INDIAN COUNCIL OF AGRICULTURAL RESERPCT **ACCREDITATION BOARD** 

The College of Horticulture, Vellanikkara a constituent college of Kerala Agricultural University, Thrissur submitted a Self-Study Report to the Indian Council of Agricultural Research, New Delhi, for accreditation, giving details indicating the fulfillment of accreditation criteria. The ICAR sent a Peer Review Team to the university, which visited the College and submitted its report to the Council.

Upon the recommendation of the ICAR Peer Review Team and the Education Division, and being satisfied that the College fulfils the minimum accreditation criteria, the Accreditation Board is pleased to accredit the College for Three years from the date of issue of this letter. The University will keep the ICAR informed about any major changes with respect to Administration, Financial Resources and Academic Programs of the College. The University will also submit half yearly updates on progress for implementation of decisions of the Board for further

**KAU LIBRARY** 

the Board for further institutional programs.

J-C- Kalja J.C. Katyal

Deputy Director General (Edn.), ICAR

& Vice Chairman, Accreditation Board

IR/KAU COH/PRO

Mangala Rai Director General, ICAR & Chairman, Accreditation Board

Date: August 25, 2004 Place: New Delhi

Same a

805880



# Vice Chancellor's Message



### KERALA AGRICULTURAL UNIVERSITY

Main Campus, Kerala Agricultural University P.O. Thrissur 680 656, Kerala

**K.R. VISWAMBHARAN**, LAS VICE CHANCELLOR

> It gives me immense pleasure to know that the College of Horticulture is set to bring out the College Profile 2007. Lot of good work is being done in the University that goes unnoticed, and hence, unrecognized within the University, let alone among the general public. It is in this context that the Associate Dean and his dedicated team have come out with a wealth of information about the splendid work being done in the field of agricultural education, research and extension in the College of Horticulture.

> The College has brought laurels to the University in all the above core areas at the national level. I sincerely wish that this publication may bridge the information gap between Kerala Agricultural University and the farming community.

With best wishes,

K.R. Viswambharan, IAS

KERALA AGRICULTURAL UNIVERSITY

Phone: 0487- 2370790(O) 2330344(R) Telefax:0487- 237370790 Fax:0487- 2370019 Mohile: 94471360344 E-mail: rajeevanpk@ yahoo.com



Associate Dean's

Message

DR. P.K. RAJEEVAN Associate Dean

Date: 26-10-2007

I am extremely happy to present the College Profile 2007, a compendium on the achievements, laurels and recognition made by the College since its inception. The compilation, I am sure, would be a nostalgic journey back to the student days of most of the teachers of this great institution.

It is a matter of great prides to all of us that the institution has fulfilled its mandate in the sphere of agricultural education, research and extension with great distinction. I hope that this publication will bring to light the standards set by the Faculty in all the spheres of agricultural education.

I also take this opportunity to appreciate the hard work done by the team of Dr. Satheesh Babu, Dr. T.E. George and Dr. T. Radha in bringing out the publication in the present form.

Best wishes to all staff and students of the college.



P.K. Rajeevan





### **CROP PRODUCTION**

- \* Agronomy
- Soil Science & Agrl. Chemistry
- Agrl. Meteorology
- stream Agrl. Engineering

### **CROP PROTECTION**

- Agrl. Entomology
- Plant Pathology

### HORTICULTURE

- Plantation Crops & Spices
- Pomology, Floriculture and Landscaping
- Olericulture
- Processing Technology

### **SOCIAL SCIENCES**

- Agrl. Economics
- Agrl. Extension
- Agrl. Statistics
- Home Science
- Physical Education

### CENTRES

- Centre for Plant Biotechnology and Molecular Biology (CPBMB)
- Centre for Land Resources Research and Management (CLRRM)
- Centre for Education Technology
- Distributed Information Centre (DIC)
- Radio Tracer Laboratory (RTL)
- Cadbury-KAU Co-operative Cocoa Research Project (CCRP)
- Centre for Plant Disease Identification and Documentation (CPDID)
- Agricultural Microbiology Unit (AMU)

### ALL INDIA CO-ORDINATED RESEARCH PROJECTS

- \* All India Network Programme on Agricultural Ornithology
- All India Coordinated Research Project on Agro meteorology
- All India Coordinated Research Project on Biological Control of Crop Pests and Weeds
- All India Coordinated Research Project on Floriculture
- \* All India Coordinated Research Project on Medicinal and Aromatic Plants
- All India Coordinated Research Project on Soil Test and Crop Response Correlation
  - All India Coordinated Research Project on Vegetable Crops
    - All India Coordinated Research Project on Weed Control



The College activities were initially taken up in the Veterinary College Campus during 1972 at Mannuthy and later shifted to the KAU Main Campus, Vellanikkara in 1977. At present, the College functions in the academic blocks II and III while the academic block I is occupied with university administrative affairs. It has grown many fold since its inception and has a very good academic record with excellent faculty. The faculty strives hard to attain excellence in teaching, research and extension in the field of Agriculture. It is one of the three Colleges of Agriculture, located centrally in Kerala.

- 1972 Established the College on 28<sup>th</sup> October, 1972 and introduced B.Sc. (Hort.)-IV year course with an intake of 20 students
- 1976 Commenced two year M.Sc. (Ag.) in major disciplines and UG intake increased to 30
- 1977 Introduced B.Sc. (Ag.)-IV year course with an intake of 50. Colleae activities shifted to KAU main campus.
- 1979 Commenced Ph.D programmes in major Agriculture disciplines. Also commenced M.Sc. (Ag.) in Agricultural Statistics and PG diploma in NRP. UG intake increased to 90 [B.Sc. (Ag.)-50 and B.Sc. (Hort.)-40]
- 1980 Both B.Sc. (Hort.) and B.Sc. (Ag.) were unified as B.Sc. (Ag.)-IV year course with an intake of 75
- 1981 Commenced Ph.D in Soil Science and Agrl. Chemistry
- \* 1983 Commenced M.Sc. (Ag.) in Plant Pathology and Ph.D in Plant Breeding and Genetics
- 1984 Commenced M.Sc. (Ag.) in Agricultural Extension
- 1985 Commenced M.Sc. (Ag.) in Processing Technology
- 1993 Commenced M.Sc. in Food Science and Nutrition
- 1994 Commenced M.Sc. (Ag.) in Agricultural Meteorology
- 1996 Established 'Padmasree' Paul Pothen IFFCO Chair in Agrl. Economics
- 2000 Commenced Ph.D in Food Science and Nutrition
- \* 2001 Stood first at national level in obtaining JRFs (ICAR) and placements for higher studies
- 2002 Again, stood first at national level in obtaining JRFs (ICAR) and placements for higher studies
- 2003 Commenced M.Sc.(Ag.) in Plant Biotechnology. Bagged the prestigious "Biotech Products and Process Development and Commercialization Award" for outstanding performance during the last five years
- 2004 Stood first at national level in obtaining JRFs (ICAR) and placements for higher studies. The performance of the College resulted in receiving the mosted coveted Sardar Patel Outstanding ICAR Institution Award in the year August 2004
- 2005 Stood third at national level in obtaining JRFs (ICAR) and placements for higher studies
- 2006 Our faculty members got recognition in their respective fields at the national level.



# Mandate



- To attain excellence in education, research and extension in the field of Agriculture
- To conduct location specific and need based research
- To generate technologies for improving production and productivity of tropical crops
- To implement effective extension programmes for efficient transfer of technology
- To produce breeder and foundation seeds, and
- To provide consultancy services in the fields of Agriculture and Horticulture

Location



The College is situated in the main campus of KAU at Vellanikkara in Thrissur District. Located almost in the middle of the State on NH-47, about 13 km from the Thrissur Railway Station and 60 km from the International Airport, Kochi. The College is easily accessible by Road, Rail and Air. The geographical co-ordinates of the location of the College are 10°32'N and 76°16' E with an altitude of 22.5 m above MSL.

# **Academic Programmes**

PROGRAMME	DURATION	INTAKE CAPACITY
B.Sc. (Ag.)	8 SEM	59*
M.Sc.(Hort.)	4 SEM	12
M.Sc.(Ag.)Agronomy, Agrl. Meteorology, Agrl. Entomology, Plant Pathology, Soil Science &Agrl. Chemistry, Plant Breeding & Genetics, Agrl. Extension, Agrl. Economics and Biotechnology	4 SEM	45
M.Sc.(Ag. Stat.)	5 SEM	2
M.Sc.Home Science (FS&N)	4 SEM	4
Ph.D (Ag.)	6 SEM	12
Ph.D (Hort.)	6 SEM	6
Ph.D Home Science (FS&N)	6 SEM	2 +

\*50 seats- state quota based on a state level entrance test 9 seats- ICAR quota + alternate years

DEGREES	AWARD	ED
C		1450

5

### **CURRENT STRENGTH**

Undergraduates	:	188	(48 boys +140 girls)
Postgraduates	:	68	(15 boys+53 girls)
Ph.D students	:	14	(5 boys+ 9 girls)

# **STUDENTS' ACHIEVEMENTS**

YEAR	2000	2001	2002	2003	2004	2005
JRF/ Placements for PG studies	23''	21	23.	21	22.	16***

\* First at the national level, \*\* Second at the national level, \*\*\* Third at the national level



**K.Dhinesh Babu** receiving Jawaharlal Nehru Award for Post graduate Research - 2006



**Dr. Baby Lizy Markose** receiving Dr. Harbhajan Singh Award (2001) from Sri. Sompal, Union Minister of State for Agriculture



**D.Jacob** KSCSTE Research Fellowship-2003-06

Joe M. Louis

Graduate Associateship

in the University of Wyo-

ming (USA) - 2004



**Kausalya V.** Young Scientist Award in the Kerala Swadeshi Science Congress-2005



**Ajay Nair** Graduate Associateship in the University of Maine (USA)-2003



Ninoj K.A. IRMA, Anand-2005



**Lency Thomas** Young Scientist Award to PG students 2002

**Faculty Award/Recognition** 



Ratna Prabha Graduate Associateship in Idaho State University (USA)-2005



**Musthafa Kunnathadi** Young Scientist Award to PG students 1996



Roopesh Ram Graduate Associateship in Kansas State University (USA)- 2005



**T. Pradeep Kumar** Dr. Harbhajan Singh Award - 1993



The award winning scientists of the 2 <sup>nd</sup> International Rice Congress –2006 with Dr.M.S. Swaminathan



Excellency, the Governor of Karnataka



Dr. K.V.Peter receiving Dr. M.H. Sri. E.U.Rajan receiving the National Marigowda National Award (2000) for Award SILVER STAR (2006) from Dr.A.P.J. the Best Horticultural Scientist from Her Abdul Kalam, His Excellency, President of India at Rashtrapathi Bhavan



Dr. P.A. Valsala receiving Jawaharlal Nehru Award-1996



Team Award-2003



Scientist Award-2000



Dr. P.A. Nazeem receiving Best Biotech Dr. P.B. Pushpalatha receiving Young Dr. M.R. Shylaja receining Jawaharlal Nehru Award-1997



Dr. P.K. Rajeevan Gold Medal from the Horticultural Society of India (2005) in recognition of his contribution and leadership in floriculture.



