG (12) Plan Scheme, (3) other agency, (2) ICAR and (1) RKVY. The department of Plant Pathology under the year of review produced 31.6 thousand litres of Bio-fertilizer of different strains and also trained 9301 students, farmers and technical persons under the Experiential learning programme. Similarly, training on utility of bio-fertilizer benefited 9326 farmers during the year. The Department of Entomology produced 3082 Trico and 4141 Chryso cards from the Bio control unit for the benefit of the farmers. The Department of Soil Science and Agricultural Chemistry under the soil health cards programme, 14555 soil samples were analyzed, in addition to this water, compost, fertilizer and manure samples received from the farmers and various organizations were also analyzed. The college farms produced 1464.02 tones of sugarcane setts, paddy seeds and banana fruits worth Rs. 53.48 lakhs, similarly, Department of Horticulture sold 115 ornamental plant species for Rs.1.06 lakh and Department of Plant Breeding and Genetics produced 3000 tissue culture banana plantlets during the year.

Seven students of N. M. College of Agriculture successfully cleared the National Eligibility Tests (NET), nine, three and one students were selected as ISAR-JRF, MANAGE, and NIAM, during this period, respectively. Such success at national level competitive examinations reflects the ability of students, excellent teaching facilities, hard working teaching staff and conducive atmosphere for studies at N. M. College of Agriculture, NAU, Navsari.

The college publishes "**Navkrushak**" magazine which reflect the activities of students and faculties of every year.



Departments of the College

1.	Agronomy
2.	Soil Science and Agricultural Chemistry
3.	Plant Breeding and Genetics
4.	Agricultural Entomology
5.	Plant Pathology
6.	Horticulture
7.	Extension Education
8.	Agricultural Economics
9.	Agricultural Engineering
10.	Agricultural Statistics
11.	Animal Science

Aims

To provide human resources in agriculture and allied fields

To conduct the agricultural research

To disseminate agricultural technologies for the farming community.

Objectives

To conduct undergraduate programme leading to Bachelor's degree in agriculture

To conduct Post-graduate programme leading to Master's and Doctoral degrees in various disciplines of agriculture

To undertake basic, need base, location specific research work in Agricultural Sciences

To undertake farmers oriented activities for transfer of technology

Academic Programme

	Programmes	Duration
UG	B.Sc. (Hons.)Agri.	8 Semester
PG	M.Sc. (Agri.)	4 Semester
	M.Sc.	6 Semester
	Ph.D.	6 Semester

Post Graduates programme

S.N.	Master's Degree Subjects offered	S.N.	Ph.D. subjects offered
1.	Agronomy	1.	Agronomy
2.	Soil Science and Agricultural Chemistry	2.	Soil Science and Agricultural Chemistry
3.	Plant Breeding and Genetics, Plant Physiology	3.	Plant Breeding and Genetics, Plant Physiology
4.	Agricultural Extension	4.	Agricultural Extension
5.	Agricultural Entomology	5.	Agricultural Entomology
6.	Horticulture	6.	Horticulture
7.	Plant Pathology	7.	Plant Pathology
8.	Agricultural Economics	8.	Agricultural Economics
9.	Agricultural Statistics	9.	Agricultural Statistics
10.	Soil and Water Engineering	10.	Soil and Water Management
11.	Soil and Water Management	11.	Plant Bio-technology
12.	Animal Science		
13.	Plant Bio-technology		



Passed out students in the year 2010-11

Sr. No.	Degree	Students Passed During 2010-2011								Total
		Gen.		SC		ST		OBC		
		M	F	M	F	M	F	M	F	
1.	B.Sc. (Hons.) Agri	38	02	04	-	06	01	21	-	72
2.	M.Sc. Agri.	24	-	-	-	04	-	19	02	49
3.	Ph.D.	05	-	-	-	-	-	03	01	09

Current Staff Position

Particulars	Teaching Staff		
	Professor	Associate Professor	Assistant Professor
Principal	1	-	-
Agronomy	1	2	5
Agricultural Entomology	1	2	3
Soil Science and Agricultural Chemistry	1	3	6
Plant Breeding and Genetics & Plant Physiology	-	2	4
Agricultural Economics	1	-	1
Plant Pathology	-	1	2
Horticulture	-	-	2
Agricultural Statistics & Computer Application	1	1	2
Agricultural Engineering & Agricultural Meteorology	-	2	1
Agricultural Extension Education	1	1	3
Animal Production	-	1	1
Mathematics	-	-	1
Physical Education/NCC/NSS	-	-	1
Total	7	15	32

Infrastructural Facilities

The college has three lecture halls and one seminar hall with LCD facilities for proper teaching learning process at UG and PG degree programme. Almost all departments possess spacious laboratories, which are well equipped with sophisticated equipments. The college has a Central Instrumentation Laboratory having sophisticated instruments like X-ray, UV-vis-Spectrophotometer, Nitrogen Analyzer, Image Analyzer, L.C. pro, HPLC, NMR, FTNIR, Blood Analyzer, Deep freezer up to -80°C , Microwave

Digester, Super Critical Extractor, Atomic Absorption Spectrophotometer etc. The college has good computer laboratory which provides training to students for CCC training.

The college has 20 ha instructional farm under the governance of Department of Agronomy. The college possesses five well managed hostels namely, Navrang, Navratna, Navjyot, PG hostel and Girls hostels. All hostels are located close to college and capable of accommodating almost all the students.



Honors and Awards

Following honors or awards were received by faculties of the college.

1. Dr. R.T. Desai, Professor and Head, Department of Genetics and Plant Breeding, N.M.C.A., Navsari was appointed as "Identified Scientist" for crop improvement in turmeric during XXII All India Spices Group Meeting held at Jaipur during 18-19, June, 2011.
2. Recognition Award was given to Dr. D. D. Patel, Associate Professor, Department of Agronomy, N.M.C.A., N.A.U., Navsari by Directorate of Weed Science Research, Jabalpur on 15th March, 2011 at Tamil Nadu Agricultural University, Coimbatore for contribution towards National Invasive Weed Surveillance Scheme (NIWS) implementation at N.A.U., Navsari.



3. Dr. P. K. Malik, Assistant Professor has been elected as Member of Central Executive Council (CEC), Animal Nutrition Society of India (ANSI) for a period of two years.
4. Dr. M. B. Patel, I/c Principal and Dean, inducted in editorial board of Indian Journal of Applied Entomology, Entomological Research Association, Udaipur and Gujarat Journal of Applied Horticulture.
5. Dr. Lalit Mahatma, Assistant Professor is appointed as zonal councilor of Indian Society of Mycology and Plant Pathology
6. Dr. B. R. Parmar, Associate Professor and Dr. R. V. Tank, Assistant Professor are appointed as Member of editorial board of The Asian Journal

of Horticulture and Hind Agri. Horticultural Society.

Foreign Training

1. Dr. P. K. Malik, Assistant Professor attended 3 months duration training on, "Metagenomics of Rumen Methanogens" at Commonwealth Scientific and Industrial Research Organization (CSIRO), Livestock Industries, St. Lucia, Australia under the Learning and Capacity building programme of NAIP, ICAR.

