ANNUAL REPORT 2010-11

Dr.Y.S.R. Horticultural University

Venkataramannagudem, West Godavari District – 534 101, A.P.

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Dr.YSRHU, Annual Report, 2010-11

Published by

Dr.C.V.S.K.Sarma, I.A.S.
Vice-Chancellor i/c.

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Printed by
New Image Graphics,
Suryaraopeta, Vijayawada-2,
Phone : 0866 2435553

DR.C.V.S.K.SARMA, I.A.S.
VICE-CHANCELLOR
Dr.Y.S.R. Horticultural University

Foreword

I am happy to present the Third Annual Report of Dr.Y.S.R. Horticultural University (Dr.YSRHU). It is a compiled document of the university's activities during the year 2010-11.

Andhra Pradesh Horticultural University was established at Venkataramannagudem, West Godavari District, Andhra Pradesh on 26th June, 2007 by Act 30 of 2007 and renamed as Dr.Y.S.R. Horticultural University w.e.f. 18th April, 2011 by Act 13 of 2011. Andhra Pradesh Horticultural University second of its kind in the country, with the mandate for Education, Research and Extension related to horticulture and allied subjects. The university at present has 4 Horticultural Colleges, 5 Polytechnics, 27 Research Stations and 3 KVKs located in 9 agro-climatic zones of the state.

Dr.Y.S.R. Horticultural University offers B.Sc. (Hons.) in Horticulture, M.Sc. (Horticulture) with specialization in four areas, namely i) Fruit Science, ii) Vegetable Science, iii) Floriculture & Landscape Architecture, iv) Spices, Plantation, Medicinal & Aromatic crops and Ph.D (Horticulture). The university runs on the land grant pattern followed in the USA, integrating Horticultural Education, Research and Extension. With an intension to provide self employment to rural youth and also to make use the services of rural youth, the university has established five Horticultural Polytechnics to offer two year Diploma in Horticulture.

The Dr.Y.S.R. Horticultural University Board of Management met 6 times during the year. Two Academic Council meetings and three ZREAC meetings were held during the year.

In B.Sc. (Hons.) Horticulture, M.Sc. (Horticulture) and Ph.D (Horticulture), a total of 987, 97 and 16 students are on roll respectively along with 254 students in Diploma course.

The Dr.Y.S.R. Horticultural University is conducting basic, applied, location / region specific and anticipatory research for the overall development of horticultural crops in the state at 27 research stations.

In Coriander, a variety namely APHU Dhania –I is released. The university scientists are developing technologies in various horticultural crops and are also involved in popularizing the proven technologies and improved varieties developed through various extension activities viz., All India Radio, Print and Visual media, Participation in Exhibitions, *Krishi melas, Rythu chaitanya yatra, Raithu Sadassulu* and *Adarsha Rythu* programmes.

I take this opportunity to thank the Indian Council of Agricultural Research and Government of Andhra Pradesh for their financial and technical support to the university.

I am thankful to Hon'ble members of Board of Management, Academic council, Research and Extension Council for their timely guidance and cooperation extended to the university.

I whole heartedly, thank the University officers, Associate deans, Principals, Heads of Research Stations and supporting staff for their cooperation in preparation of the Annual Report. I appreciate the sincere efforts of Dr.B.Srinivasulu, Controller of Examinations and Dr.K.Purushotham, Director of Research & Registrar, Dr. K.Hari Babu, Dean of Student Affairs & Dean of Horticulture, Dr.S.Amarendar Reddy, Director of Extension and the supporting staff for their sincere support in preparation of the report.

(Dr.C.V.S.K.SARMA)
Vice-Chancellor

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Summary

The Andhra Pradesh Horticultural University (APHU) was established by the Government of Andhra Pradesh with its headquarters at Venkataramannagudem, near Tadepalligudem in West Godavari District, Andhra Pradesh on 26th June, 2007 by Act 30 of 2007 and renamed as Dr.Y.S.R. Horticultural University w.e.f. 18th April, 2011 by Act 13 of 2011. It is the second Horticultural University in the country. The university runs on Land Grant Pattern followed in the USA, with emphasis on Education, Research and Extension of Horticulture and allied subjects. Presently this university has four constituent Colleges of Horticulture, 27 Research Stations, 3 KVKs and 5 Horticultural Polytechnics situated in 9 agroclimatic zones of Andhra Pradesh.

The University is governed by a Board of Management comprising of 21 members headed by the Vice-Chancellor. The Vice-Chancellor is supported by University Officers viz., Registrar, Dean of Horticulture, Director of Research, Director of Extension, Dean of PG Studies, Dean of Student Affairs, Controller of Examinations, Comptroller and Estate Officer in University management. The academic affairs of the University are governed by the Academic Council, UG and PG board lead by the Vice-Chancellor, the Research and Extension services are guided by Research and Extension Council (REC).

EDUCATION

This university offers B.Sc. (Hons.) Horticulture in four constituent colleges namely College of Horticulture, Anantharajupet (Kadapa District), Mojerla (Mahaboobnagar District), Rajendranagar (Ranga Reddy District) and Venkataramannagudem (West Godavari District), M.Sc. (Horticulture) with specialization in Fruit Science, Vegetable Science, Floriculture and Landscape Architecture and Spices, Plantation, Medicinal and Aromatic Crops and Ph.D (Horticulture) at College of Horticulture, Rajendranagar and Venkataramannagudem. The university has established five Horticultural Polytechnics in rural areas to offer two year Diploma in Horticulture. The Horticultural Polytechnics are at Dasnapur (Adilabad district), Madakasira (Ananthapur district), Ramachandrapuram (East Godavari district), Ramagirikhilla (Karimnagar district) and Kalikiri (Chittoor district).

During the year 2010-11, six meetings of Board of Management, two Academic Council meetings were held. Students on roll are 241, 46, 7 and 124 in B.Sc. (Hons.) Horticulture, M.Sc. (Horticulture), Ph.D (Horticulture) and Diploma in Horticulture respectively. NSS activities at College of Horticulture, Anantharajupet, Mojerla, Rajendranagar and Venkataramannagudem were conducted.

RESEARCH

Crop improvement

In mango at HRS, Aswaraopet, among 10 hybrids tested, Manjeera recorded the highest mean number of fruits (556 No.) and mean yield (163 kg) per tree over the all other hybrids.