Dr. T.R. Gopalakrishnan nominated as a Fellow of Indian Society of Vegetable Science (2005) in recognition of his contribution in the field of vegetable research



Dr.C.T. Abraham Biotechnology National Associateship at JNU - 1991-92, Overseas training at Auburn University, USA - 1994



Dr. P.S. John KRIBHCO Award-1992. TSI-FAI-IFA Award, 2006



Dr. T.E.George IndoAmerican Hybrid Seeds Gold Medal (1998) UAS Gold Medal (1990) Young Scientist Award (1991)



Dr. Jiji Joseph Dr.M.S. Swaminathan Gold Medal (1998) Dr. Ramaiah Gold Medal for best PhD thesis, TNAU



**Dr. Jose Mathew** P.N.Deshmukh Young Agronomist National Award- 1995 BOLT Award, 2004



Dr. C.R.Elsy Ponnaiyya Gold Medal (1992) for best PhD thesis, TNAU Young Scientist Award (1999) BOLT Award(2003)



Dr. Meera V. Menon Best Paper Award of the Indian Society of Plant Physiology-2000

### Commonwealth Fellowships

Dr. A.I. Jose Dr. C.C. Abraham Dr. K.V. Peter Dr. C. Ramachandran Dr. M.S. Rajeevan Dr. J. Thomas Dr. P.V. Balachandran Dr. P.V. Balachandran Dr. E.K. Lalithabai Dr. S. Pathummal Beevi Dr. T.P. Murali Mr. M.V.Sudeesh

## Young Scientist Awards

Dr. T.R. Gopalakrishnan Dr. T.E. George Dr. S. Pathummal Beevi Dr. R. Gopinathan Dr. T. Girija Dr. P.B. Pushpalatha Dr. P. Suresh Kumar Dr. N. Mini Raj Dr. C. R. Elsy Dr. D. Girija

### **RECENT NATIONAL RECOGNITIONS**

- Nominated as Fellow of Indian Society of Vegetable Science-2005 in recognition of contributions in Vegetable Breeding
  Dr. T.R. Gopalakrishnan
- Gold Medal from Horticulture Society of India in the field of Floriculture-2005
  Dr. P.K. Rajeevan
- Best research article award in oral presentation in the National Seminar on Appropriate Technology for Sustainable Horticulture-2005

V. Kausalya & Dr. Suresh Babu

 Best poster award in the National Seminar on Appropriate Technology for Sustainable Horticulture-2006

Dr. T. Radha & Dr. K.P. Prasanna

 Nominated as Member, Board of Studies (Agriculture), Tamil Nadu Agricultural University, Coimbatore upto March, 2009

Dr. GSLHV Prasada Rao

 Invitee to the South Asian Regional Consultation on WTO, jointly organized by Centre for Trade and Development, New Delhi and UNDP Regional Centre, Colombo from 21-22 April, 2006

Dr. Satheesh Babu K.



The Kerala Agricultural University has bagged the third position among the agricultural universities at the national level for securing the third largest number of fellowships in the JRF/SRF examination conducted by ICAR during the year 2006. The **Director of Academic & PG** Studies, KAU received the trophy for this achievement from the Hon'ble Union Minister for Agriculture, Shri. Sharad Pawar on 21st Feb 2007 at New Delhi.

Excerpt from the message of Dr. S.L. Mehta:

"It has been a matter of personal happiness for me to know that the Kerala Agricultural University students stood first in All-India Competitive Examinations. Kindly accept my heartiest congratulations for this spectacular achievement. The Deans and the Faculty deserve our deep appreciation for their untiring efforts. The fact that the KAU performance over last three years has improved substantially from a position of 5th rank to 2nd in year before last and to first in this year is a matter of joy for all. I am confident that with your continued support, students of KAU will continue to excel. Kindly convey to all the Deans and Faculty, my congratulations and wishes for their continued efforts towards academic excellence."

- SL Mehta, DDG (Edn), ICAR (2001)



### ACHIEVEMENTS

### **EDUCATION**

The performance of our students in securing JRF's/Placements for PG studies at the national level has been excellent. The KAU was in the first position in 2001, 2002 and 2004. The College has been accredited by ICAR. The revised syllabus prescribed by ICAR has been introduced at UG level from 2004 onwards. Residential facilities, playgrounds and library facilities have been improved to a large extent at the College level. However, they need further improvement. Initiatives have been taken to reinforce the Students' Counselling and Placement Cell. The Students' Computer Club of the College is a model to others to follow as it is self sustaining and students take advantage of the facility for their career advancement. Initiatives are being taken up to upgrade higher studies in the field of Agriculture in tune with globalization as per the IV Deans' Committee Constituted by the ICAR.

All our efforts in bringing out improvements in curricular and extra curricular activities of the College with financial assistance from the ICAR in the form of Development and Catch up Grants particularly for strengthening UG and PG teaching, contingency for students' practicals, study tours, RAWE, maintenance of laboratory equipment and computers with internet facility, have been manifested in enhancing academic standards of students who could secure jobs with attractive salaries in several National and International Organizations, Banking sector, Administrative and Public Services, Management Sectors and reputed Private Organizations. The institute also caters to the technical manpower requirements and research needs of the State of Kerala in the field of Agriculture. New initiatives have been taken up in crop improvement through biotechnological tools, and a *Centre* of Excellence in Biotechnology and Molecular Biology has been established. It is likely to emerge as the best Centre in Plant Biotechnology among the State Agricultural Universities. In addition, Distributed Information Centre and Central Scientific Laboratory as Central Facility have been established in the College.

#### RESEARCH

- IMPROVED VARIETIES in vegetables (35), including 12 disease resistant varieties and one F, hybrid variety, spices (4 in turmeric), cocoa (10 including 3 hybrids), medicinal plants (8 including one in tippali, two in kacholam, one in adapathiyan, two in adalotakam and two in chethikoduvel, i) rice (2), have been released, many of which have wide acceptability among farmers.
- AGROTECHNIQUES have been developed/standardized for scientific cultivation of vegetables, cocoa, spices, fruits, ornamentals and major medicinal plants of the State. Multiplication technique for bush pepper was also standardized.
- STANDARDIZED PROCEDURE for top working in cocoa, in-situ budding in nutmeg and soft wood grafting in cashew have gained wide acceptability by the farming community.
- NUTRIENT REMOVAL PATTERNS in pepper, ginger, nutmeg and clove were studied and artificially induced nutrient deficiency symptoms were documented.
- TECHNOLOGY evolved for the effective and efficient bio-control of *Salvinia*, a problematic aquatic weed of Kerala is one of the research achievements worth mentioning.



VIABLE DISEASE MANAGEMENT strategies were developed in the case of spices like pepper, ginger, cardamom and cashew. Discovery of fungal pathogen, *Hirsutella thompsonii* against coconut mite, bio-control of stem borer and leaf roller of rice are the other research achievements in the field of crop protection.

IN VITRO PROPAGATION TECHNIQUES in banana, pineapple, orchids and important medicinal plants of the State were standardized

STANDARDIZED TECHNIQUES for production, processing, storage and invigoration of seeds in tropical vegetable crops.

- DEVELOPED THE PROTOCOL for in vitro seed set and seed development in ginger. Reported somaclonal variation in pepper and ginger for yield, quality and tolerance to disease. Unraveled the expression of PR proteins and PR enzymes in black pepper in relation to *Phytophthora* foot rot tolerance.
- TECHNOLOGIES were developed for production of value added products from fruits and simple packing and storage techniques for fruits and vegetables and patents were obtained for cashew apple based products.

YIELD FORECASTING MODELS were developed for paddy, coconut, arecanut, cashew and pepper

BENEFIT COST RATIOS have been worked out for major crops of importance to Kerala

IN-SITU RAINWATER HARVEST and soil conservation techniques have been developed for the humid tropics

EFFECTS OF DROUGHT in relation to plantation crops were studied to some extent and methods were evolved to mitigate the ill effects

- A SOUND DATABASE is maintained on monsoon variability since 1870 onwards.
- INDUSTRY LINKED RESEARCH PROJECTS on climate and coconut (M/s. Marico Industries, Mumbai) and monsooned Malabar coffee (M/s. Aspinwall Co., Mangalore) are unique in the field of Agrometeorology in India.

### **EXTENSION**

- NATIONAL SYMPOSIA/WORKSHOPS/WINTER SCHOOLS/SUMMER SCHOOLS/SHORT COURSES were organized on competitive mode in the frontier areas like Biodiversity, Biotechnology, Input Use Efficiency, Market Led Extension, Drought Management in Plantation Crops, Flori-business in the Changing Global Scenario and GIS based Watershed Planning in Agriculture.
- MEMBERS OF THE FACULTY PARTICIPATED IN VARIOUS TRAINING PROGRAMMES, farmer-scientist interactions, agricultural seminars, agro-clinics, radio talks, television programmes and agricultural exhibitions. The members also took part in the identification and investigation of problems in the farmer's fields.
- WEEKLY AGRO-ADVISORIES are being issued regularly to the farmers of the Region in both English and Malayalam. These are being published in the leading newspapers and are included in websites viz.,www.kau.edu and www.kauagmet.org
- A SERIES OF TRAINING PROGRAMMES are regularly being conducted for the benefit of Officers of State Department of Agriculture, Commodity Boards, Banks, Task Force members of Peoples' Planning Programmes, Unemployed youth and Housewives.
- LARGE-SCALE MULTIPLICATION AND DISTRIBUTION OF PLANTING MATERIALS of fruit plants, ornamentals, spices and medicinal plants to farmers is an important activity undertaken by the College. Under the vegetable seed production complex, approximately 26.10 tonnes of quality vegetable seeds worth over Rs. 1.35 crores were produced and distributed to farmers.
- LARGE SCALE PRODUCTION OF PROCESSED FRUITS AND VEGETABLES is taken up and the products are sold through Agricultural Technology Information Centre, Mannuthy
- THE MUSHROOM PRODUCTION UNIT of the College caters to the needs of mushroom growers of Thrissur and nearby Districts by supplying quality spawn of oyster mushroom.
- FARMERS AND OTHER ENTREPRENEURS interested in the production of coir pith compost are supplied with an efficient fungal culture named 'Platypus' for the decomposition of coir pith to nutrient rich compost.
- DISSEMINATION OF TECHNOLOGIES generated by the faculty of the College through KAU Package of Practices Recommendation (Crops).
- TSUNAMI DISASTER MANAGEMENT: A team was constituted from this college by the Government to analyze the effect of salinity on different crops when Tsunami disaster struck on 26<sup>th</sup> December 2004.











# Varieties released from the College



- . Ajaganghi
- Vasika

### Adapathiyan

Jeeva





### Amaranth

### Krishnasree

- . Mohini
- . Renusree



### Ashgourd KAU local



### **Bittergourd**

- Preethi
- -Priya







# Brinjal

- # Haritha
- . Neelima
- . Surya
- 🗉 Swetha

### Chethikoduvely

- Agni
- Mridula





### Chilli

. Anugraha = Ujwala

### Cocoa

	CCRP-1		CCRP-8
	CCRP - 4	•	CCRP-9
•	CCRP - 5		CCRP-10
	CCRP - 6		
	CCRP - 7		



### Cowpea

- .
- .
- •
- Vyjayanthi .
- = Varun

### **Dolichos Bean**

- Grace
- Hima

### lvygourd

🗉 Sulabha

### Kacholam

- Kasthuri .
- 🗉 Rajani
- Long pepper

### 🗉 Viswam

### Okra

- 🗈 Aruna
- н Salkeerthi
- . Susthira



### **OP** Melon

- Mudicode
- Soubhagya

### Pumpkin

- Ambily
- = Suvarna
- . Saras

### Rice

- . Kunjukunju Priya
- 🗉 Kunjukunju Varna
- Ridgegourd
- Deepthi

### Snakegourd

Baby

### Tomato

- Anagha
- . Sakthi
- Mukthi

### **Turmeric**

- . Kanthi
- Sobha
- . Sona
- -Varna

### Winged Bean

. Revathy





Chinese potato Suphala -





- Bhagyalakshmi
- Kairali
- Lola

# **DEPT. of Agronomy**

Head of the Department: Dr. C.T. Abraham

The Department of Agronomy is dedicated to the management of natural resources for the sustainable production of tropical crops in Kerala. The focus areas in teaching, research and extension include tropical crop husbandry, water management, soil fertility and plant nutrition, soil conservation and watershed management, physiology of crops, farming systems and weed science. Graduate students can specialize in any of the major focus areas. By integrating teaching, research and extension efforts, the department finds and disseminates answers to field problems and discovers opportunities for enhancing efficiency and sustainability of production, improvement in quality and developing methods for safe and environmentally sound agricultural practices.