Student's Award and Recognitions

Following awards were received by the students of this college from Indian Phytopathological Society during the National Symposium on, "Perspective in the Plant Health Management" organized by the Department of Plant Pathology, B.A. College of Agriculture, Anand Agricultural University, Anand- 110 012 from December 14-16, 2010

1. Awarded first prize for presentation of paper entitled, "Studies on biodiversity of fleshy fungi in Navsari (South Gujarat)" by Korat Chandulal, Chopada Gopal, Priya John and Solanky, K.U.
2. Awarded second prize for presentation of paper entitled, "Evaluation of various botanicals against Phoma tropica causing leaf spot disease in Lablab pupuresus". by Patil, V.A. and Mehta, B.P.
3. Awarded first prize for poster presentation entitled, "Effect of cultural filtrates of grain infecting fungi on seed germination and seedling growth". by Ganesh Kotgire, Patel, S.T., Mehta, B.P. and Solanky, K.U.
4. Awarded first prize for poster presentation entitled, "Antagonistic effect of bioagents on growth of banana fruit (Musa paradisiaca L.) rot caused by Lasiodiplodia theogromae (Pat.) Griffith and Maubl" by Kedar Nath and Solanky, K.U.
5. Best paper presentation award was awarded to Miss Bhavya Bandi M.Sc. (Agri.) student of Dr. B. R. Parmar, Associate Professor, Department of



Horticulture, during National Conference on, "Plant Physiology" held during Nov. 25-27, 2010 at Banaras Hindu University, Varanasi.

6. First prize was awarded to Pandya J. R. Ph.D. student of Dr. A. N. Sabalpara for best Ph.D. research work on, "Isolation, Identification, Evaluation and Mass production of native Trichoderma sp", by GAAS Ahmedabad-2011

Students Passed NET

S.N.	Name of the student	Subject
1.	Tekale Chaitanya D.	Agronomy
2.	Pisal Rahul R.	Agronomy
3.	Kedarnath	Plant Pathology
4.	Patil Prashant	Plant Breeding and Genetics
5.	Kale Bhusan	Plant Breeding and Genetics
6.	Mistry Pramod M.	Plant Breeding and Genetics
7.	Sinde C. U.	Agricultural Entomology

JRF, ICAR		NIAM, Jaipur	
Sr. No.	Name of the students	Sr. No.	Name of the student
1.	Vadodariya Gopal	1.	Sharma Manish Kumar
2.	Meena Anita		
3.	Choudhari Sitaram		
4.	Patel Sunil		
5.	Bayal Laxmikant		MANAGE, Hyderabad
6.	Pawar Anupam	Sr. No.	Name of the student
7.	Vinodsing	1.	Sharma Anil
8.	Soni Maghal	2.	Sumit Kumar
9.	Patel Tejash	3.	Bayal Laxmikant

Seminar/Symposia/Trainings organized

1. Department of Soil Science and Agricultural Chemistry has organized one day seminar on, "Role of Potassium in Agriculture" in collaboration with Indian Potash Ltd., Ahmedabad on 18/2/2011.

2. A training programme on, " Soil / water / plant / manures / fertilizers and effluents analysis" was organized by the Department of Soil Science and Agricultural Chemistry, N. M. College of Agriculture, Navsari for the staff member engaged in soil testing units of sugar factories during 1st January to 31st January 2011.

Manual Prepared

Sr. No.	Course No.	Course Title	Compiled By
1.	Ag. Chem. 1.1	Introduction to Soil Science	Dr. A.M.Bafna and Prof. R.C.Gami
2.	Ag.Chem.2.2	Soil Chemistry, Soil Fertility and Nutrient Management	Dr. A.M.Bafna and Dr.G.G.Patel
3.	Ag. Chem. 6.3	Manure and Fertilizer	Dr. A.M.Bafna and Prof. J.R.Naik
4.	LPM 4.1	Principles of Livestock Production and Management	Dr.P.K.Malik and Dr. B.Deshpande
5.	LPM 5.2	Dairy Cattle and Buffaloes Production and Management	Dr. S.B.Deshpande and Dr. P.K.Malik
6.	Laboratory Manual	Soil, plants, manures, fertilizers and effluents analysis	Dr. A. M. Bafna, Dr. G. G. Patel and Prof R. C. Gami



Research Activities

Ongoing Research Projects in NMCA

No.	Title of the Project	Type of Scheme	Funding Agency	Name of PI /Co-PI
1.	Establishment of plant physiology, tissue culture and biotechnology at Agricultural College	Plan Scheme	State Govt.	PI: Dr. R.T. Desai Co-PI: Dr. S.R. Patel and A.V. Narwade
2.	Genetic Improvement and physiological evaluation of Ginger & Turmeric at Navsari	Plan Scheme	State Govt.	PI: Dr. R.T. Desai Co-PI: Dr. K.N. Chaudhari
3.	Genetic Evaluation and Improvement of Sesbenia (Dhancha) and Crotalaria (Sunn hemp) Spp. for green manuring at Navsari	Plan Scheme	State Govt.	PI: Dr. R.T. Desai Co-PI: Dr. Vikas Khandelwal
4.	Research on eco-friendly biological fertilizers	Plan Scheme	State Govt.	Dr.B.P.Mehta
5.	Research Studies on Mulberry Sericulture in South Gujarat	Plan Scheme	State Govt.	Dr.M.B.Patel
6.	Research in Integrated Pest Management in Fruit Crops.	Plan Scheme	State Govt.	Dr.M.B.Patel
7.	Centrally Sponsored Work Plan (Macro management) Project (New initiative) " Establishing a Residual Testing Laboratory"	Plan Scheme	State Govt.	Dr.M.B.Patel
8.	Biocontrol Laboratory under the Central Sector (plan) "Strengthening and Modernization of Pest Management Approach in India	Plan Scheme	State Govt.	Dr.M.B.Patel
9.	Strengthening Research In Biological control of Crop Pests.	Plan Scheme	State Govt.	Dr.M.B.Patel
10.	Research on Tillage Technology	Plan Scheme	State Govt.	Er.S.P.Shukla
11.	Research & Development of Agricultural Implements Black Soils of South Gujarat	Plan Scheme	State Govt.	Er.S.P.Shukla
12.	Establishment of Agro Meteorological Cell at Agricultural Colleges	Plan Scheme	State Govt.	Er.S.P.Shukla
13.	AICRP Voluntary Centre on Spices crops	ICAR	ICAR, New Delhi	PI: Dr. R.T. Desai Co-PI: Dr. K.N.Chaudhari
14.	All Indian Network Project on Agricultural Acarology	ICAR	ICAR	Dr.K.G.Patel, (P.I.) (Entomology), A.I.C.R.P. on Sugarcane Since 2005.
15.	Research in Fruit, Navsari (Pathology)	Non-Plan	State Govt.	Dr.B.P.Mehta



16.	Research in Fruit, Navsari (Entomology)	Non-Plan	State Govt.	Dr.M.B.Patel
17.	Research in Agricultural Economic, Navsari	Non-Plan	State Govt.	Dr.K.S.Patel
18.	Research in Agricultural Engineering, Navsari	Non-Plan	State Govt.	Er.S.P.Shukla
19.	RKVY Project on Survey And Surveillance Based Pest and Disease Forewarning System for South Gujarat	RKVY	Govt. of India	Dr.M.B.Patel
20.	Production of Bio-Pesticides and their use on eco-friendly Plant disease management	RKVY	Govt. of India	Dr.B.P.Mehta
21.	Rehabilitation of existing tissue culture unit	NHM	Govt. of India	Dr.R.T.Desai
22.	Creation of water resources	NHM	Govt. of India	Er.S.P.Shukla

Extension Activities

Agricultural Entomology

Prepared film slides for most of the prevailing insects, pests and fauna found in Gujarat State for extension training to UG students and farmers.