In Banana at HRS, Kovvur, 107 accessions are maintained under germplasm block. One hundred and three (103) accessions are characterized and deposited at NRC for Banana (NGIS). Dwarf cavedish clone (KBS-8) recorded an average bunch weight of 50 kg with an yield potential of over 115t ha^{-1} .

In Chillies at HRS, Lam in IET, LCA-25 recorded the highest dry chilli yield (62.19 q/ha) and was on par with HC-50 (58.66 q/ha) and UR-339 (55.75 q/ha).

In Coconut at HRS, Ambajipeta the highest nut yield per palm per year was recorded in cross combinations Gauthami Ganga X Chandra Kala 129.54 nuts and VHC-1 (123.18 nuts) compared to the Godavari Ganga (120.70 nuts).

Crop production

In orange at HRS, Mallepally, application of 100 kg Farm Yard Manure + 1 kg Urea followed light irrigation 15 days after stress recorded maximum fruit number of 346.6 /tree.

In Sapota at HRS, Venkataramannagudem, highest fruit yield / tree was recorded in 10 x 10m spacing (111.41 kg $tree^{-1}$).

In Chilli, calcium Nitrate 5 g/l sprayed at 10 days interval minimized whitened pods (2.37 q/ha^{-1}) and recorded highest dry pod yield of 49.2 q/ha^{-1} .

Crop protection

Entomology

Thiamethoxam 25% WG 58/20 lt and imadecloprid 17.8% Ll 0.3 ml/lt was found effective against thrips and hoopers in mango.

Certain new molecules of insecticides were evaluated against Chilli thrips and the results indicated that Spinosad @0.25 ml/lt recorded highest per cent reduction in population.

Plant Pathology

In Banana sigatoka disease 42.49% was effectively controlled with three sprays of Propiconezole (0.1%) followed by propiconozole (0.05%) with mineral oil (1%).

In Chilli at HRS, Lam, the fungicides tested against anthracnose disease Azoxystrobin 0.1% propiconazole @0.1% Difenconazole @0.06% Cabriotop 0.3% copper hydroxide 0.25% were found effective.

Post-Harvest Technology

Spraying of two per cent potassium sulphate (K_2SO_4) 30 days before harvest on Kesar variety of Mango resulted in minimum physiological loss of fruit weight of 5.32% and 11.04% at 5 and 10 days after harvest respectively. The yield of Neera from inflorescence is depending on skill of the tapper. V channel type of cut from inflorescence yields more Neera as compared to other type of cuts.

EXTENSION

This University has KVK's are at Pandirimamidi, East Godavari District, Venkataramannagudem, West Godavari District and Ramagirikhilla, Karimnagar District. Scientists of Dr.Y.S.R.H.U. have participated in diagnostics surveys, Rythu Chaitanya yatras, disaster management programmes, training programmes to farmers and officers of the Department of Horticulture and Agriculture, conducting field days, transfer of technology through mass media, publications, field demonstrations and village adoption programmes etc. Regular ZREAC programmes conducted in all the three zones including departmental officers and local farmers. As a support to mass media cell of Commissioner of Agriculture, All India Radio and Doordarshan monthly calendar of operations of Horticultural crops is prepared well in advance and circulated to all the concerned stations and extension agencies in the state.

I. Introduction

The Andhra Pradesh Horticultural University was established by the Government of Andhra Pradesh by Act 30 of 2007 with its headquarters at Venkataramannagudem, near Tadepalligudem in West Godavari District and renamed as Dr.Y.S.R.Horticultural University w.e.f. 18th April, 2011 by Act 13 of 2011. It is the second Horticultural University in the country. The University runs on the Land Grant pattern followed in the USA, with emphasis on Education, Research and Extension of Horticulture and allied subjects.

The University at present has four horticultural colleges, five polytechnics, 27 Research Stations and three KVKs across 9 agro-climatic zones of the state. Ongoing research programmes at 27 Research Stations have been reoriented into eight thrust areas identified based on the present day need. Nineteen All India Coordinated Research projects are also operating at different research stations of the university. Funds for research are provided by the State Government and also the Indian Council of Agricultural Research (ICAR). The ICAR provides 75 per cent of funds for conducting research under various All India Coordinated Research Projects of ICAR.

The University is governed by a Board of Management comprising of 21 members headed by the Vice-Chancellor. The Vice-Chancellor is supported by University Officers viz., Registrar, Dean of Horticulture, Director of Research, Director of Extension, Dean of PG Studies, Dean of Student Affairs, Controller of Examinations, Comptroller and Estate Officer in University management. The academic affairs of the University are governed by the Academic Council, UG and PG Boards led by the Vice-Chancellor. The Research and Extension services are guided by the Research and Extension Council (REC).

This university offers B.Sc. (Hons.) Horticulture, M.Sc. (Horticulture) with specialization in i) Fruit Science ii) Vegetable Science iii) Floriculture and Landscape Architecture, and iv) Spices, Plantation, Medicinal and Aromatic crops and Ph.D (Horticulture). The course curriculum prescribed by the IV Deans' committee of Indian Council of Agricultural Research is being followed for the degree programme. Students besides course work, they shall also undergo Rural Horticultural Work Experience Programme (RHWEP) and 'Hands on Training / Experiential learning of 14 weeks each on specialized subjects, namely, (1) protected cultivation of high value crops (2) post-harvest technology and value addition (3) nursery production and management (4) floriculture and landscape gardening, dealing with commercialization of horticulture in addition to rural training for the award of Bachelor's degree. In RHWEP the final year students are deputed to stay in villages along with farmers for full one year, where they will interact with farmers of the village, work with them, understand their problem, apply the latest knowledge, acquire necessary skills and gain self confidence. These rural based training programmes i.e., RHWEP, Hands on Training/ Experiential Learning will be useful to develop the manpower requirement with different technical expertise in view of the globalization of Horticultural trade and for imparting quality education and training in horticulture to the students to develop into well trained personnel, a part of rural development programme. With an intention to provide self employment to rural youth, and also to make use the services of rural youth in rural development, the University has established five Horticultural Polytechnics in rural areas to offer two year Diploma in Horticulture.

The University scientists are involved in popularizing the proven technologies and improved varieties developed through various extension activities, namely; All India Radio, print and visual media, participation in Exhibitions, Krishi Melas, Rythu Chaitanya Yatra, Rythu Sadassus and Adarsha Rythu Training Programmes.