The department offers courses for 18 credits at the B.Sc. (Ag) level. It also has the responsibility to offer Agronomy courses for B.V. Sc & A.H., B.Tech (Dairy Science & Technology), B.Sc (C&B) and B.Sc (Forestry), PG Diploma programmes in Dairy Science, and remedial courses for non agricultural PG programmes. The department also offers M.Sc. (Ag) and PhD in Agronomy. Transfer of technology is achieved through various extension activities such as visits to farmer's field, research – extension interface, monthly reviews, training to field level officers of the State Department of Agriculture and Development Boards. The faculty have received many awards like Young Scientist Awards of the Kerala Science Congress, KRIBHCO award and TSI-FAI-IFA award, PN Deshmukh Young Agronomist National award, BOLT award, and Commonwealth Fellowships. They are also recipients of national and international recognition such as overseas training at prestigious foreign universities, Research Fellowship at IRRI, Manila, Philippines, National Biotechnology Associateship at JNU, New Delhi. The postgraduate students of the department are also recipients of ICAR Senior Fellowships (5 PhD students), ICAR Junior Fellowships (8 M.Sc students), CSIR Fellowships (5 PhD students), FAI Silver Jubilee Fellowship (1 PhD student), and KSCSTE Fellowship (1 PhD student).

The Faculty of the Department serve as members of several expert committees of Command Area Development Authority, Plantation Corporation of Kerala, Directorate of Cashewnut, Arecanut and Cocoa Development, Peoples Planning Programme, and as members of the Task Force appointed by Government of Kerala for monitoring and evaluation of schemes under Macro Management in Agriculture implemented by the Department of Agriculture. The Department is maintaining a crop museum and running an Agronomy club and organizing practical training programmes in rice, millets, tapioca and other tuber crops, pulses, oil seeds and fodder crops. The Department has published 350 research papers in National and International journals and 325 popular articles. The Faculty members have published 8 books and have contributed to various chapters in several books. Four externally aided projects including AICRP on Weed Control are being conducted in the department.

E mail : agroncoh@gmail.com Phone : 0487- 2370822 \* 313



# **DEPT.** of Soil Science & Agricultural Chemistry

Head of the Department: Dr. K.C. Marykutty

The department of Soil Science and Agricultural Chemistry was established in 1972 with a mandate of providing teaching, research and extension activities in the relevant fields. Postgraduate and doctoral degree programmes were commenced during 1976 and 1981 respectively. So far, 73 students have been awarded *M.Sc* (*Ag*) *degree* and 11 with doctoral degree. The department offers 9 courses under the old syllabus and 10 courses under the new syllabus for the B.Sc. (Ag) programme, 5 courses for the B.Sc. (Forestry), 19 courses for the M.Sc (Ag), 1 course for the M.Sc. (Stat) and 10 courses at the Ph.D level. The department has full fledged UG, PG and Research laboratories with facilities for the analysis of almost



all elements. As on date, thirty six UG students have secured ICAR Junior Fellowships for their M.Sc. (Ag) Programme. The faculty and graduate students received many awards including Young Scientist Awards of the Kerala Science Congress, 'ISSS Zonal Award' for the South Zone (for best M. Sc (Ag) thesis presentation), Dr. C.S. Venketa Ram Memorial Award (for the best research paper), Dr. S. P. Raychaudhuri Gold Medal (for the best Ph.D. thesis), and H.S. Mehta memorial National Award (for the best paper in Soil Science). Currently, one AICRP project on Soil Test Crop Response Studies (STCR), and one *ad hoc* project funded by DBT are functioning in the department. Under the Revolving Fund scheme, manure samples submitted by Commercial Firms are being tested on payment basis. ATIC - ABARD SAIU on Vermi-composting Unit, aimed at employment generation for unemployed youth is attached to the Department.

The department possesses the full facility to deal with any eventuality of soil and water problems related to crop production, besides meeting any challenge in the research needs of the farming community. Recently, the department organized an ICAR sponsored winter school on 'GIS based watershed planning in Agriculture' of 21 days duration. Vermicompost, organic farming, solid waste management, heavy metal pollution, residue analysis and water harvesting are the other major activities in the department. The scientists of the department are participating in various extension activities organized by KAU, Department of Agriculture, Central and State Institutes. The Thrissur Chapter of the Indian Society of Soil Science is actively functioning in this department.

E mail : soilcoh@yahoo.co.in Phone : 0487- 2370822 \* 316



# **DEPT. of Agricultural Meteorology**

Head of the Department: Dr GSLHV Prasada Rao

The department of Agricultural Meteorology was established in 1988 as one of the statutory departments of the College of Horticulture. Two year postgraduate programme, M.Sc.(Ag) in Agricultural Meteorology was commenced during the academic year 1994-95 with an intake capacity of two students, of which one is reserved for ICAR nominees. So far, seven students have been awarded the P.G. degree from this department. Out of seven, five students qualified in the NET, conducted by ICAR. Two PhD students are on roll in the field of Agricultural meteorology under CUSAT.

This is the unique department among southern SAUs where PG degree in Agricultural Meteorology is awarded. The research projects viz., AICRP on Agro meteorology (ICAR), Agro-advisory Services based on Medium Range Weather Forecasting and Economic Impact on Agro-advisory (DST) and a few ICAR ad-hoc schemes are ongoing in collaboration with other departments. This is also the unique department in Agricultural Meteorology in the Country where research funding is obtained from the Private Industries. At least, two Research Fellows are supported with fellowships under externally aided projects in this department. A textbook on Agricultural Meteorology has been written and published from the department. Another textbook in Agricultural Meteorology has been edited from the department and published by the ICAR. Several research articles have been published in the various aspects in the field of Agricultural Meteorology. The weekly agro-advisory service based on weather forecasting is disseminated regularly to the selected farmers and they appear in print and e-media for the benefit of the farming community of this region. M/s Marico Industries (Pvt.) Ltd., Mumbai and M/s Aspinwall & Co., Mangalore extends research support to the department for coconut and coffee respectively.

Visit us at www.kauagmet.org

E-mail: kauagmet@yahoo.co.in, kauagmet@rediffmail.com. Phone: 0487-2371931, Fax: 0487-2371931





# DEPT. of Pomology, Floriculture and Landscaping

Head of the Department: Dr. P.K. Rajeevan (Officiating as Associate Dean) Acting Head: Dr. P.K. Valsalakumary

The department of Pomology, Floriculture and Landscaping was established in 1972 with the main objective of teaching at UG and PG levels, research in tropical fruit crops and ornamental plants and extension activities. Postgraduate and doctoral degree programmes commenced during 1976 and 1979, respectively. Sixty six students have been awarded with M.Sc. degree and 13 with doctoral degree from the department. AICRP on floriculture is attached to this department. So far, 17 EAPs have been completed, of which eight were funded by ICAR, three by NHB, four by NATP, two by STED and one by KRPLLD. At present, seven



research projects are ongoing, funded by ICAR, DBT, DST, BARC, SHM and STEC. There are ICAR Revolving Fund Scheme and ICAR mega seed project operating in the department under which quality planting materials of fruits and ornamental plants are being supplied to farmers.

Training programmes on orchid cultivation (28 batches), anthurium cultivation (18 batches), commercial floriculture (12 batches) plant propagation and nursery management (15 batches) propagation and processing in jack fruit (3 batches) and orchid, anthurium and jasmine cultivation (4batches) have been conducted in the department for the benefit of Agricultural Officers, VHSE students, unemployed youth, women entrepreneurs and farmers.

The department has organized AICRP Workshop in Floriculture (1990), Seminar on Flori 2020 (1999), National Symposium on Recent Advances in Indian Floriculture (2003) and ICAR Winter School on 'Flori business in the changing global scenario - Issues and Strategies' (2006). Farm advisory services and other consultancy services are being rendered. Demonstration cum instructional plots of 25 ha where a wide germ plasm of tropical, subtropical and under exploited fruits are maintained. An orchidarium and different types of playhouses and shade houses are established for orchid, anthurium and ornamental plants. Two tissues culture laboratories have been functioning in the department. Other than these, nursery units (3 nos), commercial units of orchids (18 nos) and anthurium (10 nos) have been also established in farmers' field.

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# **DEPT.** of Plantation Crops and Spices

Head of the Department: Dr. E.V. Nybe

The Department of Plantation Crops & Spices was established as a statutory department of KAU in 1972. The postgraduate and doctoral degree programmes were commenced during the year 1976 and 1979 respectively. So far, 56 students have been awarded PG degree and 21 students, Ph.D degree from this department. The prestigious Jawaharlal Nehru Award for the best Ph.D thesis was bagged by two staff members of this department during 1996 and 1997. The coveted Jawaharlal Nehru Fellowship for the doctoral degree programme, Young Scientist Awards and best research paper awards have been won by the faculty of the department. ICAR, DBT, DST, KSCSTE and Gol extend research support in black pepper, ginger, turmeric, vanilla and various medicinal plant species.



Phone: 0487 - 2370822 \* 358





# **DEPT. of Olericulture**

Head of the Department: Dr T.E. George

The Department of Olericulture was established as a statutory department of KAU in 1972. The postgraduate and doctoral degree programmes were commenced during the year 1976 and 1979 respectively. So far, 81 students have been awarded M.Sc. (Hort.) degree and 15 students Ph.D degree from this department. The students of this department have won four national awards while the faculty members had bagged 16 national and state level awards including the prestigious *Rafi Ahmed Kidwai* National Award.



The department was shifted to the new full-fledged building on 1<sup>st</sup> June 2000 with a separate establishment of 12 faculty members, eight technical and administrative staff and 21 permanent labourers. At present, the department is nationally recognized as a major centre for higher education and research in vegetable science. The department has so far developed and released 35 improved varieties of different vegetable crops at the state level, out of which six were released at national level also. The bacterial wilt resistant varieties, *Surya, Swetha, Haritha* and *Neelima* (brinjal), *Ujwala* and *Anugraha* (chilli), *Sakthi, Mukthi* and *Anagha* (tomato) were well accepted nationally. Amaranth varieties *Krishnasree* and *Renusree* and Dolichos bean varieties *Hima* and *Grace* are the latest released varieties. High yielding drumstick cultures AD-4 and MO-144 were recommended for release during the 28<sup>th</sup> ZREAC meeting of Central Zone held at Pattambi. The department has generated several viable and appropriate technologies for crop management, plant protection and seed technology in tropical vegetables. The department is operating a number of externally aided projects on vegetable crops including AICRP on Vegetable Crops.

Large scale production of breeder, foundation and truthfully labeled seeds of different vegetable varieties and their distribution is another important activity of the department. The annual revenue from the sale of seeds is around Rs. 6.57 lakhs. Till date, 26.10 tonnes of vegetable seeds worth Rs.1.35 crores were produced and supplied to farmers, State Department of Agriculture and different seed agencies. The faculty members of the Department have so far published 41 books, 586 research papers and 418 extension articles. The department organizes several training programmes, seminars, workshops and agricultural exhibitions, of which Summer Institute on Recent Advances in Tropical Vegetable Production and X<sup>th</sup> and XX<sup>th</sup> National Workshops of AICRP on Vegetable Crops deserve special mention.