Large collection of crop pests' photographs for the benefit of students & farmers.

Imparting training pertaining to insect pest management to farmers of south Gujarat.

Prompt diagnosis and management of crop pests were provided a door step of farmer.

Similarly spot diagnosis and management or respective disease of plants was provided to farmers as and when required.

During the year 2010-11, the recognized staff members of department of entomology delivered talk on Doordarshan (3), ETV (10) & AIR (2).

Department of Agronomy

Department is imparting training to the extension workers / officers of department of agriculture Gujarat state, Sugar factories officers / field staff; Gujarat Land Development Corporation officers / field staff and farmers brought by various NGOs to develop their skill for improving crop production.

Department staff is also actively participating in Krushi mela, Khedut Din, Khedut Shibir, Seminar, Radio and television programme time to time.

Department is also imparting training to the students of various rural academic institutes.

This department is also guiding farmers through publishing press notes in daily news paper on the agronomic aspects of major crops of this zone.

Plant Pathology

The department of Plant Pathology produced different types of Bio-fertilizer under experiential learning in the Bio-fertilizer and Bio pesticide Laboratories.

Bio fertilizer	Phosphorus solubilizing bacteria	Azoto-bactor	Rhizo-bium	Aceto-bactor	Azo-spirillum	Pseudo-monas	Tricho-derma
Production (liters)	17082	11788	413	440	410	360.5	108



During the year, total of 31579.5 liters of bio-fertilizers was produced and distributed to farmers during Krishi Mahotsav-2011.

Training on Bio-pesticides/Bio-fertilizers benefited 9301 students, farmers and technical persons from various private companies.

Under RKVY scheme 9,326 farmers/students were trained on utility of Bio-pesticides/Bio-fertilizers.

Disease sample diagnosed : 166

Farmers/Gram Sevak training classes : 19

T & V workshop : 3

Pre seasonal training lectures : 2

Technical guidance at farmers field : 5

Agricultural Entomology

During the year 2010-11 the department of Agricultural Entomology produced & distributed 3082 trico card and 4141 chryso cards for biological control of insect/pest control to farmers of south Gujarat.

Agricultural Chemistry and Soil Science

The department of Soil Science and Agricultural Chemistry analyzed soil, water, fertilizer and compost samples received from the farmers and also analyzed 14555 soil samples for preparation of soil health cards.

The one month training for analysis of soil, manure, fertilizer, irrigation water and effluent was given to the staff members of Sugar Factories working in south Gujarat.

Department of Extension Education

During the phase of co-operatives, non-government organization, NAU research stations and training institutes, the exposure of field extension activities were shown to the student as first hand information. Specifically, during the farm family phase the students were sent to the farms of selected progressive farmers where, group meetings were organized in ten villages by the students.

Department of Plant Breeding & Genetics

Production of tissue culture plants of banana for farmers.

Production and selling the seeds of Gujarat Navsari Turmeric -1 for farmers.

Participation in Krishi Mela and Krishi Shibir with departmental store of banana tissue culture plants and spices.

Participation in farmers training arranged by Mega seed Project and KVK of the University.

Given the standardized protocol of Ginger (*Zingiber officinale* Rose).

Other Activities

The main college farm possesses 100 ha of cultivable land for production of quality seeds of different major crops. During the year 2010-11 college farm produced and sold seeds and plantlets of various crops. Details are given as under :

Crop	Quantity in kilo gram	Rupees
Sugarcane	13,01,510	34,86,627/-
Paddy	91,725	13,78,155/-
Banana	70,790	4,83,180/-

Thus main college farm earned Rs. 53.48 lakhs against the sale of seeds and plantlets.

The Horticulture department of the college also have Nursery having 115 ornamental plant species and earned Rs. 1,06,377/- by selling them during year 2010-11.

The department of Plant Breeding and Genetics has produced 3000 Tissue culture Banana plant during year 2010-11.

Research Publications

National Journals	International Journals	Paper presented at Seminar/Symposium/Conference	Publication in vernacular language	Total
63	10	16	40	129



Research Paper

Department of Agricultural Entomology

1. Chavan, N.P.; Rote, N.B.; Patel, M.B. and Shinde, S.V. (2010). Comparative biology of sorghum stem borer, *Chilo partellus* (Swinhoe) (Lepidoptera : Pyralidae) on different sorghum genotypes/cultivars. *Trends in Biosciences*. 3(2): 184-186.
2. Kadu, R.V.; Patel, M.B. and Pandya, H.V. (2010). Biology of *Ceratovacuna lanigera* Zehntner on sugarcane in Gujarat. *Insect Environment*. 15 (4): 190-191.
3. Kadu, R.V.; Patel, M.B. and Pandya, H.V. (2010). Nature of damage of *Ceratovacuna lanigera* Zehntner on sugarcane in Gujarat. *Insect Environment*. 15 (4): 177-178.
4. Patel, B.P.; G. G. Radadia and H. V. Pandya (2010). Biology of leaf eating caterpillar, *Noorda blitealis* Walk. on drumstick, *Moringa oleifera* L. *Insect Environment*. 16 (3): 135-138.
5. Patel, M.B. and Pandya H.V. (2010) Study on nature of damage of *Ceratovacuna lanigera* Z. on sugarcane in Gujarat. *Insect Environment* Vol. 16 (3) pp.109.
6. Patel. K.A., Patel, M.B., Patel, Gajjar, S.N., Patel, A.J. and Desai H. R. (2011) Efficacy of different acaricides against chilli yellow mite *Polyphagotarsonemus Latus*, and its safety to predator mite. *Recent Advancces in seed spices*. Editors Y. Rajendrababu, R. K. Jayman, K. D. Patel and S. B. S. Tikka.
7. Suresh B.V. and Patel, M.B.,(2010) Record of Aphid parasitoid. (*Diaeretiella rapae*) on mustard aphid, *Lipaphis erysimi* *Insect Environment* Vol. 16 (3) pp.103.
8. Sureshkumar B.V. and Patel, M.B. (2010) Seasonal activity of predator *Menochilus sexmaculatus* F. on *Lipaphis erysimi* K *Insect Environment* Vol. 16 (3) pp.100-101.

Department of Horticulture

1. Bhalerao R,R.; B.R. Parmar, B.V. Padhiyar and P.P. Bhalerao (2010). Pre harvest spray of

different sources of calcium to improve the biochemical qualities of sapota (*Manilkara achras* (Mill) Fosberg) fruits Cv. Kalipatti. *Asian J. of Horticulture*, 5(1) June - 2010: 93-95.