II. University Administration

His Excellency, the Governor of Andhra Pradesh, **Sri E.S.Lakshmi Narasimhan** is the Chancellor of the University.

Dr.S.D.Shikhamany the Vice-Chancellor (upto 25.2.2011) and Dr. C.V.S.K.Sarma, the Vice-Chancellor, Agricultural Production Commissioner and Principal Secretary to Government & Vice-Chancellor i/c. are the Academic Head and Principal Executive Officers of the University.

The organizational set up of the University is presented in flow chart.

The University is governed by the following authorities.

- Board of Management
- Academic Council

A. AUTHORITIES OF THE UNIVERSITY

1. Board of Management

The Board of Management of Dr.YSRHU is the apex body, empowered to make policy decisions, with the Vice-chancellor as its Chairman who is also the Chief Executive of the University.

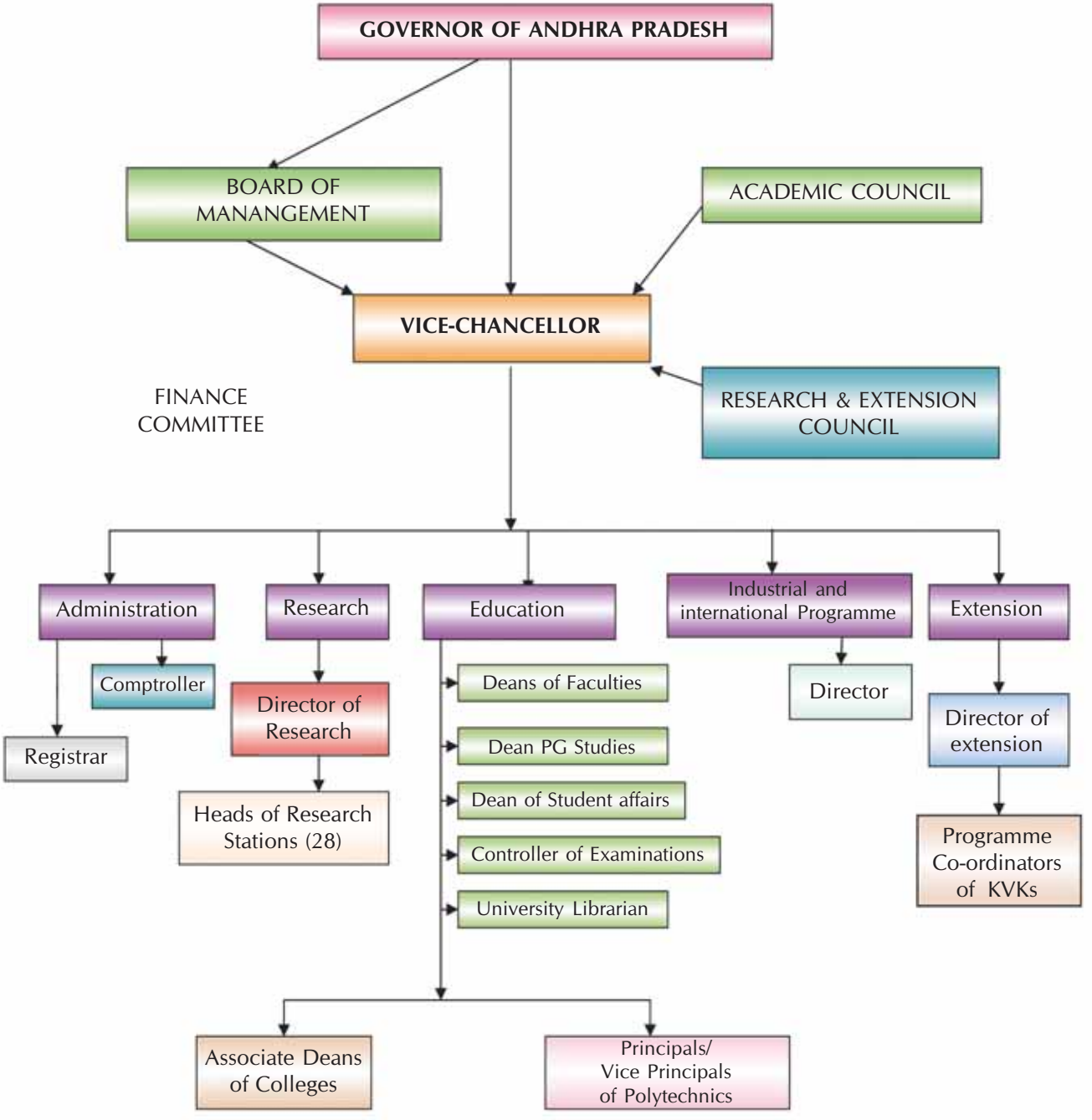
The Board of Management has representatives from State Legislature/Parliament (4), the Horti-industry (2) and State Chamber of Panchayat Raj (1) as well as Horticultural Scientific Community (1). In addition, one representative from the Indian Council of Agricultural Research, three Members of Academic Council of the University, Secretaries to Government from Panchayat Raj and Finance Departments and Director of State Departments of Agriculture and Animal Husbandry are also the Members of the Board of Management of APHU.

Members of Board of Management, Dr.YSRHU

Chairman	**Dr. C.V.S.K.Sarma,** I.A.S. Agril. Production Commissioner & Principal Secretary to Government, ATM & Vice-Chancellor (from 26-02-2011)
	Dr. S.D. Shikhamany Vice-Chancellor, APHU (upto 25-02-2011)
Official Members	**Dr. P. Raghava Reddy,** Vice-Chancellor, ANGRAU
	Dr. V.Prabhakar rao, Vice-Chancellor, SVVU
	Dr. C.V.S.K.Sarma, I.A.S. Agril. Production Commissioner & Principal Secretary to Government, ATM