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# **DEPT.** of Processing Technology

Head of the Department: Dr. P.Jacob John

The Department of Processing Technology was established as a statutory Department of KAU in 1972. The postgraduate and doctoral degree programmes were commenced during the year 1976 and 1985 respectively. So far, 27 students have been awarded M.Sc degree and 6 scholars, Ph.D degree from this department. The faculty of the department has won Young Scientist Award for best research paper. Research programmes were conducted with the support from ICAR, National Horticultural Board, M/s Aspinwall & Co., Manglore and KSCSTE. Simple packing and storage techniques were developed for mushroom, sapota, breadfruit, banana, papaya, tomato, bitter gourd, pumpkin, okra and amaranth.



Technologies were developed for production of value added products from papaya, sapota, banana, grape, pineapple, ivy gourd, mango and jackfruit and by- products from wastes of fruits and tender coconut. The department runs an FPO licensed processing unit operated on revolving fund, where processed fruit and vegetable products are manufactured and sold through the University Sales Counters. The annual revenue of the Processing Unit is around Rs. 2.0 to 2.5 lakhs. The department is also a study centre for the Diploma course on value added products from fruit and vegetable (DVAPFV) as a distant education programme of the Indira Gandhi National Open University (IGNOU). The department is also having a separate centre for hands on training for RAWE students under the ICAR experiential learning in postharvest horticulture and processing.

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# **DEPT. of Agricultural Engineering**

Head of the Department: Dr.Joby V. Paul (Officiating as Registrar) Acting Head : Er. P.S. Preman

The Department of Agricultural Engineering was established in 1979 in the College of Horticulture, Vellanikkara. The mandate of the department is the triple function of Teaching, Research and Extension activities in the field of Agricultural Engineering. Post Graduate programme in Agricultural Engineering, viz., M Sc (Ag. Engg.) was started in 1979 with an intake capacity of 4 students in the department. Later after the formation of Kelappaji College of Agricultural Engineering & Technology – KCAET- at Tavanur, Malappuram, the M Sc.(Ag. Engg.) programme was shifted to KCAET, Tavanur in 1985. Now the department



is offering Engineering courses for B Sc (Agriculture) at College of Horticulture, B Sc (Forestry) at College of Forestry, B Sc. (CB&M) at College of CB&M, B Tech (DST) at College of Dairy Science and Technology, Mannuthy, B FSc (Fisheries) at College of Fisheries, Panangad and Diploma in Dairying (Part time diploma course) at College of Veterinary and Animal Sciences, Mannuthy. The department undertakes the following additional responsibilities:

- The engineering workshop at Mannuthy is modified into Agro Engineering Service Centre and the Staff of the department is entrusted with the running of the center.
- The repair and maintenance of farm implements, repair and maintenance of automobile vehicles of the college and technical scrutiny of minor civil works of College of Horticulture and nearby stations in the central zone are entrusted with the department.
- The department is conducting different training programmes in the 'Operation and maintenance of Farm Machineries' for unemployed youth, 'Selection and installation of Agricultural Pump sets' and 'Alternate Energy Conservation in Homesteads (Biogas)' for the officials of Department of Agriculture.
- The department is rendering its services in the design and installation of modern Irrigation techniques, Green houses and Poly houses for different schemes of College of Horticulture. The department took a leading role in the construction of Rain Water Harvesting System in the College.
- \* The department is associating with Centre for Gender Studies in different projects
- The department provides resource persons for various training programmes of various departments and farmers
- The department renders consultancy services to all high tech agricultural activities of the campus

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# **DEPT.** of Plant Breeding and Genetics

Head of the Department: Dr. V.V.Radhakrishnan

The Department was started from the very inception of the College of Horticulture in the year 1972 with the mandate to undertake the triple functions of teaching, research, and transfer of technology in specialized fields of Plant Breeding and Genetics. The department is offering UG courses in Plant Breeding and Genetics; and also in Plant Physiology. M.Sc (Ag) programme in Plant Breeding and Genetics was started during 1977 and PhD programme in 1983 with an intake capacity of four and two students respectively during a year. So far, 52 M.Sc (Ag) students and 10 Ph.D students have passed out from this department. The department has separate laboratory facilities for undergraduate and postgraduate students. A tissue



culture laboratory is also attached to the department. The AICRP project on Medicinal and Aromatic plants is attached to the department.

The rice varieties, viz., *Kunjukunju Varna* (VK-1), *Kunjukunju Priya* (VK-2), Coleus variety *Suphala* (TC-9), Long pepper variety *Viswam* have been released from this department. The department is also associated with the release of rice varieties *Ahalya*, *Hraswa*, *Varsha*, *Manghala Mashuri*, *Anaswara*, *Manupriya* and the Coleus variety *Nidhi*. The faculty undertake such extension activities as farmer's field visits, research - extension interface, monthly reviews, training to field level officers, and dissemination of information through popular articles. The department is actively associating with the activities of IPR cell of the University. Workshops on IPR issues related to seeds and Plant Variety Protection are organized in this regard. The participatory plant breeding activities of the Department bagged the first "Plant Genome Savior Community Recognition" National award during February 2007 from PPV & FRA, Government of India. The Faculty have received many awards and fellowships including best thesis awards, best student awards, young scientist award, BOLT award etc

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# **DEPT. of Agricultural Entomology**

Head of the Department: Dr. Jim Thomas

Right from its inception in 1973 till date, the Department of Entomology is excelling in its academic pursuits in agricultural education as well as in its commitments to solve the crop protection problems of the farming community in Kerala. The department could mark outstanding performance at the national level with the award of BSc. (Ag.), MSc. (Ag.) PhD (Ag.Ent.) degrees. The department is the flagship of the KAU in IPM know- how and services in the State and is presently equipped with the major research units in Biological control of crop pests and weeds, Taxonomy and identification of insect pests, Economic Entomology and IPM services in all agricultural and horticultural crops, Eco-toxicology and Environmental management,



Quality Analysis of stored food grains, Nematology, Agricultural Ornithology, Apiculture and Sericulture. Of late, the department has initiated research works in biotechnological approaches and tools in Entomological studies too. The department is offering various UG courses in fundamental and applied aspects of Agricultural Entomology to equip a graduate with sufficient expertise in identification, diagnosis and management of various agricultural pest species. In the recent past with the motivation, guidance and training of the department scientists, there were a number of ICAR- JRF awardees who could bag top ranks in Entomology at the national level and could therefore secure admissions in National Institutes and other leading Universities in India and abroad. Till date it could churn out more than 40 post-graduate students and 10 PhD scholars who graduated with flying colours to enable consequent academic placements.

In the research front, the department can wear a number of feathers in its cap by its substantial contributions in applied sciences. In biocontrol research, it could bring out the most widely acclaimed success story of the eradication of the aquatic weed (Salvinia) menace from the water bodies in Kerala. It was followed by the discovery of the use of *Hirsutella thompsonii*, an acaropathogenic fungal agent for the biosuppression of the dreaded coconut mites for the first time in India. Collaborative researches with ICAR-DFID funds on the integrated management of fruit flies in melon crops and mango could work out suitable area wide strategies of Bait application and Male insect annihilation techniques with environmentally safe materials. Of late, an entirely revolutionizing concept of application of agrichemicals as stem remedies was introduced for the benefit of the palm farmers for more economical and efficacious pest and plant health management. On the extension front, the department is offering various services in multidisciplinary diagnostic visits to the farmers' fields, agro clinics, quality certification of the government nurseries, various district level research extension interfaces with the agricultural department personnel, area wide plant protection demonstrations and outreach IPM services etc., apart from attending the routine training classes for the farmers and the technical personnel in the state. The scientists in the department regularly undertake awareness campaigns and extension education through mass media such as All India Radio and TV Channels.

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# **DEPT of Plant Pathology**

Head of the Department: Dr. Koshy Abraham

The department of Plant Pathology is one of the statutory departments of the college, established in 1972 with the mandate of teaching, research and extension activities. The M.Sc (Ag.) programme in plant pathology was started in 1976 and Ph.D programme in 1983. The department possesses well equipped UG and PG laboratories to cater to the needs of the students. So far, 50 M.Sc (Ag.) and 7 Ph.D students have secured their degrees. At present, 9 M.Sc (Ag.) and 3 Ph.D students are on the rolls. The department has handled many externally aided research projects on black pepper, vanilla, coconut, vegetables and cocoa in addition to the various training programmes. At present, four externally aided projects are being carried out in this



department. Research work conducted here led to the development of viable management strategies for diseases of various crops especially spices, cocoa and vegetables. Now, more attention is being given to develop eco-friendly disease management practices against bacterial wilt of ginger and vegetables, phytophthora rot of black pepper, cocoa and vanilla.

A full-fledged mushroom production unit is attached to this department with the support of I.C.A.R to meet the needs of the farming community for quality mushroom spawn. Training programme on mushroom cultivation is well received by the unemployed youths in the State. An Agricultural Microbiology unit was established in 2003 and attached to the department to conduct research on beneficial microorganisms. A centre of plant disease identification and documentation was established in 2004 to facilitate identification of plant diseases, pathogens and documentation of cultures as well as disease specimens. Facility for mass production of biocontrol agents for the benefit of farmers, students and technical hands has also been established in 2006. The teachers of the department have published more than 270 research papers and many books and are also actively involved in various training programmes and field visits including consultancy.

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# **DEPT. of Agrcultural Economics**

Head of the Department: Dr. E.K. Thomas

The department of Agricultural Economics commenced functioning in 1972. The mandate of the department is to create, preserve, and disseminate knowledge through education, research and extension on the issues related to socio-economic aspects of agriculture and rural development. The postgraduate programme in Agricultural Economics was started in 1979. So far, 63 students have been awarded M.Sc (Ag) degree, and 15 UG students procured ICAR Junior Fellowships for their M.Sc. (Ag) Programme. The department offers course programmes of 45 credits at the B.Sc. (Ag) and M.Sc. (Ag) level. It also supports the economics component of the B.Tech (Dairy Science & Technology), B.Sc. (Forestry), B.V.Sc. & A.H. and



B.Tech. (Ag. Engg.) programmes. The curriculum of the department is organized to include farmer outreach through farm surveys, market surveys, and interactive learning through visits to credit institutions, commodity boards and development departments. The Department offers the farm planning and entrepreneurship modules of RAWE. It provides a good platform for the students in the preparation of resource based farm plans and capacity building in agriprenueurship.

The department has completed 31 externally funded projects till date, which includes funding from both national and international agencies. In addition, 39 state funded projects have been undertaken as on date. Research projects to address socio-economic problems of contemporary /regional relevance are also undertaken as and when requested. The Agro Economic Centre of the department came into existence in 1998 to conduct research on major farming systems of Kerala. The *Padmasree Paul Pothen IFFCO Chair* in Agricultural Economics commenced its activities from 1996. Academic linkages with institutions like CWRDM, KFRI, KILA and CDS facilitate close interaction in all spheres of academic excellence. Owing to this, a library grant was granted to the department under the World Bank aided environmental economic capacity building programme. This is also reflected in the high ratio of students securing JRF and other similar scholarships at the national level. The department is also providing technical support to the WTO Centre of the University and the concurrent evaluation of Central Sector Schemes in agriculture.