2. Bhalerao R,R.; B.R. Parmar, P.P. Bhalerao, S.S. Gaikwad and S.J. Patil Pre harvest spray of calcium on shelf life of sapota fruits *Manilkara achras* (Mill) Fosberg) Cv. Kalipatti. *Green Farming* Vol.1(2) : 152-154 , (March-April,2010).
3. Chaudhary, S.S.; B.R. Parmar and P.B. Parmar (2010). Effect of foliar application of nitrogen and zinc on growth, yield and quality of cauliflower cv. Snowball-16. *G.A.U.,Res. J. S.K. Nagar*. 35(2): 97-101.
4. Deshmukh, U.M.; B.R. Parmar; R.V. Tank and P.P. Bhalerao (2010). Study on pre-cooling treatments in sapota (*Manilkara achras* (Mill) Fosberg) for extending ripening process cv. Kalipatti. *Int.J.of Bio Science Reporter*, 8 (1) 2010 : 123-127.
5. Parmar B.R.; V.B. Patel ; P.P. Bhalerao and R.V. Tank (2010). Effect of different plant growth regulators on vegetative propagation of *Bougainvillea peruviana* cv. Touch Glory through hard wood cutting. *Asian J. of Horticulture*, 5(1) June - 2010: 222-224.
6. Patel, R.G.; B.R. Parmar and S.J. Patil (2010). A study on biochemical changes of sapota varieties in cold storage with application of GA-3. *Asian J. of Horticulture*, 5(1) June - 2010: 127-130.
7. Patil, P.D.; B.R. Parmar; P.P. Bhalerao and R.R. Bhalerao (2010). Effect of storage and packing materials on shelf life of bottle gourd (*Lagenaria siceraria* L.) cv. Pusa Naveen. *Asian J. of Horticulture*. 5(1) June - 2010: 214-217.
8. Somi R.G.; C.B. Patel; B.R. Parmar and P.P. Bhalerao. Effect of pre harvest application of some chemicals on post harvest life of banana (*Musa paradisiaca* L.) fruit cv. Grand Nain. *Int. J. of Bio Science Reporter*, 8 (1) 2010 : 123-127.
9. Sumer Singh; B.R. Parmar; P.P. Bhalerao ;M.P. Ahir and R.V.Tank (2010). Influence of pre-drying treatments and drying methods on



biochemical properties of different recipes of aonla product preparation. *Asian J. of Horticulture*, 5(1) June - 2010: 199-202.

10. Sumer Singh; B.R. Parmar; P.P. Bhalerao ;R.R. Bhalerao and R.V. Tank (2010). Influence of pre- drying treatments and drying methods on storability with different recipes of aonla product preparation. *Int. J. of Bio Science Reporter*, 8 (1) 2010 : 185-189.
11. Yadav, M.K.; N.L. Patel; B.R. Parmar; Kirti Bardhan and Paramveer Singh (2010). Effect of micronutrients on growth and crop duration of banana cv. Grand Nain. *Progressive Horticulture*, Vol.42(2) 162-164.

Department of Agricultural Chemistry and Soil Science

1. A.R. Gajera, A. M. Bafna, R. G. Patil and Z. N. Patel (2010) " Soil health as influenced by integrated nutrient management in palmarosa (*Cymbopogon martini*). *Green Farming* 1 (6): 568-571.
2. H. M. Patel, A. M. Bafna and Z. N. Patel (2010) "Yield and quality of castor as affected by INM". *Green Farming* 1 (3): 263-265
3. H.M. Viradia, H.D. Mehta, V. N. Parmar, A. M. Bafna, Z. N. Patel and R. C. Gami (2010) " Integrated nutrient managemnet in transplanted rice" *Green Farming* 1 (3): 249-252.
4. N.D. Desai, A.M. Bafna and R.G. Patil (2010) "Fertigation and planting geometry studies on tomato. *Green Farming* 1 (4): 383-385.
5. P.Y. Patil and A. M. Bafna (2010) " Effect of moisture regimes and Fertigation on growth and flowering parameters of gladiolus" *Green Farming* 1 : 1-4.
6. S.Tripathi, H.M. Patel, P.K. Srivastava and A. M. Bafna (2010) "An assessment of ground water quality of eighteen selected locations of South Gujarat. *Indian J. Environ. and Ecoplan.* 1 (18): 177-184.

Department of Agronomy

1. Patel, V.S. and Patel, D. D. (2010), Bio-organic

nutrient management in sugarcane (*Saccharum officinarum* L.). *Green Farming*, 3(2). 85-87.

2. Patel, V.S. and Patel, D. D. (2010), Sustenance of soil health and productivity of sugarcane through different levels and source of organics. *Green Farming*, Vol. 1(3): 266-269.
3. Raj, V. C., Arvadia, M. K. and Patel, D. D. (2010) Effect of integrated weed management on rabi green gram (*Vigna radiata*). *Green Farming*, Vol. 1(4): 377-379.
4. Patel, V.S. and Patel, D. D. (2010), Effect of different sources and levels of organics on sugarcane (*Saccharum officinarum*). *Indian J. Agronomy*, Vol.55 (2) :152-156.

Department of Plant Breeding and Genetics

1. Gawali, S.T., Khandelwal, V., Chauhan and Lodam, V.A. (2011) Heterosis and combining ability in Indian bean. *Journal of Food Legumes* 24(2): 145-147.
2. Ghodke, U.R. and Patil, P.P (2011) Variability for Yield and Quality Traits in (Single-Cut) Forage Sorghum [*Sorghum Bicolor* (L.) Moench]. *Indian J. Plant Genet. Resour*; 24 (2):205-210.
3. Jadhav, A.R., Chaudhari, K.N., Desai, R.T., Kodapally, V.C. and Shinde. D.A., (2011) Correlation and path in (Single-Cut) forage sorghum [*Sorghum bicolor* (L.) Moench] *Forage Res*; 35 (3): pp. 175-179
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Extension Education

1. Salunkhe S. R. and R. D. Pandya (2011) Role of KVK in transfer of technology, Agrobios News Letter, pp50.

Student's Activities

Student's participation in NSS activities

Sr. No.	Programmes	Months	Participants	
			Boy's	Girl's
1.	Consumer Act Training Programme	July-2010	10	-
2.	All India essay writing competition	July-2010	3	-
3.	Women's right and consumer Act Training programme	August-2010	26	38
4.	Cleanliness camp	August-2010	68	34
5.	Awareness Programme on Ragging	August-2010	79	30
6.	Legal awareness programme	September-2010	78	24
7.	Vanche Gujarat programme	September-2010	64	11
8.	Vanche Gujarat programme	October-2010	60	15
9.	Blood donation camp	October-2010	08	03



Sr. No.	Programmes	Months	Participants	
			Boy's	Girl's
10.	Vanche Gujarat programme (Three days Shibir) at Gandhinagar	February-2011	01	-
11.	Thelesemia Checkup camp	March-2011	144	51

Performance of N.M. College of Agriculture student at Inter Agricultural Universities Competitions

Badminton (Boys) Winner Team (University Player)			
1.	Shiroya Maheshkumar S.	2.	Fefar Rohitkumar M.
Badminton (Girls) Winner Team (University Player)			
1.	Shashikanta Mishra		
Table-Tennis (Boys) (University Player)			
1.	Kaneriya Upendrakumar J.	2.	Lathiya Sandipkumar V.
Table-Tennis (Girls) Winner Team (University Player)			
1.	Rudani Amruta		
Basket Ball (University player)			
1.	Vasadiya Bhumirajsinh S.	2.	Sitaram Choudhary
Volly Ball (University Player)			
1.	Patel Dhruvilkumar	2.	Shaikh Naweed
3.	Gamit Viral		
Kabadi (University Player)			
1.	Vasadiya Bhumirajsinh S.	2.	Gavit Chandrakant S.
3.	Jalondhara Rasik M	4.	Kamani Milan D
Kho-Kho (University Player)			
1.	Patel Ravindra V.	2.	Lipne Shushil V.
3.	Dongare Sanjay	4.	Misal Nitin B.
5.	Gavit Chadrakant	6.	Ramani Pankaj
Chess Winner Team (University Player)			
1.	Kulkarni Manoj		
Cricket Winner Team (University Player)			
1.	Chaudhari Akashkumar	2.	Chaudhari Pankajkumar
3.	Chaudhari Sunil	4.	Khambhu Chirag
5.	Jalondhara Rasik	6.	Lipne Shushil V.
7.	Bokare Sachin P.		