	Mrs. Vasudha Mishra, I.A.S. Secretary to Government (IF)
	Mrs. I.Rani Kumudini, I.A.S. Commissioner & Director of Horticulture
	Dr. S.Amarender Reddy, Professor (Hort.)
	Dr. K. Purushotham, Director of Research
	Dr. D.V. Raghava Rao, Dean of Horticulture (Retd.)
Non-Official Members	**Sri V.Jayarami Reddy,** Assistant Professor of Horticulture (Retd.), Distinguished Horticultural Scientist
	Sri Merla Veeraiah Chowdary, Progressive Farmer of Horticulture
	Sri H. Venugopal, Progressive Farmer of Horticulture
	Smt. M. Sreevani, Progressive Farmer of Horticulture
	Dr. Y. Narayana Reddy, Professor (Horticulture) & Head (Retd.)
	Sri J. Devi Prasad, Horticulture Industrialist /Other Entrepreneurs.
	Sri Galla Jayadev, Industrialist
Members of Parliament/	**Sri S.P.Y.Reddy,** Member of Parliament
Legislature	**Sri Rao Sujaya Krishna Ranga Rao,** Member of State Legislature, Bobbili.
	Sri Challa Amarnatha Reddy, Member from State Chamber of Panchayat Raj.
	Sri G.Venkata Ramana Reddy, Member of Legislative Assembly, Bhupalpally
	Sri Katasani Rambhoopal Reddy, Member of Legislative Assembly, Panyam
ICAR Representative	**Dr. B. Venkateswarlu,** Director, CRIDA
Member – Secretary	**Dr. P. Suryanarayana Reddy**

ORGANIZATIONAL STRUCTURE OF DR.YSR HORTICULTURAL UNIVERSITY



2. Officers of the University

The list of University Officers for the year is given below

UNIVERSITY OFFICERS	
Vice-Chancellor	**Dr. C.V.S.K.Sarma** I.A.S. Agril. Production Commissioner & Principal Secretary to Government, ATM & Vice- Chancellor (From 26.02.2011 onwards)
	Dr. S.D.Shikhamany (26.02.2008 to 25.02.2011)
Registrar	**Dr. P.Suryanarayana Reddy** (04.09.2008 onwards)
Comptroller i/c.	**Dr. P.Suryanarayana Reddy** (03.10.2008 onwards)
Dean of Horticulture	**Dr. D.V.Raghava Rao** (17.05.2008 to 31.10.2010)
Dean of Horticulture i/c.	**Dr. K.Hari Babu** (01.11.2010 onwards)
Dean of Postgraduate Studies i/c.	**Dr. D.V.Raghava Rao** (17.05.2008 to 31.10.2010)
Dean of Postgraduate Studies i/c.	**Dr. K.Hari Babu** (01.01.2010 onwards)
Director of Research	**Dr. K.Purushotham** (09.05.2008 onwards)
Director of Extension i/c	**Dr. K.Purushotham** (09.05.2008 to 04.03.2010)
Director of Extension	**Dr. K.V.Seshadri** (05.03.2010 to 30.06.2010)
Director of Extension	**Dr. S. Amarender Reddy** (17.09.2010 onwards)
Dean of Student Affairs	**Dr. K.Hari Babu** (06.03.2009 onwards)
Controller of Examinations	**Dr. B.Srinivasulu** (12.03.2009 onwards)
Estate Officer	**Sri P.R.P.Raju** (05.03.2010 onwards)

3. Academic Council

The Academic Council is vested with the responsibility of implementing and monitoring all the academic programmes. The Council is headed by the Vice-Chancellor, as Chairperson and consists of Deans of Faculties, Directors of Research and Extension, Controller of Examinations, Dean of Student Affairs, University Heads of Departments and Professors as Members. In addition, the Council consists of ten academicians, representing different faculties nominated by the Vice-Chancellor and two representatives of the Board of Management. As Chief Executive of the University the Vice-Chancellor is vested with the powers and responsibilities for the academic administration.

MEMBERS OF ACADEMIC COUNCIL	
Chairman	**Dr.C.V.S.K.Sarma** I.A.S. Agril. Production Commissioner & Principal Secretary to Government, ATM & Vice- Chancellor (From 26.2.2011 onwards)
	Dr. S.D.Shikhamany (26.2.2008 to 25.2.2011) Vice-Chancellor, APHU
Ex-Officio Member Secretary	**Dr. P.Suryanarayanareddy,** Registrar
Members	**Dr. P.Raghava Reddy** Vice-Chancellor, A.N.G.R.A.U

Dr. V.Prabhakara Rao, Vice-Chancellor
Sri Venkateswara Veterinary University

Dr. V.Jayaramireddy
Hon'ble Member, Board of Management

Sri H.Venugopal
Hon'ble Member, Board of Management

Dr. Y. Narayana Reddy
Hon'ble Member, Board of Management

Dr. D.V.Raghava Rao, Dean of Horticulture, Dr.YSRHU

Dr. K.Purushotham, Director of Research, Dr.YSRHU

Dr. S.Amarender Reddy, Director of Extension, Dr.YSRHU

Dr. K.Haribabu Dean of Students Affairs, Dr.YSRHU

Dr. B.Srinivasulu Controller of Examinations, Dr.YSRHU

Dr. K.Veeranjaneyulu University Librarian, ANGRAU

Dr. Syed Ismail Associate Dean

Dr. G. Subbi Reddy Associate Dean

Dr. D. Sri Hari Associate Dean

Dr. M.L.N. Reddy Associate Dean

Dr.B.Gautam Principal Scientist

Dr.K.Gopal Principal Scientist

Dr.K.Ravindra Reddy Professor

Dr.G.Satyanarayana Principal Scientist (Retd.,) ANGRAU

Dr.M.Rama Rao Associate Director of Research (Retd.), ANGRAU

Dr.M. Kochu Babu Director, Directorate of Oil Palm Research

Dr.K.M.Yuvaraj Associate Professor

Dr.N.B.V.Chalapati Rao Associate Professor

Dr.V.Sudhavani Assistant Professor

Mrs. K.Venkata Laxmi Assistant Professor

Dr.M.Ramakrishna Principal

Dr.K.Chandrasekhar Reddy Vice-Principal,
SKPP Horticulture Polytechnic.

B. MEETINGS OF THE AUTHORITIES OF THE UNIVERSITY

1. Board of Management

The Dr.YSRHU Board of Management met 6 times during the year. The dates of the meetings are given below.