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# **DEPT. of Agricultural Extension**

Head of the Department: Dr.F.M.H. Kaleel

The department of Agricultural Extension started functioning in 1972 with the mandate of teaching, research and extension. Teaching is done at undergraduate and postgraduate levels leading to M.Sc. (Ag.) and Ph.D. degrees. The main research areas are: Collection, prioritization, rationalization and documentation of indigenous technology knowledge in agriculture; participatory technology assessment, development and dissemination, assessing the field level impact of various agricultural technologies; livelihood analysis of different farming systems; information and communication technology; gender



studies; private extension; co-ordination, control and evaluation mechanisms of development programmes; socio psychological analysis of farming community; expert systems and agricultural knowledge centres in agriculture; development of research tools in Agricultural Extension to suit the changing requirements of research; market led extension and extension strategies to suit the different farming systems. So far, a total of 50 students have completed the Masters Degree program and 11 students have completed the Doctoral Degree program in the department. Four Masters and one Doctoral student are on rolls now. Three externally aided projects have been completed in the department while two are ongoing.

The KAU Plan Project on Action Research on Coconut Mite Control is under the Principal Investigatorship of the Department. Under the DBT sponsored project eleven women SHGs have been trained on production and use of bio-inputs. Ten field units have been established and they have started marketing their produce under the guidance of the project team. An ICAR sponsored winter school on "Market Led Extension: Tools and Dimensions" was organized by the department in December 2004. The Department is spearheading the RAWE program since its inception and also coordinating the general extension activities of the College of Horticulture.

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# **DEPT. of Agricutural Statistics**

Head of the Department: Sri. P.Gangadharan

The Department of Agricultural Statistics is as old as the College of Horticulture. It caters to the teaching needs of College of Horticulture and College of Co operation and Banking. It renders consultancy services to all scientists as well as PG and UG students, relating to the research work and also does statistical analysis and interpretation work. M.Sc programme in Agricultural Statistics was started in the year 1979. The current intake capacity is 3. Till date 59 students have been awarded M.Sc degree from the department. The department has developed several methodologies for statistical analysis of data and methods to control experimental error with regard to all major crops – seasonal as well as perennials. It has also



developed package of practice, recommendations for under planting in pepper gardens. Yield forecasting models with high predictability were developed for paddy, coconut, pepper, arecanut, cashew, lemon grass and sugarcane based on biometric and weather parameters. Several new computer programmes have been developed with applications in agriculture. Yield forecasting models with high predictability have also been developed for different crops.

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# **DEPT. of Home Science**

Head of the Department: Dr. V. Usha

Department of Home Science was established in 1996. M.Sc. and Ph.D. programmes in Home Science (Food Science and Nutrition) were started during 1993 and 1998 respectively. So far, 40 students have been awarded M.Sc. degree and one student, Ph.D. degree from this department. The department has completed four externally aided projects funded by ICAR, Government of India and Sakthi Soyas Ltd. Currently, an externally aided project entitled "Standardization and quality evaluation of banana based probiotic fermented food mixtures" funded by DBT is being implemented in the department. The department is addressing the qualitative evaluation of foods, value addition and nutritional problems of the different



sectors of the agrarian community in its research activities. Quality evaluation of different genotypes/varieties of winged bean, thamara venda, banana, cashew kernel, cashew apple, hyacinth bean, ivy gourd, leafy vegetables and plant foods consumed by the tribal communities with respect to nutritional and organoleptic qualities and quality evaluation of crops cultivated under protected cultivation have been completed.

Various value added products from Indian gooseberry, banana rhizome, banana flower, banana pseudo-stem, banana peel, breadfruit, bilimbi, rose apple, lovi-lovi and under utilized fishes and products like protein enriched mango bar, cashew apple tutty-fruity were developed. Apart from the teaching and research activities, department organizes various training programmes in fruit and vegetable preservation, bakery and confectionery, flower arrangement and mushroom cultivation for the benefit of housewives and unemployed youth. Faculty members also serve as resource persons for the training programmes organized by the Department of Agriculture, Nutrition Board and Voluntary organizations on topics related to food and nutrition and food preservation.

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# **DEPT. of Physical Education**

Head of the Department: Sri. E.U. Rajan

The department of Physical Education was established during 1978 in order to streamline the sports and games activities and enhance physical fitness of the students. The department offers one course of 0+1 credit for the B.Sc. (Ag) students. The department ensures that the students participate regularly in all the sports and games programmes organized at the University, State and National levels.



The college has been affiliated to the District Sports Association in the various games, and actively participates in the league matches conducted by the respective associations. The college team has entered the final

rounds in the Inter Collegiate tournaments of KAU in various sports and games events and hold championships in many events. The players of this college have been selected to represent KAU teams for Inter University tournaments. Four students of the college donned the University jersey for the Inter- University Football match held at Annamali University. Three students of the College represented KAU for the All India Agri University tournament and won Gold medals.

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# **Central Facilities and Schemes**

### **INSTRUCTIONAL FARM**

Head: Dr. R.Gopinath

The Instructional Farm was established in 1973 as a part of Agricultural Research Station, Mannuthy and later became a constituent unit of the College of Horticulture in 1983 for instruction purpose to the students. The farm has a total area of 67.35 ha with undulating topography and covers expanse of hilly and flat land. The farm activities are carried out in 9 major areas namely; Coconut and Intercrop area, Vegetables and food products area, Nursery and Seed production area, Fruit plants area, Value added products area, Area for Soil and Water conservation, Organic farming and Livestock management area, area for Farm Development, and Ornamental and domestic fish farming area. The farm activities are being carried out in ABARD mode due to shortage in labour strength. This ensures productive farm operations as well as gainful self-employment opportunities for rural women.



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### RADIO TRACER LABORATORY

Head: Dr. P. Sureshkumar



The Radiotracer Laboratory at Kerala Agricultural University was established in the year 1982. Over the past years this laboratory has served as a central facility for research, employing radioisotopes and radiations for the faculty and students from different institutions of the university. The laboratory is well equipped except for the facility for analysis of stable isotope of nitrogen, N. The lead function is to serve as a common facility in radiotracer aided research in different disciplines of the university and to offer PG courses in radiation and radioisotopes as well as to do the essential research functions, which are complementary



to the lead function.

### **Infrastructure Facility**

- GAMMA CHAMBER –900 installed by BARC in 1982 with Co–60 as gamma source. Used for irradiation of plant propagule for inducing mutation, insects for inducing male sterility, processed food and herbal product for disinfestations and different chemicals for radiolytic reactions
- THREE IN ONE COUNTER (TRIATHLER) used for radioassay of samples containing beta emitting radioisotopes and for radioassay of samples containing gamma emitting Autoradiography
- \* AUTORADIOGRAPH processing and developing lab for developing autoradiographs of radiolabelled specimens
- GREEN HOUSE for doing pot culture experiments using radioisotopes
- GEOGRAPHIC INFORMATION SYSTEM (GIS)
- GAS CHROMATOGRAPH UNIT for the detection of pesticide residues in different living systems
- \* ATOMIC ABSORPTION SPECTROPHOTOMETER (AAS) for analyzing micronutrients and heavy metal pollutants

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### **CENTRE FOR PLANT BIOTECHNOLOGY AND MOLECULAR BIOLOGY**

Head: Dr. P.A. Nazeem



The Centre for Plant Biotechnology and Molecular Biology (CPBMB) was established in 1996 with the main objective of strengthening biotechnology research, teaching and outreach activities in the University. A full-fledged Molecular Biology Lab with all basic equipment items was set up in 1998 and the centre is now functioning in the IT-BT Complex under College of Horticulture in the main campus of Kerala Agricultural University. Thrust area identified is improvement of Horticultural crops through biotechnology tools such as plant tissue culture for mass



multiplication of elite crop varieties and endangered species, *in vitro* pollination for seed set, exploitation of somaclonal variation, *in vitro* production of secondary plant metabolites, germplasm conservation, genetic fingerprinting, molecular diagnostics, genetic transformation for quality improvement, construction of gene library, identification and characterization of genes and gene products, environmental biotechnology etc. On behalf of KAU, the centre is identified as the nodal agency to initiate and co-ordinate Agri-Biotech HRD programmes in the state. It is also the coordinating centre for Human Resource Development in Biotechnology (KSCST&E) and for Spices Network Programme of DBT. There is a Bioinformatics Centre (DIC) funded by DBT to support storage and retrieval of biotechnology information.

The centre offers M.Sc. (Ag) programme in Plant Biotechnology since 2003. The current intake capacity is 10 students/year through common entrance of JNU as envisaged by DBT. It also offers Molecular Biology and Biotechnology courses included in the curriculum of B. Sc (Ag), B.Sc (Forestry), M.Sc (Ag) and Ph. D programmes. The Centre organizes regular training programmes in Plant Tissue Culture, Molecular Biology and Bioinformatics for entrepreneurs, students, scientists and extension officers of the State Department. The centre actively involves in farmer participatory programmes involving 400 farmers and in women empowerment programmes. The Centre bagged the prestigious 'Biotech Product & Process Development & Commercialization Award 2003', instituted by the DBT for its outstanding performance in the previous 5 years. It also received the 'H.S. Mehta Memorial National Award 2003' for the best research paper presentation. An ICAR National Symposium on 'Biotechnological Interventions for Improvement of Horticultural crops - Issues and Strategies' was organized in 2005. The centre is now undertaking more than 20 externally aided projects.



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### **CENTRE FOR LAND RESOURCE RESEARCH AND MANAGEMENT**

Head: Dr. P.R. Suresh

The Centre for Land Resource Research and Management (CLRRM) is a common facility which co-ordinates pilot studies on integrated



resource management at farmstead, watershed and zonal levels and provides orientation and training in new and emerging technologies such as Remote Sensing, Geographic Information System (GIS) and Automated Land Evaluation and System Simulation. Facilities like computer, A<sub>0</sub> digitizer, A<sub>0</sub> colour plotter, PC Arc Info, Arc View, Spatial Analyst, 3D Analyst, GRAM++ and R2V have been established in the Centre. The Centre undertook the projects on SRI-Thrissur (Soil Resource Information for Thrissur District), and Land Information System (LIS) of the main campus KAU. The Centre, in collaboration with the Department of Soil Science and Agricultural Chemistry, organized an ICAR sponsored winter school on *GIS based Watershed Planning in Agriculture* during 2 – 22 December 2006. The Centre is also taking a lead role in project formulation for 11 watersheds in *Pazhayannur* Block under the *Hariyali* Projects. Efforts are on, to develop an Integrated State Agricultural Resource Information System (ISRIS) at the Centre for multi-sectoral resource analysis and research.

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### CADBURY-KAU CO-OPERATIVE COCOA RESEARCH PROJECT

Head: Dr. V.K. Mallika



Cocoa research was initiated in Kerala Agricultural University in 1979 as a part of the World Bank-aided Kerala Agricultural Development Project. This project envisaged standardisation of management practices of cocoa, initiation of work on crop improvement and survey and management of pests and diseases. After its termination in 1986, the projects were taken over by the Kerala Agricultural University. As the financial position of the University was not sound enough to support cocoa research as envisaged, proposal for funding was submitted to M/s Cadbury India Ltd. for financial assistance. The Company accepted the



proposal and cocoa research was strengthened substantially from April 1987 with the establishment of Cadbury- KAU Co-operative Cocoa Research Project. The objectives of the project included evolution of varieties suited to this region, standardization of agro techniques and plant protection. The facilities developed at this project are being utilized for instructional and research purposes both at UG and PG levels of the college.

### Research focus

- Collection, maintenance and evaluation of germplasm of cocoa
- Selection for high yield, desirable bean characters and disease resistance
- Hybridization for evolving superior varieties with desirable characteristics
- Inbreeding to produce fully homozygous genotypes and their further exploitation in breeding
- Breeding for disease resistance especially to Vascular Streak Die Back and Black Pod
- Standardization of farm practices
- Development of management strategies for major pests and diseases of cocoa
- Production of hybrid seeds for area expansion programme in South India

The Germplasm collection at Kerala Agricultural University is the biggest in India with diverse types. Enrichment of germplasm is undertaken by import from the University of Reading, UK and also by collecting local types with unique characters. The collection includes very valuable accession like Sca 6, which is the only source of resistance to all known diseases of cocoa. The other important accessions are IMC 67 and ICS 6. The clones maintained under the germplasm are being regularly utilized in the breeding programme for direct distribution as an improved clone, as a parent in hybridization programme and for inbreeding. The unit has standardised the technology for small-scale fermentation for quantities ranging from 2 kg to 50 kg wet beans.