Participated at All India Inter Universities Sports at Kochi, Kerala

Badminton (Boys)			
1.	Shiroya Maheshkumar S.	2.	Fefar Rohitkumar M.
Badminton (Girls)			
1.	Shashikanta Mishra		



Table-Tennis (Boys)			
1.	Kaneriya Upendrakumar J.	2.	Lathiya Sandipkumar V.
Table-Tennis (Girls)			
1.	Rudani Amruta		

Activities of NMCA



Cleanliness camp



Cleanliness camp



Awareness program on anti ragging



Blood donation camp



Legal literacy Program





Experiential Learning

For skill development under Experiential learning, 78 students undergone hands on training at the UG level as a part of the RAWE program in bio fertilizer laboratory. Fifteen students were actively involved in producing 117795 liters of different liquid bio fertilizer at bio fertilizer laboratory of Department of Plant Pathology, N.M. College of Agriculture, Navsari



Hands on Training to Students at Bio fertilizers laboratory



Students at Practical Crop production



ASPEE College of Horticulture and Forestry

Introduction

The ASPEE College of Horticulture and Forestry is one of the important constituent college of Navsari Agricultural University . This college was approved by Krishi and Gram Vikas Vibhag of the Government of Gujarat vide its resolution No. Gkv/1087/317/K.2/Dated 01.02.1988 and started in November, 1988 at Navsari. The objectives were to bring out trained human resource, to generate new knowledge through research in relation to production and quality and to plan effective transfer of technology for development of horticulture and forestry sectors in the state and improving the environment, which is a world wide concern. For starting this college the generous donation of Rs. 40.00 lakhs was provided by ASPEE Foundation, Malad, Mumbai for Agricultural Research and Development and therefore, the college derived its name as ASPEE College of Horticulture and Forestry.

Presently, College of Horticulture and Forestry has 11 departments of horticulture and forestry faculties. Horticultural faculty offers 54 courses of 171 (78 Theory and 93 Practical) credits to B.Sc. (Horticulture) students, whereas, Forestry faculty offers 50 courses of 164 (81 Theory and 83 practical) credits to B.Sc. (Forestry). As per the IV Deans committee recommendations, the college has also started 3 experiential learning units in horticulture viz. (i) Protected cultivation of high value horticultural crops, (ii) Commercial production of horticultural crops and (iii) Post-harvest handling and value addition in horticultural crops. Similarly, forestry faculty also initiated two experiential learning unit (i) production of quality planting materials in forestry and (ii) commercial apiculture. ICFRE gave fund for construction of college building & hostels during 2006-07. Simultaneously, Government of Gujarat approved faculties for forestry, hence Forestry

faculty has been separated out.

During the year 2010-11, total 8 students cleared JRF and 7 students/alumni cleared NET, which reflects quality teaching at UG and PG level offered by College of Horticulture and Forestry. Moreover, staff members of college also delivered lectures and guide to large number of farmers engaged in horticultural and forestry activities.

Mission and Objectives

1. Imparting education in Horticulture and Forestry leading to B.Sc., M.Sc. and Ph.D. degrees
2. To generate new technologies through research in the area of Horticulture and Forestry.
3. Transfer of technology to stakeholders

Degree Programs

The college offers the following degree programs

1. Undergraduate programme: B. Sc. (Hons.) Horticulture and B.Sc. (Hons.) Forestry (4 years duration)
2. Postgraduate programme: M.Sc. in 12 subjects and Ph.D. in 09 subjects.

Increase in Intake Capacity

Looking to the demand in Horticulture and Forestry sector, the intake capacity was increased by 25% in Horticulture and by 10% in the Forestry faculty at the undergraduate level. There was also a 10% increase in the intake capacity of the Horticulture Polytechnic course.



M.Sc. Degree Programs

Horticulture		Forestry	
Sr. No.	Subject	Sr. No.	Subject
1.	Fruit Science	1.	Agroforestry and Ecology
2.	Vegetable Science	2.	Medicinal and Aromatic Plants
3.	Floriculture and Landscape Architecture	3.	Forest Genetic Resources,
4.	Post Harvest Technology	4.	Forest Biotechnology,
5.	Plantation crops, spices, medicinal and aromatic plants.	5.	Watershed Management.
6.	Horticultural Entomology		
7.	Horticultural Pathology		

Ph. D. Degree Programs

Horticulture		Forestry	
Sr. No.	Subject	Sr. No.	Subject
1.	Fruit Science	1.	Agroforestry and Ecology
2.	Vegetable Science	2.	Medicinal and Aromatic Plants
3.	Floriculture and Landscape Architecture	3.	Forest Genetic Resources,
4.	Post Harvest Technology	4.	Forest Biotechnology,
5.	Plantation crops, spices, medicinal and aromatic plants.		

Details of students enrolled during the year 2010-11

Sr. No	U.G.				M.Sc.				Ph.D.			
	Admitted		Pass Out		Admitted		Pass Out		Admitted		Pass Out	
	Hort.	Fort.	Hort.	Fort.	Hort.	Fort.	Hort.	Fort.	Hort.	Fort.	Hort.	Fort.
1.	38	28	23	25	52	19	6	4	14	03	01	01

List of Departments of the college

Horticulture		Forestry	
1.	Fruit Science	7.	Agro-forestry and Silviculture
2.	Vegetable Science	8.	Natural Resource Management
3.	Floriculture and Landscape Architecture	9.	Forest Product Utilization
4.	Plantation crops, spices, medicinal and aromatic plants.	10.	Forest Genetic Resources and Tree Improvement
5.	Post Harvest Technology	11.	Basic Science and Humanities
6.	Plant Protection		

There are eleven departments in the college of Horticulture and Forestry. All activities of different departments are looked after by seven professors, 13 Associate Professors and 39 Assistant Professors.



Faculty Strength

Sr. No.	Faculty	Professor	Associate Professor	Assistant Professor	Total
1.	Horticulture	3	8	18	29
2.	Forestry	4	5	21	30

Infrastructural Development

During the year expansion of building of College of horticulture and forestry was initiated. College already has three experiential learning units to promote "Learning by doing" and "Earn while you learn." Additionally, college has purchased many equipments to strengthen research activities of Department of Biotechnology and Department of NRM.