S. No.	Board Meeting No.	Date of the Meeting
1.	22nd Board Meeting	31-05-2010 (Monday)
2.	23rd Board Meeting	10-07-2010 (Saturday)
3.	24th Board Meeting	23-09-2010 (Thursday)
4.	25th Board Meeting	23-10-2010 (Saturday)
5.	26th Board Meeting	20-12-2010 (Monday)
6.	27th Board Meeting	27-01-2011 (Thursday)

2. Academic Council

The Academic Council normally meets once in six months. Sixth and Seventh Academic Council meetings were held on 07.07.2010 and 19.10.2010 at Teachers Home, Boiguda, Secunderabad.

C. FACULTY STRENGTH

The cadre-wise strength of teaching staff of Dr.YSRHU is as follows

Faculty Strength in Dr.YSRHU during 2010-11

Teaching Staff	
Post	**No.**
Professors	21
Associate Professors	41
Assistant Professors	109

Non-teaching staff	
Post	**No.**
Executive Engineer (Civil)	1
Deputy Executive Engineer	3
Assistant Engineer	1
Deputy Comptroller	1
Deputy Registrar	1
Assistant Comptroller	2
Assistant Registrar	2
Superintendents	17
Senior Assistants	25

III. EDUCATION

1. Teaching Institutes

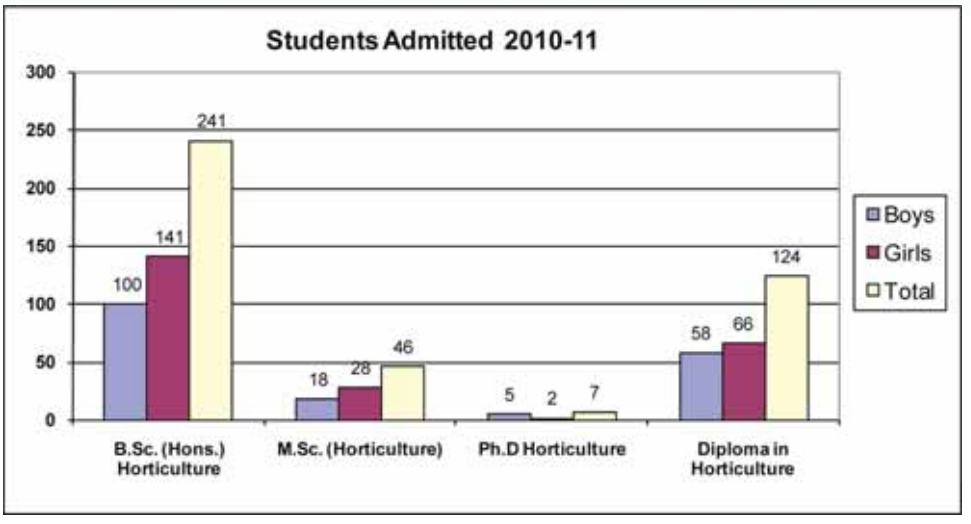
Dr.YSR Horticultural University (Dr.YSRHU) offers under graduate programme, B.Sc. (Hons.) Horticulture, M.Sc. (Horticulture) with specialization in Fruit Science, Vegetable Science, Floriculture & Landscape Architecture and Spices, Plantation, Medicinal & Aromatic crops and Ph.D (Horticulture). In addition to these, Dr.YSRHU also offering two years Post-matric-diploma programme.

The list of colleges and polytechnics with their location, year of establishment and courses offered is given in Table.

S.No.	Teaching Institute with location	Courses offered
I.	Colleges of Horticulture	
	i) College of Horticulture, Anantharajupet	B.Sc. (Hons.) Horticulture
	ii) College of Horticulture, Mojerla	B.Sc. (Hons.) Horticulture
	iii) College of Horticulture, Rajendranagar	B.Sc. (Hons.) Horticulture M.Sc. (Horticulture) with specialization in Fruit Science, Vegetable Science, Floriculture and Landscape Architecture and Spices, Plantation, Medicinal and Aromatic crops and Ph.D (Horticulture)
	iv) College of Horticulture, Venkataramannagudem	B.Sc. (Hons.) Horticulture, M.Sc. (Horticulture) with specialization in Fruit Science, Vegetable Science, Floriculture and Landscaping Architecture and Spices, Plantation, Medicinal and Aromatic crops and Ph. D (Horticulture)
II.	Horticultural Polytechnics	
	i) Horticultural Polytechnic, Adilabad ii) Horticultural Polytechnic, Kalikiri iii) SSPG Horticultural Polytechnic, Madakasira iv) Horticultural Polytechnic, Ramagirikhila v) SKPP Horticultural Polytechnic, Ramachandrapuram	Diploma in Horticulture

2. Admission Strength and Out turn of Students

Course	Students admitted (2010-11)		
	Boys	Girls	Total
B.Sc. (Hons.) Horticulture	100	141	241
M.Sc. (Horticulture)	18	28	46
Ph.D Horticulture	5	2	7
Diploma in Horticulture	58	66	124
Total	**181**	**237**	**418**



3. Scholarships and Stipends

Name of the Scholarship	No. of recipients	Amount received (Rs.)
BC Post Matric Scholarship	40	328333
SC Post Matric Scholarship	23	135785
ST Post Matric Scholarship	7	144034
EBC Post Matric Scholarship	19	131136
District Minority Department Scholarship	1	2500

4. Students' Hostels

No. of Hostels		
Boys	Girls	Total
4	3	7

5. Students Activities

i) NSS Activities

College of Horticulture, Mojerla

COH, Mojerla

NSS UNIT inaugurated at College of Horticulture, Mojerla. On 3rd March 2011, National Service Scheme Unit was formally inaugurated at College of Horticulture, Mojerla. The function was attended by Sri M Arun Kumar, DRDA Area Coordinator, Sri A Rajavardhan Reddy, Director SES Group of Institutions as special invitees of NSS Advisory committee. Dr.D.Srihari, Associate Dean has presided over the function.

A special NSS camp was organized at Amadabakula

Blood donation camp organized by COH, Mojerla

NSS Special Camp organized by COH, Mojerla A special NSS camp was organized from 22-28th March 2011, at Amadabakula village, Kothakota mandal with the participation of final year B.Sc. Hons. (Horti) students.