In order to safeguard the interests of the growers, technology for small scale secondary processing have also been standardised. A small agro-industrial unit on cocoa products is established in the unit under the Kerala Agricultural University. This unit provides employment for educated unemployed women. This unit attracts women entrepreneurs and is being visited by people from all fields of life.

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### **DISTRIBUTED INFORMATION CENTRE (DIC)**

Head: Dr. R. Keshavachandran



The Distributed Information Centre (DIC) at College of Horticulture is funded by the Department of Biotechnology. It was established during 1997.It carried out works related to the interpretation of data obtained from biotechnological wet lab experiment, provides regular training to staff members on various aspects of bioinformatics such as sequence analysis and database management and creates databases on various biotechnological aspects. For more details, visit www.kaubic.org.

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### **CENTRE FOR EDUCATION TECHNOLOGY**

Head: Dr. T.E. George

The Centre for Information Technology (CIT) was established in 2003. In order to strengthen I.T. enabled teaching and learning facilities of the College, the Centre for Information Technology (CET) was reorganized during 2007 as Centre for Education Technology with Dr.E.Sreenivasan and Mr.A.T. Francis, the I.T.Nodal Officers of the College as other members. The College Website has been developed and launched on 31.10.2007. All the computers are interconnected and a common file 'public' is used for exchange of information. The centre took leadership in providing e-mail and intercom facility to all scientists of the College.

### NETWORK COMPUTER CENTRE

Staff Advisor: Dr. E. Sreenivasan

The Computer and Intercom Networks of the College are maintained and monitored by the Network Computer Centre. A full-fledged College Intranet is being developed to provide office automation, digital library and e-learning facilities to the users, especially to the student community. An ARIS Computer Facility has been established in the College







under the NATP – ISD Programme of ICAR, with a full-fledged building LAN on UTP cabling. This LAN is connected to the main campus LAN though fibre optic backbone. The College LAN runs on Windows 2003 Server Software with a capacity to serve about 250 nodes. UPS power back up and high-speed broadband Internet facility is available all over the Network. The Computer and Internet facility is available in all the teaching departments, administrative office as well as the College library.

ARIS Computer facility was shifted to a new fully furnished air-conditioned room during 2007 with 24 computers networked through Wireless Network (Wi-Fi). This is the first Wire-Free Networking facility in the University. Wi-Fi enabled LapTops and other PC's can automatically access the Net Work. The room is also equipped with LCD projector and video-conferencing facility. The SCC immensely helps the students in higher agricultural education and research. This has enabled the students to get access to the latest developments and opportunities in the field of Agriculture. A large number of students secured fellowships and placements abroad, utilizing this facility.

E-mail: ithort@kau.in Phone : 0487- 2370822 \* 333

### STUDENTS' COMPUTER CLUB



Staff Advisor: Dr. E. Sreenivasan

The students Computer Club is a self-sustaining facility instituted in the College with the objective of exposing the students to latest computer facilities right from the undergraduate level. The infrastructure required are provided under the ARIS Computer facility and the club is entirely managed by the students under the guidance of a Staff Advisor. The expenses including salary of the Instructor are met from the revenue generated by the club. The club also arranges trainings to students, teachers and office staff on computer applications. There are facilities for scanning & community printing over LAN.

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Officer i/c PG: Dr. K. Nandini

### ACADEMIC CELL UG & PG

Officer i/c UG: Dr. M.V.R. Pillai



A well functioning Academic cell, both for UG and PG students, is functioning in the College. The cell handles all the academic affairs of UG and PG students of the College. The cell functions efficiently by utilizing internally developed computer programmes making error free, speedy and efficient documentation of students' records. All the academic records are computerized and a good database is generated. The entire students' files are computerized.

This is the only college in the University, where the grade sheets of the students are sent to their parents soon after the publication of semester results. The PG course planning and allotment, preparation of time-table, monitoring the registration, provision of

guidelines for preparation of research programme, conduct of College Council and Faculty Research Council for the approval of research programmes, scrutiny and recommendation for approval of forecast, submission of thesis, conduct of qualifying and final viva are also being arranged by the academic cell.

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### CAREER GUIDANCE & STUDENTS' PLACEMENT CELL

Officer i/c: Dr. N.K.Parameswaran, Dr. Jayasree Krishnankutty and Dr. D.Girija



A placement cell functions actively in the College, which provides guidance to students on career opportunities. Bio data of the graduate and postgraduate students are collected and sent to needy entrepreneurs and potential employers for placement.

Latest development in employment and higher education are disseminated to the students through display boards and interactive sessions by guest faculty from reputed management institutes. More over, campus recruitments are arranged in tie up with commercial banks, input agencies and industries related to Agriculture.

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### STUDENTS' COUNSELLING CENTRE

Consultant Officer : Dr. Joy Mathew

The need for a Students' Counseling Centre at the College was widely felt to help out students with their emotional problems and personality development issues. Accordingly the centre was inaugurated on 13-01-2004. It has been organizing guest lectures by eminent speakers on various topics related to personality development besides providing counseling on one-to-one basis for needy students on a regular basis.

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### **TECHNICAL/ PLANNING CELL**



Officer i/c: Dr. T. Radha

The Cell aims to coordinate formulation, planning and documentation of technical matters of the College. The cell is vested with the responsibility of compilation of quarterly, half yearly and annual reports and other reports to be placed before the General Council from time to time.

The Cell has prepared Vision 2020 of the College.

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### **STUDENTS' UNION**

Students' union is the co-coordinating hub of all the co-curricular activities of the students of the College of Horticulture. Office bearers to various positions of the union are elected every year from among the students. The Associate Dean as the patron, an Associate Patron nominated from amongst senior faculty and Staff Advisors provide leadership and guidance to the students union. The activities of the union are mainly focussed on the arts club, magazine committee, social service league, planning forum, sports club, environment club and quiz club. An interclass arts festival, college magazine, quiz programmes, lectures, debates and social service and community contact programmes are the major activities annually taken up by the Students' Union. The arts club organizes film shows that attract students from across the campuses. Our students participated in *Campus Hungama* by Jeevan TV and brought laurels to the college by being runners up. A literary wall magazine is another remarkable activity undertaken by the students' union.



### **HOSTEL FACILITIES**

Assistant Warden (Men's Hostel): Dr. Mani Chellappan Assistant Warden (Ladies' Hostel): Dr. Lyla Mathew



The Under Graduate and Post Graduate programmes of the College are residential in nature, and hence hostel facility is provided for *bonafide* students, unless they are exempted on the ground that they are residing with their parents or guardians. The hostel *Harsha* accommodates UG girl students while *Haritha* accommodates PG girl students. Both are located 200m away from the College. The boys are

accommodated in *Pamba* Men's Hostel. The hostels have spacious and comfortable rooms with extra guestrooms to accommodate guests. There are clean mess halls in which more than 100 people can dine at a time. Television sets have been provided with cable connections. The hostels enjoy round the clock telephone and security facilities.



The other facilities available are:

A reading room with books and magazines for various competitive exams, vernacular and national newspapers and other major periodicals
Round the clock working computer club
A well equipped multi-purpose gym facility at the boys' hostel
Indoor facilities for table tennis, carroms, chess, badminton and for other outdoor games like volleyball and basketball
Spacious garage for parking vehicles
Facility for "earn while learn" scheme

Phone : 0487- 2371656 (Men's Hostel) 0487- 2371697 (Ladies Hostel)

### LIBRARY

Assistant Librarian: A.T. Francis



The College Library was started in 1975 with the inception of the College of Horticulture. Now, it is functioning as constituent network part of the Kerala Agricultural University Library and Information System(KAULIS) which has a three tier structure, with the University Library at the apex level, and College and Research Station Libraries at the second and third levels respectively. The library is housed in a most accessible area in the main academic block, with a total carpet area of 512 sq. meters with 56 reading seats for the users. The library has 27,455 Books, 2,994 Books under Book Bank Scheme, 1,268 Theses and 32 Electronic Documents. It subscribes to 69 Journals, 17 Magazines and 06 Newspapers. Library also receives 19 Newsletters on gift/exchange basis. A good collection of Career Guidance Publications is also available. The documents are classified according to the Dewey Decimal Classification Scheme and catalogued as per the Anglo American Cataloguing Rules (AACR). The Library follows Open Access System.

The library provides regular membership to the students, teachers and researchers of the college. Outside users are permitted for reference. Under the KAU Book Bank Scheme, books will be supplied to the students at subsidized rates. The SC/ST Book Bank Scheme will provide textbooks to the SC/ST Students for long term lending. The ICAR Accreditation Team (2003) has appreciated the services of the College Library.

### Services

The Library provides all conventional services such as

Book Loan & Guidance in Literature Search & Use of Reference Books & Indexes & Abstracts & Book
Bank- General; Book Bank -SC/ST & Formal and Informal User Education Programmes & Internet and
Database services & Scanning and Printing Facility with enough UPS back up

e-mail: francisaloor@yahoo.com 0487- 2370822 \* 307





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Database services & Scanning and Printing Facility with enough UPS back up



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### NATIONAL SERVICE SCHEME

Programme Officers: Dr. A. Prema and Dr. P.R.Suresh



National Service Scheme, sponsored by the Ministry of Youth Affairs and Sports, Government of India is an important programme functioning in the College. The prime aim of NSS is to make education more realistic and community oriented. The sanctioned strength of volunteers is 225 under two units. The total strength of students in the college is 270. Two teaching faculty members, nominated as Programmes Officers, provide proper guidance and leadership to the volunteers in the various NSS activities.

The NSS units take up community-based activities and the students get an opportunity to work with the people. They engage in creative and constructive social activities. Programme of water conservation, tree planting, setting up of kitchen gardens in rural households, awareness against drug abuse, blood grouping and blood

donation are being undertaken. Special programmes are also organized in connection with important auspicious days such as Independence Day, NSS Day, Gandhi Jayanti Day, Republic Day, World Environment Day and World Food Day. Selected volunteers are also given chance to participate in national level inter-university camps being organized by the State and Central Government. A special camp for 10 days was organized at *Kondazhi Grama Panchayth* upholding the slogan 'Healthy Youth for Healthy India".

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### **RAWE PROGRAMME**

The Rural Agricultural Work Experience (RAWE) programme is a flagship activity for the final year B.Sc. (Ag.) students during the last semester. Building self-confidence in the agricultural graduates by honing their professional skills is the key objective of introducing RAWE at the under graduate level by ICAR. Accordingly, this semester-long programme has been evolved. The entire programme is split into eight modules through which the students are exposed to the current and emerging opportunities and challenges in Agricultural and Rural Development. Farm Planning, Watershed Development Programme, Entrepreneurship Development Programme, Agro-clinics, Krishi Bhavan training, Research Stations and KVKs training, NGO training and Village Stay are the main modules designed to provide the students a hands-on experience of these strategic areas. During the village stay, the students stay in the rural environment for a fortnight, which provides a rare opportunity to rediscover the farmers.

Besides acquiring first hand field experience, the RAWE modules bring about positive changes in the students' mindset, outlook, personality traits, managerial and entrepreneurial skills. Thus, the RAWE programme developed by the College is a prototype for the University to be extended to other constituent colleges.