S.N.	Name of Instruments
Department of Biotechnology	
1.	Gel doc XR+Bio Rad with accessories and software
2.	Laboratory Deep Freezer Model No. LOF-9051-U Cap: 500lt.
3.	Laboratory centrifuge Machine Model No. 1-14
4.	Autoclave SLE series Model:7451 - 55x75cm
Department of NRM	
1.	Trinocular Stereo Microscope
2.	Tissue lyzer
3.	Nanophotometer
4.	Vertical Electrophoresis Unit
5.	Digitech Caliper
6.	Pressure Chamber Instrument
7.	Rolta Geomatic 10.3.1 User
8.	Vertex Laser Hypsometer
9.	Auto temperature controller

Research Achievements

The following recommendations were presented in 7th Meeting of Horticulture and Agro-forestry Research Sub Committee at JAU, 2011.

1. Effect of calcium hydroxide and ripening retardants on shelf life of sapota fruits.

The farmers of South Gujarat heavy rainfall zone-I, agricultural situation-III are advised to dip sapota fruits in 1 % calcium hydroxide for 5 minutes and wet rubbed after drying for improving the appearance of fruits then again dipped in 2, 4-D 4 ppm or GA3, 300 ppm or kinetin 100 ppm for extending the shelf life without affecting quality of sapota fruits as compared to farmers practice i.e. wet or dry rubbing only (2011).

2. Effect of packaging, pre-cooling and cold storage on shelf life of sapota

The wholesale buyers of sapota fruit (co-operatives/ traders) are recommended to establish a cold chain for extending shelf life of sapota fruits. Immediately after harvest, sapota fruits should be pre-cooled at 5 or 10 °C for 8 hrs in pre-cooling chamber. Subsequently, pre-cooled sapota fruits should be packed in perforated polythene bag (50 micron) and kept in CFB box and then stored at 12 °C in cold storage. This cold chain treatment extend the shelf life of sapota fruits up to 15 days without adverse effect on quality (2011).

3. Fertigation studies in papaya (*Carica papaya L.*) var. Madhu Bindu under South Gujarat conditions.

The farmers of south Gujarat heavy rainfall zone (AES-III) growing papaya var. Madhu Bindu are advised to adopt fertigation and apply 80% recommended dose of N and K₂O (160 g N and 200 g K₂O/plant) in 12 equal splits starting from 45 days after transplanting and subsequently at 15 days interval through drip irrigation along with 100 g P₂O₅/plant at 1½ month and at 3 months after transplanting as soil application. By adopting drip method of irrigation and fertigation, farmers can get 32 per cent increase in yield and 20 per cent saving of water and fertilizer as compared to



conventional method of irrigation along with maximum benefit cost ratio of 3.50. The distance between two laterals (16mm) should be 2.1 m and each plant having two drippers of 8 lph capacity placed at 30 cm on the either side of the plant trunk

and run the system at pressure of 1.2 kg/cm². The drip system should be operated for 50 minutes during August to September except rainy days, 70 minutes during September to February and 2 hours from March onwards at an alternate day.

List of Research Schemes

S.N.	Name of Schemes	Funding Agency	PI
1	AICRP on Tuber crops	ICAR	Shri K.D.Desai
2	Modernization of Agricultural University farm	ICAR	Technical Officer
3	AICRP on palm centre for coconut project	ICAR	Shri. M.M.Patel
4	A value chain on mango and guava domestic and export markets	ICAR	Dr. Parag Pandit
5	Vegitable improvement project	ICAR	Dr. S.N.Sarvaiya
6	B-1 (RHSP) seed production, Agricultural crops & fisheries, (RF)	ICAR(Revolving)	Dr. B.N.Patel
7	Scheme for research in fruit crop (horticulture), Navsari	Non plan	Dr. B.N.Patel
8	Establishment of poly school Aspee, Navsari	Non plan	Dr. N.B.Patel
9	Rastriya krushi vikas yojna Aspee Navsari.(RKVY)	Other agencies	Dr. D.B.Jadeja
10	Rastriya krushi vikas yojna Aspee Navsari.(RKVY)	Other agencies	Dr. B.N.Kolambe
11	Forest resource of Rajpipla forest division	Other agencies	Dr. Bimal S.Desai
12	Forest resource of Vyara forest division	Other agencies	Dr. N.S.Thakur
13	Forest resource of Valsad forest division	Other agencies	Dr. Suman Jha
14	National network on integrated development of Jatropha(Novod)	Other agencies	Dr. Taslim Ahmed
15	Food processing laboratory, Aspee college, Navsari	Other agencies	Dr.Z.P.Patel
16	Gujarat horticulture mission Aspee Navsari (GHM)	Other agencies	Dr. B.K.Dhaduk
17	National horticulture mission Aspee navasari(NHM)	Other agencies	Dr. M.M.Patel
18	National horticulture mission Aspee navasari(NHM)	Other agencies	Dr. B.N.Kolambe
19	National horticulture mission Aspee Navsari (Mangrol)	Other agencies	Dr. N.S.Patil
20	Bayer project. Aspee college, Navsari	Other agencies	Dr. S.P.Saxena
21	Jivika project (Mango), Aspee Navsari	Other agencies	Dr B.N.Patel
22	Jivika project (Banana) , Aspee Navsari	Other agencies	Dr. B.N.Kolambe
23	Jivika project, Aspee Navsari	Other agencies	Dr .S.N.Sarvaiya
24	Identification, isolation & molecular characterization of RCPCS in Ricinus comunis	Other agencies	Dr. M.K.Mahatma
25	Socioeconomic status and Ethanobotany of forest dwellers in the Dang	Other agencies	Dr. S.K.Jha
26	Biotechnological application for transforming the most abundant bacterial form industrial waste waters of south Gujarat for bioremediation	Other agencies	Shri Sanjay Jha
27	Research in vegetable crops, Navsari	Plan	Shri S.Y.Patel
28	Establishment of research project in floriculture, Navsari	Plan	Shri S.Y.Patel