International Programme (Faculty participation in overseas programme)

S. No.	Name of the faculty	Training programme/ Workshop/conference attended	Period	Place
1	Dr.M Shiva Prasad, Associate Professor College of Horticulture, Mojerla	SAS products for NARS personal	13th to 18th December, 2010	NAARM, Hyderabad
2	Dr. P. Saidaiah, Assistant Professor (Plant Breeding), College of Horticulture, Mojerla	SAS products for NARS personal	19th to 25th January, 2010	NAARM, Hyderabad
3	Dr B. Peda Babu, Assistant Professor (Soil Science), College of Horticulture, Mojerla	" Geospatial Analysis of Environmental data"	21st to 25th February 2011.	ICRISART learning systems unit, Patancheru, Hyderabad
4	Dr. P. Prasanth, Assistant Professor (Horticulture), College of Horticulture, Mojerla	SAS products for NARS personal	21st to 26th March , 2011	NAARM, Hyderabad

NSS Activities at SKPP Horticultural Polytechnic, Ramachandrapuram

Name of the college	Camp	Venue	Date	No. of students attended
SKPP Horticultural Polytechnic	Assisting in Pulse polio	Ramachandrapuram	27.2.2011 to 28.2.2011	58
	NSS special camp	Kapavaram	5.3.2011 to 11.3.2011	58
	Clean & Green	Ramachandrapuram	18.3.2011	58

NSS Activities at SSPG Horticultural Polytechnic, Madakasira

120 Avenue Trees (Four Species-*Delonix regia*, *Cassia marginata*, *Bauhinia virigata* and *Cassia fistula*), ***Fruit trees*** (10 Papaya, 3 Aonla, 10 Custard apple, 2 Wood apples, 4 Jamun etc) were planted in the New S.S.P.G. Horticulture Polytechnic campus.

Special Camp Programme: The 53 NSS Volunteers (32 Boys & 21 Girl students) along with NSS Programme Officer and Principal of the College have removed the thorny bushes, filled the pits on the road with mud lifted from the side fields. The students worked from 9:00AM to 5:00PM from 25th February 2011 to 3rd March 2011 with a break of one hour for lunch on each day and finished removing of thorny bushes especially *Prosophis* and also filled the pits on the road and completed repairs to a 3 Km road from Rekulakunta to Kantipuram.

Lecture on "***Anti Plastics***" was delivered by Sri. R.Preetham Goud, Assistant Professor (Agronomy) & NSS Programme Officer on 24th February 2011 at SSPG Horticulture Polytechnic, Madakasira. Immediately after the Lecture was completed, a prossession (Rally) along with NSS Volunteers was taken up in the Streets of Madakasira stating No to Plastics and the alternatives available for Plastics

On 8th March 2011 ***International Women's Day*** was celebrated at SSPG Horticulture Polytechnic, Madakasira. Elocution and Essay Writing Competitions were held for Girl Students and the winners were give prizes on the occasion by the Principal, SSPG Horticulture Polytechnic, Madakasira.

Vegetable Cultivation was taken up by the students in an acre of land, students could successfully grow thirty vegetables. An amount of Rs.2250/- generated by selling of vegetables by 31st March 2011was remitted into University General Fund.

A ***Vermicompost Unit*** was raised by the students under the supervision of the teaching staff.

A demonstration plot on "***Integrated Pest Management***" was taken up by the students in the campus.

ii) Sports, Games and Cultural Activities

SSPG Horticultural Polytechnic, Madakasira

Sree Rajeev Gandhi Memorial Cricket League Championship is being sponsored by the Honourable MLC, Government of Andhra Pradesh, Shri. Gundumala Thippe Swamy. The students of Our College are actively involved in the League and have played 16 matches on Sundays and Second Saturdays during the Academic Year 2010-11.

Ball Badmenton, ***Volleyball*** and ***Tennikoit courts*** are laid in the New SSPG Horticulture Polytechnic campus.

Students of 2009 Admitted Batch gave a bid ***Farewell*** to 2008 Admitted Batch on 19th July 2010.

Freshers Day was celebrated on 8th November 2010

IV. RESEARCH

The university is conducting basic, applied, location /region specific and anticipatory research for the overall development of horticultural crops in the state at 27 Research Stations located in 9 agro-climatic regions of the state. The research programmes are covered under three categories namely, Non plan projects/ University projects, ICAR plan projects under All India Coordinated Research Projects and State Horticulture Mission projects.

The research activities of the university are being carried out in the following thrust areas.

1. Thrust areas of research

- Increasing productivity
- Sustaining productivity under biotic and abiotic stress
- Improving nutritive value
- Environment protection
- Increasing profitability to the farmers
- Export promotion
- Minimization of post harvest losses
- Processing and value addition

2. Research Stations

1. Horticultural Research Station, Mallepally, Nalgonda District
2. Citrus Research Station, Petlur, Nellore District.
3. Citrus Research Station, Tirupati, Chittoor District.
4. AICRP on Floriculture, Rajendranagar, Ranga Reddy District
5. Grape Research Station, Rajendranagar, Ranga Reddy District.
6. Herbal Garden Scheme, Rajendranagar, Ranga Reddy District.
7. Horticultural Research Station, Adilabad, Adilabad District.
8. Horticultural Research Station, Ambajipeta, East Godavari District.
9. Horticultural Research Station, Anantapur, Anantapur District.
10. Horticultural Research Station, Anantharajupet, Kadapa District.
11. Horticultural Research Station, Aswaraopet, Khammam District.
12. Cashew Research Station, Bapatla, Guntur District.
13. Horticultural Research Station, Chintapalle, Vishakapatnam District.
14. Horticultural Research Station, Darsi, Prakasam District.
15. Horticultural Research Station, Lam, Guntur District.

16. Horticultural Research Station, Kovvur, West Godavari District.
17. Horticultural Research Station, Mahanandi, Kurnool District
18. Horticultural Research Station, Pandirimamidi, East Godavari District.
19. Horticultural Research Station, Peddapuram, East Godavari District
20. Vegetable Research Station, Rajendranagar, Rangareddy District.
21. Fruit Research Station, Sangareddy, Medak District.
22. AICRP on MAP & Betelvine, Venkataramannagudem, West Godavari District.
23. Horticultural Research Station, Venkataramannagudem, West Godavari District
24. Horticultural Research Station, Vijayarai, West Godavari District.
25. Horticultural Research Station, Malyal, Warangal District.
26. Mango Research Station, Nuzvid, Krishna District.
27. Turmeric Research Station, Kammarapally, Nizamabad District.