FACULTY AT A GLANCE

#### Agronomy

Dr.C.T.Abraham Dr.R.Gopinathan Dr.John P.S. Dr.Mercy George Dr. Lalitha Bai Dr.Sreedevi P Dr.George Thomas Dr.Meera V. Menon Dr. Prameela P. Dr.A.Latha

### **Agricultual Economics**

Dr.E.K.Thomas Dr.K.Satheesh Babu Dr.P.Indira Devi Dr.A.Prema

**Agricultual Engineering** 

Dr. Joby V. Paul Prof. & Registrar Asso, Prof. Dr.V.R.Ramachandran Assit Prof. Er. P.S. Preman

#### **Agricultual Entomology**

Prof. & Head Dr.Jim Thomas Dr.Sosamma Jacob Prof. Dr.Pathummal Beevi Prof. Prof. Dr.A.M.Ranjith Dr.Susannama Kurien Prof. Dr.Lyla K.R Prof. Prof Dr.R.Ushakumari Asso. Prof. Dr.Haseena Bhaskar Asst. Prof. Dr.Mani Chellappan

#### **Agricultual Extension**

Prof. & Head Dr.F.M.H.Khaleel Dr.Jayasree Krishnankutty Asso. Prof.

### **Agricultual Meteorology**

Dr.G.S.L.H.V.Prasada	Rao	Prof.&	Head
DI.O.O.L.III.IIIIdoddad			

Asso. Prof.

Asso. Prof.

Asst Prof.(S.G.)

Asst Prof.(S.G.)

### **Agricultual Statistics**

Mr. P. Gangadharan	
Dr.Laly John	
Mr.S.Krishnan	
Ms. T.K. Ajitha	

**Home Science** Dr.V.Usha Dr.V.Indira

### Olericulture

Prof. & Head

Prof. i/c, IF

Asso. Prof.

Asso. Prof.

Asso, Prof.

Asst.Prof.(SS)

Asst.Prof.(SS)

Prof.& Head

Asso, Prof.

Asso. Prof.

Asst. Prof. (SS)

Prof.

Prof.

Prof.

Dr.T.E.George Dr.K.V.Peter Dr.Salikutty Joseph Dr.P.Indira Dr.P.G.Sadhan Kumar Dr.Baby Lissy Markose Dr.K.P.Prasanna Dr.K.V.Suresh Babu Dr.S.Nirmala Devi Dr.K.Krishnakumari Dr. Pradeepkumar T.

### **Physical Education**

Mr.E.U.Rajan

### **Plant Biotechnology**

Dr.P.A.Nazeem Dr.P.C.Rajendran Dr A.Augustin Dr.R.Kesavachandran Dr.P.A.Valsala Dr.D.Girija Dr. R.Sujatha

### **Plant Patholology**

Prof.& Head Dr.Koshy Abraham Dr.Sally K.Mathew Prof. Dr.M.V.Rajendran Pillai Prof. Prof. Dr.Sheela Paul Prof. Dr.Rehumath Niza Asso, Prof. Dr.S.Beena Dr.Surendra Gopal.K Asso. Prof. Smt. Sainamol Kurien.P Asst Prof.(SS)

### **Plant Breeding & Genetics**

Dr.V.V.Radhakrishnan Prof. & Head Prof.i/c CCRP Dr.V.K.Mallika Dr.K.T.Prasanna Kumari Prof. Dr.K.Nandini Prof. Asso, Prof. Dr.C.R.Elsy Dr.T.Girija Asso. Prof.

Prof. & Head Prof.

Prof.& Head Prof. Prof. Prof. Prof. Prof. Asso. Prof. Asso, Prof. Asso. Prof. Asso. Prof. Asso, Prof.

Asst. Prof.(S.G.)

Prof. & Head Prof. Prof. Prof. Prof. Asso. Prof. Asst Prof.(SS)

Dr.Diji Bastin Dr.Jiji Joseph Asst Prof. (SS) Asst Prof. (SS)

### **Plantation Crops & Spices**

Dr.E.V.Nybe	Prof. & Head
Dr. Prasanna Kumari An	nma Prof.
Dr.P.V.Nalini	Prof.
Dr.Alice Kurien	Prof.
Dr.M.R.Shylaja	Asso. Prof.
Dr.V.S.Sujatha	Asso. Prof.
Dr.N.Mini Raj	Asso. Prof.
Dr.Asha Sankar	Asso. Prof.
Dr.Lissamma Joseph	Asso. Prof.
Dr.B.Suma	Asso. Prof.

#### Pomology, Floriculture & Landscaping Dr PK Painov D. l o

Dr.P.K.Kajeevan	Prot. a
	Asso. Deani/c
Dr.P.K.Valsalakumari	Prof. & Head
Dr.K. Aravindakshan	Prof.
Dr.Lyla Mathew	Prof.
Dr.T.Radha	Prof.
Dr.A.K.Babylatha	Prof.
Dr.C.K.Geetha	Prof.
Dr.Sudhadevi.P.K.	Prof.
Dr.Sarah T.George	Prof.
Dr.N.K.Parameswaran	Asso. Prof.
Dr.A.Sobhana	Asso. Prof.
DrK.Ajith Kumar	Asso. Prof.

### **Processing Technology**

Prof. & Head Dr.P.Jacob John Prof. Dr.K.B.Sheela Dr.P.B.Pushpalatha Asso. Prof.

### Soil Science & Agril. Chemistry

Dr.K.C.Marykutty	Prof.& Head
Dr.K.A.Mariam	Prof.
Dr.M.A.Hassan	Prof.
Dr.P.K.Sushama	Prof.
Dr.Betty Bastin	Asso. Prof.
Dr.P.Sureshkumar	Asso. Prof.
Dr.K.M.Durga Devi	Asso. Prof.
Dr.P.R.Suresh	Asso. Prof.
Dr.Mini S.	Asst Prof. (SS)



# **SPECIAL OFFICERS/ASSOCIATE DEANS**

Name	From	То	
Dr. V.S.S. Potti	30-12-1972	25-10-1974	
Dr. K.C. Naik	26-10-1974	22-04-1976	
Dr. V.K. Damodaran	23-04-1976	30-05-1978	
Dr. P.C. Sivaraman Nair	31-05-1978	08-03-1981	
Dr. P.K. Gopalakrishnan	09-03-1981	02-03-1987	
Dr. C. Sreedharan	03-03-1987	03-01-1989	
Dr. C.C. Abraham	04-01-1989	13-11-1995	
Dr. A.I Jose	14-11-1995	14-02-2000	
Dr. P.V. Prabhakaran	15-02-2000	17-02-2001	
Dr. A. Sukumara Varma	18-02-2001	10-07-2003	
Dr. GSLHV Prasada Rao	11-07-2003	19-07-2006	
Dr. P.K.Rajeevan	20-07-2006	continuing	

# **ADMINISTRATIVE STAFF**

Category	a (n. 1997) 1 an - Alian Angela, an - Alian Ang	Sanctioned Post	In Position
Administrative Officer			1
Section Officer		5	5
Section Officer (FC&I	D)	1	]
Assistant Librarian	and the second	2	1
Assistants	a a se Pro-	16	12
OS / Typist		9	5
Farm Supervisor/ Far	m Assistants	13	10
Technical Supervisor		2	1
echnician		1.00	0
Technical Assistants		2	0
Junior Programmer		2	0
Hostel Manager		1	1
Matron		1	
Processing Technolog	y Assistant	1	0
Duplicator Operator		2	2
HDV/ LDV Driver		5	1
Lab Assistants/ Librar	Assistants	21	7
Class IV		9	3
Total		94	53

## Externally Aided Research Projects (Ongoing)

Funding Agency	No. of Projects
ICAR ADHOC	1
AICRP	8
DBT	10
DST	4
CSS	3
NHB	2
KSCSTE	5
IFFCO	
PFID(UK) through ICAR	
Dept. of Agrl., GoK	e a brind and the second
CCRP	1
Aspinwall Ltd.	an an an Alexandra II. An an an an
Marico Ltd.	1
BARC	
Total	40

# Externally Aided Research Projects (Concluded)

Funding Agency	No. of Projects
ICAR ADHOC	
AICRP	8
NATP	10
DBT	10
DST	4
CSS	3
NHB	2
KSCSTE	5
SANDEE	1
Dept. of Agrl., GoK	1
Aspinwall Ltd.	1
Marico Ltd.	1
BARC	
Total	58



## **Recent Publications by the Faculty**

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- Peter, K V 2007(Ed). Radha, T. and Mathew, L. **Fruit Crops.** New India Publishing Agency, New Delhi. p.429.
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# Workshops/ Seminars Oraganised

Name of Symposia/ Seminar/Workshops	Duration & Period	No. of delegates
XVI National Workshop on AICRP on Spices	2 days November 1-2, 2001	200
20 <sup>th</sup> Group Meeting of AICRP on Vegetables	4 days April 9-12, 2002	200
XI Annual Review Meeting of the DST Project on Experimental Agrometeorological Advisory Services	3 days November 28-30, 2002	150
National Workshop on Patent Awareness	1 day March 21,2003	150
Working Group Meeting on the AICRP on Agrometeorology	3 days May 16-18, 2003	50
CAR Short Course On Emerging Trends In Conservation And Management of Genetic Resources	10 days September22- October1, 2003	25
National Symposium on Recent Advances in Floriculture	3 days November 12-14, 2003	150
Consultation on Natural Resources of Kerala	1 day September7, 2004	50
CAR National Symposium on Input Use Efficiency in Agriculture: Issues and Strategies	3 days November 25-27, 2004	150
ICAR sponsored Winter School on Market-Led Extension: Dimensions and Tools	21 days December 1-21, 2004	25
National Symposium on Biotechnological Interventions for Improvement of Horticultural Crops: Issues and Strategies	3 days January 10-12, 2005	150
National Workshop on Drought Management in Plantation Crops	2 days March 22-23, 2005	75
ICAR sponsored Winter School on Intellectual Property Management of genetic resources : Dimensions and Tools	21 days November 9- 29, 2005	30
State level workshop on protection of Geographical Indications of Pokkali Rice	2 days May 4 & 25 , 2006	280
ICAR sponsored Winter School on Flori-business in the changing global scenario: Issues and Strategies	21 days November 8-28, 2006	25
National Seminar on Plant Physiology	21 days November 28-30, 2006	250
ICAR sponsored GIS based watershed planning in Agriculture	21 days December 2-22, 2006	25
Nurserymen Face to Face 2007	1 day September 27, 2007	47