S.N.	Name of Schemes	Funding Agency	PI
29	Strengthening of Horticulture research & development activities	Plan	Dr. B.N.Patel
30	Centre of Excellence on post harvest, Aspee college, Navsari	Plan	Dr. S.P.Sukla
31	Establishment of Agrilcultural experimental research station at Mangorl	Plan	Dr. N.S.Patil
32	Strengthening of tissue culture research & development at all campuses	Plan	Shri. Taslim Ahmed
33	Strengthening of department of bio-tecnology, Aspee Navsari	Plan	Dr. M.K.Mahatma
34	Establishment of Horticulture & Forestry college, Navsari	Plan	Technical officer
35	Research in agro-forestry system, Aspee college, Navsari	Plan	Dr. D.B.Jadeja
36	Establishment of dept. of Pl.physiology, tissue culture & biotechnology	Plan	Shri Taslim Ahmed
37	Research in papaya	Plan	Dr. B.N.Patel
38	Increasing the productivity of mango & sapota centre	Plan	Dr. B.N.Patel
39	Introduction apple var.anna & citrus	Plan	Dr. B.V.Padhiyar
40	Research in vegetable crops under protected condition	Plan	Dr. D.T.Desai
41	Upgrading existing of Horticultural Polytechnic at Navsari	Plan	Dr. N.B.Patel
42	Establishment of centre for PG Programme On PHT & Processes engineering,	Plan	Dr. S.P.Sukla
43	Strengthening of PG programme On PHT & Processes engineering	Plan	Dr. S.P.Sukla
44	Land spacing & tree plantation Aspee college Navsari	Plan	Dr.B.K.Dhaduk
45	Establishing organic farming cell at Navsari	Plan	Dr. B.N.Kolambe
46	Establishment of Fruit & Vegetable Packaging Res. Centre, Aspee	Plan	Dr. S.P.Sukla
47	Genetic enhancement of niche crops of SG CONVE & bio-technology, Mangrol	Plan	Dr. N.S.Patil
48	Genetic enhancement of niche crops of SG CONVE & bio-technology Mangrol,	Plan	Dr.N.S.Patil
49	Genetic enhancement of niche crops of SG CONVE & bio-technology, Navsari	Plan	Dr. D.T.Desai
50	Maximization of the total factor productivity of banana production system through value addition and by-product utilization	Plan	Dr. R.G.Patil Parag Pandit
51	Establishment of centre on environmental studies Aspee college Navsari	Plan	Dr. P.K.Shrivastav
52	Strengthening of college of forestry, Aspee, Navsari	Plan	Dr.D.B.Jadeja
53	Establishment of new department of bio-technology,	Plan	Shri Taslim Ahmed
54	Establishment of practical training centre for student of horticulture faculty for high-tech horticulture	Plan	Dr. B.K.Dhaduk



Honours/Awards/Recognition

1. Dr.N.L.Patel received Rashtriya Gaurav Award by India International Friendship Society, New Delhi
2. Dr.N.L.Patel got Glory of India Gold Medal by International Institute of Success Awareness, New Delhi
3. Dr.N.L.Patel was awarded Best citizen in India awarded by International Publishing house, New Delhi
4. Dr. D.U. Patel, Dr. S. C. Mali and Dr. A. I .Patel received the **second prize** for a research paper presented on "Sugarcane Variety CoN 05072 (Gujarat Sugarcane - 6) a new midlate variety released to increase and sustain sugar yield in South Gujarat Region" in the annual convention of Deccan Sugar Technologists Association meet at held at Pune on 11th September, 2010.

National Eligibility Test (NET)

During the year 2010, a total of 13 staff members of the college have cleared NET. In all, 8 staff members of horticultural faculty and 5 of forestry faculty have cleared NET during the year.

Students Awards and Recognition

Eight students including six from forestry and two from horticultural faculties have cleared the **ICAR- Junior Research Fellowship (JRF)** during the year. Ms. Shikha Goyel (rank -13), Mr. Ashok Dhakad (25), Ms. Poonam Khatri (27), Mr. Vinod Keron (32), Mr. Kamal Kishore (45) and Mr. Dharmendra Singh (52) qualified ICAR- Junior Research Fellowship (JRF) with high ranking from the forestry faculty. Similarly, Mr. Deepak Swami (101) and Prerak Gondaliya (1098) also qualified ICAR-JRF during the year from horticultural faculty.

A total of seven students /alumni of College of Horticulture and Forestry cleared **National Eligibility Test (NET)**. Mr. Sandip Sanghani, Ms. Deepal Kapadiya, Ms. Shakti Arbat, Mr. Gaurang Patel, Mr. Shivam Bhatt and Mr. Chirag Desai from

Horticultural and Mr.Vimal Patel from Forestry faculties cleared NET during the year 2010.

Practical Manuals Prepared

Four practical manuals were published in this period

S.N.	Authors	Title of the Manual
1.	Dr. S. P. Saxena and Dr. K. D. Parmar	Practical Manual of Apiculture
2.	Dr. S. N Sarvaiya	Practical Manual of Potato and Tuber Crops
3.	Dr. B.V. Padhiar, Prof. R.B. Patel and Dr. N. L. Patel	Practical Manual of Plantation and Spices
4.	S. K. Jha and S. Attar	Tree Breeding and Improvement-A Practical Manual

Reaching Farmers

Farmers Visit

Sr. No.	Research Station/ Farm/Unit	Number of farmers
1.	RHRS	1427
2.	Floriculture Farm	689
3.	Hi-Tech Horticulture Park	250

During 2010-2011, faculty members of ASPEE College of Horticulture and Forestry have delivered around 55 lectures to farmers on various aspects pertaining to production technology, plant protection and post harvest management of horticultural crops.

During Krushi- Mahotsav -2010, a total of twenty faculty members delivered talk /seminars/lectures on various topics of Horticulture and Forestry.

Student Activities

Participation in NCC Camps

Two NCC Camps (CATC-Valsad and Vadodara) were organized in this period. Leadership training, Personality development, weapon training, civil defense and trekking were important modules in these camps.



A Report on the Activities accomplished during the year 2010-2011

Sr. No.	Name of the Camp, Location and Duration	No. of Cadets Participated
1.	Blood Donation Camp, Navsari on October 02, 2010	16
2.	Bird Watching Camp, Navsari on October 03, 2010	15
3.	National Energy Public Awareness Rally, Navsari on January 01, 2011	35
4.	Combine Annual Camp, Valsad (April 29, 2011 to May 08, 2011)	37
5.	Combined Annual Training Camp, Baroda (July 18-28,2011)	25
6.	Trekking Camp, Tirupati (July 17, 2011 to August 01, 2011)	04
7.	Thal Sainik Camp, Vaso (July 30, 2011 to August 08, 2011)	04

'B' and 'C' Certificate Examination

Student-cadets Appeared
'B' Certificate Examination
46 Cadets
'C' Certificate Examination
62 Cadets

Cadet Khusbu Nayak, a student of IInd Sem. B. Sc. (Hort) won the first prize in Shooting Event in Combined Annual Training Camp

Participation in NSS Camps

About 461 students participated in six NSS programs organized by Aspee College.

Month and Activity	Participants	
	Boys	Girls
August -2010		
Orientation Program	44	34
Cleanliness Camp	60	40
Awareness Program on Ragging	102	53
September-2010		
Legal Literacy Camp	39	28
October-2010		
Blood Donation Camp	09	02
March-2011		
Special Camp	26	24
Total	280	181

Other activities

Cycling by Natures Club on 30th January, 2011
Annual Social Gathering on 17th March, 2011

World Forestry Day on 21st March, 2011

Placement Cell Activities

Thirty one students of ASPEE College of Horticulture and Forestry got employment through the placement cell in the public and private sector as well in NGOs.

New Gold Medals Added

A donation of Rs. 10 lakhs was received from the ASPEE Foundation, Mumbai towards awarding gold medals to meritorious UG and PG students.

Newly Formulated Board of Studies

Different Board of Studies was formulated in Fruit Science, Vegetable Science, Floriculture, Plant Protection, Basic and Allied Sciences, Natural Resource Management, Agro-forestry and Tree Improvement. This Board of Studies shall meet at regular intervals and suggest modifications aimed at improving the standard of Academic, Research and Extension activities in their respective subjects.