3. Seasonal conditions and crop performance:

Seasonal conditions prevailed in the state during the year 2010-11 on the whole was satisfactory. The state received an average total rainfall of 1227 mm as against normal rainfall of 940 mm, the surplus being 31 per cent. During the south west monsoon the state received an average rainfall of 809.9 mm as against the normal rainfall of 624.1 mm, the surplus being 30 per cent. During north east monsoon period an average rainfall of 332.5 mm was received as against the normal rainfall of 224.3 mm, the surplus being 48 per cent.

Hot weather period of 71.7 days prevailed during the period as against normal hot weather period of 77.8 days.

The areas, production and productivity of horticultural crops in Andhra Pradesh during 2010-11 are presented.

Statistics of Horticultural crops in Andhra Pradesh during 2010-11

Sl. No	Crop Category	Area (000'HA)	Production (000'MT)
1	Fruit Crops	921	12918
2	Vegetables Crops	333	5461
3	Plantation Crops	364	654
4	Spice Crops	299	1121
5	Flower Crops	21	130
	Total	**1938**	**20284**

4. Salient Research Results during 2010-11

New Crop varieties released during 2010-11

Crop	Variety released	Research Station
Betelvine	Swarna Kapoori- pre released 	AICRP on MAP & Betelvine, VR Gudem
Coriander	APHU-Dhania-1  	HRS, Lam

- It is a high yielding variety suitable for rainfed conditions of Andhra Pradesh, with an yield advantage of 27 % to 33% increase which comes to maturity in 80 (rainfed) to 100 days (irrigated).
- This variety gives an average yield of 7.5 to 10.0 quintals per hectare under rainfed conditions and 12.0 to 15.0 quintals under irrigated conditions.
- This variety is having high volatile oil content (0.36% to 0.50 %) in comparison with previous varieties Sadhana (0.30 %), Swathi (0.30) and Sudha (0.34%).

Particulars of cultures under Minikits testing:

Name of culture	Year of Minikittesting	Important features
KCS-3	2010	Short duration variety(5months)yield potential is 24 t ha^{-1}.Good cooking quality

A. CROP IMPROVEMENT

FRUITS

MANGO

At HRS, Pandirimamidi, Mango var. Alphonso of three districts Krishna, Vizianagaram and East Godavari were evaluated and screened for colour and spongy tissue respectively.The fruits collected from Vizianagaram and East Godavari districts evinced turmeric yellow colour high percent of red blush. However, the fruits collected from Krishna district exhibited no incidence of spongy tissue.

At HRS, Aswaraopet, among 10 hybrids tested, Manjeera recorded the highest mean number of fruits (556 No.) and mean yield (163 kg.) per tree over the all other hybrids.Among 10 table varieties tested, M.Vikarabad recorded the highest mean number of fruits (469 No.) and mean yield (133.7 kg) per tree compared to rest of the varieties. Among 7 juicy varieties tested, Suvarna rekha recorded the highest mean number of fruits per tree (152 no.) while Cherakurasam recorded the highest mean yield (49.7 kg) per tree. Tellagulabi gave higher mean number of fruits (182 no.) and mean yield (88 kg) per tree over the Jalal variety.

SWEET ORANGE

At HRS, Mallepally, among the selections maximum height of 277.1 cm, girth of 7.8 cm and plant spread in East West direction 241.3 cm, 226.5 cm in North South direction was recorded in Mallepally selection-4.

SAPOTA

At HRS, Venkataramannagudem, thirty four genotypes were collected and maintained under germplasm block

At HRS, Venkataramannagudem, among ten cultivars tested, Singapore recorded maximum number of fruits (4326.00), PKM-3 recorded maximum yield/tree and yield t/ha (288.63 kg and 28.86t/ha). Cumulative yield from 1999-11 was maximum in PKM-3 (100.06 t/ha).

At HRS, Aswaraopet, among eleven cultivars tested, Kalipathi recorded the highest mean number of fruits (314 no.) and mean yield (23.4 kg) per tree over the rest of the varieties.

BANANA

At HRS, Kovvur, 107accessions are maintained under germplasm block. One hundred and three (103) accessions were characterized and deposited at NRC for Banana (NGIS).
Dwarf Cavendish clone (KBS – 8) recorded an average bunch weight of 50.0 Kg with an yield potential of over 115 t ha^{-1}.

A clone from Tella chekkerakeli variety of banana with 9 hands, 127 fruits weighing 16 kg bunch was selected.

In cooking type var. FHIA 03 and desert type Var. Robusta recorded highest yield of 57.66 t ha^{-1} and 46.82 t ha^{-1} respectively.

Kovvur Bontha (ABB) cooking type was found to be highly susceptible to Rhizome rot disease.
In varietal Trial, Gandevi has recorded highest yield of 55.89 t ha^{-1} with crop duration of 451.58 days in plant crop and 52.3 t ha^{-1} with duration of 413.33 days in ratoon crop

VEGETABLES

OKRA

At HRS, Lam, in IET -7 Bhendi hybrids were evaluated against 3 checks (HOK-152, Arka Anamika, and Pusa Sawani). Among the entries, 10/OKHYB-4(154.4q/h) followed by 10/OKHYB-6 (137.6q/h) 10/OKHYB-7(112.7q/h) recorded significantly higher yield. The incidence of YVMV was nil in 10/OKHYB-6 and 10/OKHYB-7.

At HRS, Lam, in AVT-1, six Bhendi hybrids were evaluated against 3 Checks (HOK-152, Arka Anamika, and Pusa Sawani). The highest yield was recorded by 09/KHYB-10 (112.3q/h) with no incidence of YVMV followed by 09/KHYB-6 (86.7q/h) being on par with OKHYB-1, OKHYB-9 and were significantly superior to checks

At HRS, Lam, in AVT-2, 7 Bhendi hybrids were evaluated against 4 Checks (HOK-152, Arka Anamika and Parbhani Kranthi, Pusa Sawani). Among the hybrids, the highest yield was recorded by 08/OHYB/7 (76.3q/h) and significantly superior to checks.

AGAKARA

At HRS, Aswaraopet, pentalobed type recorded the highest mean number of fruits per vine (81 no.) and recorded the highest mean yield per vine (1030 gr.)