# **B.Sc. (Ag.) Courses Under Various Disciplines**

Majo	or Cour	ses	Credit hrs.
Agro. Agro. Agro. Agro. Agro. Agro. Agro. Agro.	2104 2205 2206 3107 3108	Principles of agronomy Weed management Irrigation and water management Field crops I Field crops II Rain fed agriculture Farming systems and sustainable agriculture Practical crop production I – rice	2+1 1+1 2+1 2+1 1+1 2+0 0+1 <b>11+7 = 18</b>
	orolog 1101	<b>y</b> Agricultural meteorology	1+1
Chem Chem Chem Chem	Science 1101 1202 2103 3204 3205	& Agricultural Chemistry. Fundamentals of soil science Elementary biochemistry Soil fertility and nutrient management Conservation and management of soil and water resources Agro ecology and environmental pollution (multidisciplinary course)	1+1 = 2 2+1 2+1 2+1 2+1 2+1 2+1
Plant	Breed	ing & Genetics	10+5 = 15
Pbgn. Pbgn. Pbgn. Pbgn.	1101 1202 2203	Elements of genetics and cytogenesis Principles of Plant Breeding Breeding of crops Seed production and certification	2+1 2+1 2+1 2+1 <b>8+4 = 12</b>
<b>Plant</b> Phys.	<b>Physic</b> 2201	b <b>logy</b> Elementary crop physiology	
	Patho		2+1 2+1 = 3
Path. Path. Path. Path. Path.	1101 1202 2203 3104 3205 4106	Microbiology Introductory plant pathology Principles of crop disease management Disease of field crops Disease of horticultural crops Mushroom cultivation	1+1 1+1 1+1 1+1 1+1 0+1
		Entomology	5+6 = 11
Ento. Ento. Ento. Ento.	1201 2102 2203 4104	Fundamentals of entomology Economic entomology Crop pests and their management Agro clinic	2+1 2+1 2+1 1+1
		Extension	7+4 = 11
Extn. Extn.	1101 2102	Sociology and psychology as applied to extension education Fundamentals of extension education	2+0
Extn.	3103	and rural development Communication and diffusion of	2+1
Extn. 4		agricultural innovations Rural agricultural work experience programme (RAWE)	2+1 0+18
Agric	ultural		6+20 = 26
Stat. Stat. Stat. Stat. Stat.	<b>ultural</b> 1101 1202 2103 3104	Mathematics (Remedial) Elementary statistics Computer applications Design and analysis of experiments	3+0 1+1 0+2 1+1 5+4 = 9
<b>Agric</b> Econ. Econ. Econ.	1201 2102	<b>Economics</b> Basic Economics, co-operation & agrl. finance Farm business management Agricultural marketing and international trade	e 2=1 2+1

Engg. 2101	<b>Engineering</b> Farm machinery and power Post harvest engineering	2+1 1+1 <b>3+2 = 5</b>
Animal Hus	sbandry	372 - J
Anhs. 2201	Livestock and poultry management	2+1
Home Scier	ice	2+1 = 3
Hmsc. 3201	Human food and nutrition	1 + 1
Physical Ed	ucation	1 + 1 = 2
	Physical education	0+1
inou. Trot		0+1 = 1
Horticulture	•	
Hort. 1101	Fundamentals of horticulture	1+1
Hort. 1202	Plantation crops	1+1
Hort. 2103	Landscaping and ornamental horticulture	1+1
Hort. 2204	Vegetable production	2+1
Hort. 3105	Fruit crops	2+1
Hort. 3106	Spices and medicinal plants	1 + 1
Hort. 3207	Post harvest management and processing	
	of horticultural crops	2 + 1
Hort. 3208	Practical crop production – vegetables	0 + 1
Digent Risto	halow	10+8 = 18
Plant Bioter Biot. 3201		1 . 1
DIOI. 3201	Introduction to plant biotechnology	]+] ]+]
		1+1

# Semester-wise distribution of courses for B.Sc. (Ag.) Programme

Semester -	I Cr	edit hrs.
Agro. 1101	Principles of agronomy	2+1
Agmt. 1101	Agri-meteorology	1 + 1
Chem. 1101	Fundamentals of soil science	2 + 1
Path. 1101	Microbiology	1+1
Extn. 1101	Sociology and psychology as applied	
	to extension education	2+0
Hort. 1101	Fundamentals of horticulture	1+1
Pbgn. 1101	Elements of genetics and cytogenetics	2 + 1
Phed. 1101	Physical education	0 + 1
Stat. 1101	Mathematics (Remedial)	3+0
Semester –	11 II I	14+7
Agro. 1202	Weed management	]+]
Agro. 1202 Agro. 1203	Irrigation and water management	1+1
Chem. 1202	Elementary biochemistry	2 + 1
Path. 1202	Introductory plant pathology	1+1
Econ. 1201	Basic economics, co-operation and agrifinance	2 + 1
Ento. 1201	Fundamentals of entomology	2+1
Hort. 1202	Plantation crops	1 + 1
Stat. 1202	Elementary statistics	1+1
Pbgn. 1202	Principles of plant breeding	2+1
		13+9
Semester -		
Agro. 2104	Field crops – I	2 + 1
Chem. 2103	Soil fertility and nutrient management	2 + 1
Engg. 2101	Farm machinery and power	2 + 1
Stat. 2103	Computer applications	0+2
Extn. 2102	Fundamentals of extension education and	
	rural development	2 + 1
Econ. 2102	Farm business management	2 + 1
Ento. 2102	Crop pests and their management	2 + 1
Hort. 2103	Landscaping and ornamental horticulture	1+1
Semester IV		13+9
Agro. 2205		2+1
rigio. 2200	Field crops II	ZTI

Agro. 1 Anhs 2		Rain fed agriculture Livestock and poultry management	1+1 2+1	Path.
Pbgn.		Breeding of crops	2+1	Path.
Path.	2203	Principles of crop disease & management	1+1.	Path.
Phys.	2201	Elementary crop physiology	2+1	Path.
Ento.	2203	Economic entomology	2+1	1 ann.
Hort.	2203	Vegetable production	2+1 /*	
11011.	2204	vegelable production	14+8	Agrl.
Somo	ster V	· · ·	- 10 M	Extn.
Agro.	3107	Farming system and sustainable agriculture	2+0	Extn.
Agro.	3108	Practical crop production I – Rice	0 + 1	Extr.
Stat.	3104	Design and analysis of experiments	1+1	Extn.
Engg.	3102	Post harvest engineering	1 + 1	Extn.
Path.	3104	Disease of field crops	1 + 1	Extn.
Extn.	3103	Communication & diffusion of agricultural innovat	ion 2+1	
	3103	Agricultural marketing and international trade	2 + 1	Agric
Hort.		Fruit crops	2 + 1	Econ.
Hort.	3106	Spices and medicinal plants	1 + 1	Econ.
		and the second	12+8	Econ.
Seme	ster V			
Hort.	3208	Practical Crop production - vegetables	0 + 1	Plant
Hort.	3207	Post Harvest management and processing of		Phys.
		horticultural crops	2 + 1	1
Chem	. 3204	Conservation and Management of soil and water r	esources	Agric
C.I.C.I.		2+1		Ento.
Chem	. 3205	Agro ecology and environmental pollution	2 + 1	Ento.
	3204	Seed production and certification	2 + 1	Ento.
Biot.	3201	Introduction to plant biotechnology	1 + 1	Ento.
Path.	3205	Diseases of horticultural crops	1+1	Ento.
Hmsc	. 3201	Human food and nutrition	1 + 1	Ento.
			11+8	
Seme	ester V			Ento.
Path.	4106	Mushroom cultivation	0+1	Ento.
Ento.	4104	Agro-clinic	1+1	Ento.
		Optional courses (from various disciplines)	16	
			17+2	Hort
	ester V		18	Hort.
Extn.	4210	RAWE	163	Hort.
	Gran	nd total	105	LI
LICT		TIONAL COURSES		Hort. Hort.
LIJI	OF OF	HONAL COOKSES		11011.
Aar	nomy			Hort.
	<b>nomy</b> 4109	Agro waste utilization in crop production	1 + 1	11011.
	4110	Techniques for quality seed production	1 + 1	Hort.
Agro.		Watershed management	1 + 1	Hort.
Agro.	4111	Waldishea managemeni		Hort.
Soil	Science	& Agricultural Chemistry		11011.
	n. 4106	Analytical Chemistry	0 + 1	Hort.
	n. 4107	Soil survey, soil taxonomy and remote sensing	1 + 1	
	n. 4108	Organic farming	1 + 1	Hort.
	n. 4109	Fertilizer technology	1 + 1	Hort.
Chen	n. 4110	Agrl. chemicals and environmental pollution	1 + 1	Hort.
				Hort.
Plan	t Breed	ding & Genetics		Hort.
Pbgn	. 4105	Breeding for biotic and abiotic stresses	2 + 1	Hort.
Pbgn	. 4106	Germplasm conservation and utilization	2+0	Hort.
Pbgn	. 4107	Hybrid seed production	2 + 1	Hort.
Pbgn	. 4108	Advanced cytogenetics	2+0	Hort.
	t Path		0 + 1	Hom
Path.		Post harvest pathology	0 + 1	Hmsd
Path.		Biofertilizers	$0+1 \\ 0+1$	Hmso
Path.		Biopesticides Riscontrol of plant dispersor	$0+1 \\ 0+1$	Hms
Path.		Biocontrol of plant diseases	$0+1 \\ 0+1$	Hms: Hms:
Path. Path.		Fungicide in plant disease management Seed pathology	$0+1 \\ 0+1$	Hms

ath.	4113	Detection and management of viral diseases of	
		new elle l'encourse	0 + 1
	4114	- left-re	$0+1 \\ 0+1$
	4115 4116	Extension plant pathology Commercial cultivation and utilization of tropical	0+1
ath.	4110		0 + 1
	Extens	ion	1 . 1
xtn. Ixtn.	4104 4105	Agricultural extension management Entrepreneurship development in agriculture	$1+1 \\ 1+1$
.xin. Extn.	4105	Participatory approaches for rural development	1 + 1
xtn.	4107	Agricultural journalism	1 + 1
Extn.	4108	Distance education	1 + 1
Extn.	4109	Gender perspectives in agri-development	0 + 1
Aaric	ultural	Economics	
con.	4104	Natural resource economics	]+]
con.	4105	Environmental economics	1+1
con.	4106	Agrl. business management	1 + 1
Plant	Physic	ology	
Phys.	4102	Mineral nutrition and stress physiology of plants	1 + 1
Aaric	ultural	Entomology	
Ento.	4105	Insect systematics	1 + 1
Ento.	4106	Biological control of pests and weeds	1+1
Ento.	4107	Integrated pest management : principles & practices	1+1
Ento.	4108	Insect toxicology Toxicology and residues of pesticides	1+0 1+1
Ento. Ento.	4109 4110	Pests of stored products, animals, household,	1.1.1
LINO.	4110	public health important pests and their management.	.1+1
Ento.	4111	Productive insects	1 + 1
Ento.	4112	Introductory nematology and taxonomy of nematode	s]+]
Ento.	4113	Vermiculture	0+1
Horti	culture	<b>a</b>	
Hort.	4109	Production technology of commercial flowers	]+]
Hort.	4110	Greenhouse technology and protected	1.1
11	4111	cultivation of ornamental crops Breeding of commercial flowers	1+1 1+0
Hort. Hort.	4111 4112	Post Harvest handling and marketing of	1 + 0
11011.	4112	cut flowers and foliage	1 + 1
Hort.	4113	Propagation and nursery production of	
		ornamental plants	1+1
Hort.	4114	Landscape designing & indoor gardening techniques	; 1+1
Hort.	4115	Production technology of Coconut Value addition and product diversification of	]+]
Hort.	4116	spices and aromatic plants	1+1
Hort.	4117	Plant Propagation and nursery management in	
		plantation crops, spices and medicinal Plants	2 + 1
Hort.	4118	Propagation of fruit crops	1+1
Hort.	4119	Dry land pomology	1+1
Hort.	4120	Breeding of fruit crops	$1+1 \\ 1+1$
Hort. Hort.	4121 4122	Biodiversity and conservation of vegetable crops Principles of vegetable breeding	2+1
Hort.	4123	Biotechnology in vegetable crops	1 + 1
Hort.	4124	Seed production in vegetable crops	2 + 1
Hort.	4125	Protected cultivation in vegetables	2 + 1
Hort.	4126	Orientation in processing industry and quality control	1+1
Hom	e Scie	nce	
	. 4102	Family and community nutrition	1+1
	. 4103	Food toxicology and hygiene	1+0
	. 4104	Bakery technology	$0+1 \\ 1+0$
	: 4105 : 4106	Consumer education Fruit and vegetable preservation	1+0 1+1
	. 4100	Food science	1+0