Publications

National Journals	Paper present- ed at Seminar/ Symposium/ Conference	Popular Article/ Books/ leaflets	Total
32	41	33	106



Research Papers Published in National Journals

1. Hegde, H.T., Gopikumar, K., Samom, K., Hegde, N. and Jha S.K. (2011). Calorific Value Assessment of Selected Tropical Tree Species of the Southern India for Higher Fuelwood Potential. *Indian Journal of Ecology*, 38.
2. Kansara R.V., Sanjay Jha, M. K. Mahatma and Suman Jha (2010) In vitro regeneration of castor plant from apical meristem. *J. Oilseed Res.* 27: 30-38.
3. Mali, S.C., Patel, A.I., Patel, D.U. and Patel, C.L. (2010). Variability, Correlation, Path analysis and Genetic Divergence in sugarcane. *Research on Crops*, 11(2):497-504.
4. Naik, V. R., Patel, P. B., Barvalia, V. D., Arvadiya, L. K. and Patel, R. G. (2011). Effect of irrigation, mulching and nitrogen levels on yield of summer okra grown in coastal salt affected soils. *Green Farming*, 2 (2): 199-200.
5. Pancholi, B. Y., J. R. Desai, Saravaiya, S. N., Patel, N. M. and Patel, R. B. (2010). Response of Anthurium to foliar application of urea and growth regulators in shade net house. *The Asian J. Hort.*, 5 (1): 203-207.
6. Paramveer Singh, B. K. Dhaduk and S. L. Chawla (2011). Standardization of growing medium for Anthurium cv. Flame under protected conditions. *Indian J. Hort.*, 68 (1): 86-90.
7. Patel D. A., Patel, H. C., Saravaiya, S. N. and Musu, M. M. (2010). Physico-chemical status of d't Genotypes and Hybrids of Aonla. *The Asian J. Hort.*, 4 (2): 461-463.
8. Patel P. R and Shukla, A. (2011). Investigation on seasonal incidence of banana aphid, *Pentalonia nigronervosa* (Coq.) and bunchy top disease. *Uttar Pradesh J. Zool.*, 31 (2): 191-193.
9. Patel, A. I., Mali, S. C., Patel, U. G. and Patel, D. U. (2010). Stability analysis for seed cotton yield and component traits in intra and interspecific crosses of GMS based Asiatic cotton. *Research on Crops*, 11(2):483-490.
10. Patel, A. R., Saravaiya, S. N., Patel, A. N., Desai, K. D., Patel, N. M. and Patel, J. B. 2010. Effect of micronutrients on yield and fruit quality of Banana (*Musa paradisiaca* L.) cv. "Basarai" under pair row planting method. *The Asian J. Hort.*, 5 (1): 245-248.
11. Patel, D. U., Mali, S.C. and Patel, A. I. (2010). Studies in ratooning ability of midlate maturing sugarcane varieties in south Gujarat. *Indian Sugar*: 27-30.
12. Patel, K. A., Desai, J. R., Saravaiya, S. N., Patel, N. B. and Patel, N. M. (2010). Influence of organic manures and chemical fertilizers on growth and yield attributes as well as economics of Golden rod cv. "Local Yellow" under South Gujarat conditions. *Internat. J. Agric.Sci.*, 6 (1): 253-258.
13. Patel, N. B., Saravaiya, S. N., Patel, B. N. and Desai, K. D. (2010). Studies on Integrated Nutrient Management (INM) in Elephant Foot Yam. *The Asian J. Hort.*, 5 (1): 32-33.
14. Patel, N. I., Padhiar, B. V. and Patel, N. B. (2010). Effect of post harvest treatments on storage life of bananas cv. Grand Nain. *The Asian J. Hort.* 5 (1): 80-84.
15. Patel, N. M., Desai, J. R., Saravaiya, S. N., Patel, N.B. and Patel, R.B. (2010). Influence of chemical fertilizers on growth, quality, corm and cormel production of gladiolus (*Gladiolus grandiflorus* L.) cv. "Sancerree" under south Gujarat conditions. *The Asian J. Hort.*, 5 (1): 123-126.
16. Patel, P. R and Shukla, A. (2010). Studies on host pathogen interaction of banana bunchy top. *International J. of Plant Protection*, 2 (2):176-177.
17. Patel, V. I., Saravaiya, S. N., Arvadia M. K., Chaudhari, J. H., Ahir, M. D. and Bhalerao, R. R. (2010). Effect of conjunctive use of bio-organics and inorganic fertilizers on growth, yield and economics of rabi fennel *Internat. J. Agric.Sci.*, 6 (1): 178-188.



18. Saravaiya, S. N., Chaudhari, P. P., Chauhan, G. G., Patel, N. B., Patel, K. A. and Chaudhari, J. H. (2010). Influence of spacing, time of planting and seed corm size on yield of Elephant Foot Yam (*Amorphophallus paenifolius* (Dennst.)) Nicolson.cv. "Gajendra" under South Gujarat conditions. *The Asian J. Hort.*, 5 (1): 119-120.
19. Saravaiya, S. N., Chaudhari, P. P., Patel, D. A., Patel, N. B., Ahir, M. P. and Patel, V. I. (2010). Influence of Integrated Nutrient Management (INM) on growth and yield parameters of Elephant Foot Yam under South Gujarat condition. *The Asian J. Hort.*, 5 (1): 58-60.
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23. Saravaiya, S. N., Patel, N. B., Ahir, M. P., Patel, N. M., Desai, K. D. and Patel, J. B. (2010). Integrated Nutrient Management (INM) approach for brinjal (*Solanum melongena* L.) and other Solanaceous vegetables - A Review; *Agric. Reviews.*, 31 (2): 79-92.
24. Shindhe, K. A., Patel, R. M. and Shah, R. R. (2010) Proliferation, rooting and acclimatization of micopropagated grape cv. Thompson Seedless. *International J. Plant Science*, 5(1): 98-101.
25. Shukla, A. and P. R. Patel (2010). Comparative biology of banana aphid, *Pentalonia nigronervosa* (Coq.) on banana cultivars. *Indian J. of Applied Entomology* (1): 1-6.
26. Shukla, A. and P. R. Patel (2011). Biology, Food Utilization and Seasonal Incidence of *Spodoptera litura* (Fab.) on Banana cv. Grand Naine. *Research Journal of Agricultural Sciences*, 2(1):49-51.
27. Sinha Satishkumar (2010). Tree-ring analysis of teak (*Tectona grandis* L.F.) from Western Ghats of India as a tool to determine drought years. *Emirates Journal of Food and Agriculture*, 22(5).
28. Sinha Satishkumar (2010). Wound response in teak trees from western ghats of India and its potential in dendroecology. *Indian Forestry*.136(5).
29. Sinha Satishkumar (2011). Dendro climatic analysis of teak (*Tectona grandis* L.F.) annual rings from two locations of peninsular India. *Current science*.100(1).
30. Sreedevi, M., Patil, N. S. Jha, S. K., Anish S. (2011). Harvest related nutrient Export from fast growing multipurpose trees (MPTS): a case study from South Gujarat. *Indian J. Eco*, 138.
31. Sreedevi, M., Patil, N. S., Jha, S. K. and Anish, S. (2011). Short Rotation Forestry as a Viable Option for GHG Mitigation. *Indian Journal of Ecology*, 38.
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Activates of Aspee college of Horticulture & Forestry



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Faculty Participation in Fourth Indian Horticulture Congress Organized in New Delhi



Products Prepared by Students under Experiential Learning



Celebration of Van Mahotsav Week