CAPSICUM

At HRS, Lam, in IET, 6 entries were evaluated against one national check Nishat-1.Among the entries tested, 09/CAPVAR-3 recorded the highest yield (91.44q/ha), and significantly superior to other entries and check

COWPEA

At HRS, Lam, in AVT-II - five varieties were evaluated against 3 Checks (Kasi Kanchan, Arka Garima and Local). The highest yield was recorded by 09/COPB VAR/1 being (36.97q/h) on par with 09/COPB VAR/4 (36.34q/h) and found significantly superior to all the other entries tested.

FLOWERS

GLADIOLUS [*Gladiolus byzantinus*]

At HRS, Pandirimamidi, in performance trial, Gladiolus variety Dhanvantari, Shabnam, Jyotsuna and Apple Blaid recorded highest plant height (76.8 cm), spike length (90.5 cm), number of florets (16.4) and number of corms / plant & cormels/corm (24.3 & 378.3) respectively.

At AICRP on Floriculture, Rajendranagar, during 2010-11 one new variety viz., White prosperity was added to the existing collection of 45 varieties of gladiolus. Earliest flowering (<60days) was observed in Aldrion, Sagar, Shubangani, Snow Princess, Swarnima, while late flowering (>90days) was recorded in Arun, Candyman, Hybrid 94-4, Hybrid-10, and Snow White. Maximum spike length (>80cms.) was recorded in Chandini, IIHR-G-12, Kajol, and White prosperity. Maximum number of florets per spike (>16) was observed in Apple blossom, Pure yellow, Yellow Pril and White Prosperity.

Apple blossoms, American beauty, Darshan, Kum kum, White prosperity, Yellow Pril, Arka Amar were found promising for cut flower production.

GENETIC DIVERSITY IN GLADIOLUS


Hy-94-101


Sadabahar


Punjab Dawn


Kum Kum


IIHR-G-12


Sylvia


American beauty


Darshan


Tilak


Arka Amar

CHRYSANTHEMUM

At AICRP on Floriculture, Rajendranagar, 99 varieties were evaluated. The days for first flower bud appearance ranged from 60 to 105 days. Chocolate pompon variegated and Yellow bonsai are the earliest flowering varieties (60 days) while Apurva Singar (105 days), Akitha (92 days) and Shintome are categorized under late varieties. Shintome followed by Aparajita recorded more number of flowers per spray with maximum spray length. The diameter of flower among the lines differed with the type of flower and it ranged from 1.9cm in local button to 7.8 cm in Shaffoli. With regards to number of suckers per plant, maximum number was produced in the variety local button (50.18).

GENETIC DIVERSITY IN CHRYSANTHEMUM


Winter Queen


Salora Royal


Purple


Ratlam selection


Neelima


Mother teresa


Meera


Kalyani mauve


Garden Beauty


Dolly orange


Anjali


Yokari

Newly evolved genotypes of chrysanthemum were tested and found that PAU-B-107 recorded maximum spray length of 41.47cm and number of flowers/pl. (229.74) while early flowering recorded with UHFS-44(19.33days)

New chrysanthemum hybrid
PAU-B-107(from Ludiana Centre)

TUBEROSE

Arka Niranthara
(New Hybrid of tuberose)

At AICRP on Floriculture, Rajendranagar, about four tuberose varieties were evaluated along with Prajwal (check) and Hyderabad single (local check) varieties. Maximum plant height (57.56cms) and number of leaves (48.6) were observed in Prajwal and Hyderabad single respectively. Early flowering was noticed in Prajwal (68.91days) while late flowering was observed in GK-T-C-4(88.20 days). The varieties Prajwal and Hyderabad single produced maximum spike length and spike weight respectively.

The variety Arka Nirantara produced maximum number of florets per spike (48.11) and maximum floret size i.e floret length (6.23cms) and floret diameter (4.50cms.).

CUT FOLIAGE AND FILLERS (asparagus, ferns and philodendron)

At AICRP on Floriculture, Rajendranagar, fourteen foliage plants which includes two new asparagus species, two Dieffenbachia varieties, Five philodendron varieties and Five fern varieties were collected.

Asparagus densiflorus var. Springeri

Among the 4 varieties of ferns, Nephrolepsis exalta "smithi' and Blechnum penna – marina have attractive foliage with long fronds of varied shapes.

In asparagus, Asparagus densiflorus springeri was identified as suitable green filler for this region.

Golden rod (Solidago)**:** The spike length varied from 97cms to 103cms. The flowering duration is 180 days (October, December and March to May. The spike yield is about 107 spikes per square meter. This was identified and recommended as suitable flower filler for this region.

Goldenrod (Solidago)

HELICONIUM

At HRS, Pandirimamidi, 19 species of Heliconium were maintained and evaluated. Maximum number of leaves / plant was (11.0) recorded in Heliconia Alan Carle and minimum (6.0) in Heliconia psittacorum "Parakeet" at 150 DAP. Whereas highest number of suckers/ plant (12.5) was observed in Heliconia psittacorum "Parakeet" and least (1.0) in Heliconia marginata at 150 DAP.

TUBER CROPS

At HRS, Kovvur, among the non-irritant types of *Amorphophallus*, Gajendra has recorded a highest yield of 51.39 t ha^{-1} followed by accession AC-1 (49.44 t ha^{-1}) and AC-6 (45.56 t ha^{-1}). Among the irritant types, AC- 36 recorded maximum yield of 33.89 t ha^{-1}.

In colacasia, among the short duration group, IG Col E6 has recorded the highest cormel yield (32.00 t ha^{-1}) followed by IG Col E8 (30.82 t ha^{-1}) and KCS-3 (29.63 t ha^{-1}).In medium duration group CA-9, CA-45 has recorded the highest cormel yield (26.07 t ha^{-1}), while among long duration group KCS-2 has recorded highest cormel yield of 20.74 t ha^{-1}.

Tallapalem variety of Dioscorea recorded highest yield of 42.60 t ha^{-1} followed by Yetipalli, Bombay Yam with 35.55 t ha^{-1}.

In MLT on colocasia, highest average cormel yield of 24.20 t ha^{-1} was recorded by KCS-3 followed by IG Col- E-8 (23.48 t ha^{-1}) and KCS -2 (22.65 t ha^{-1}) as compared to local check (17.61 t ha^{-1}).

SPICES

GINGER

At HRS, Pandirimamidi, among the ginger varieties CTP-local and Suprabha significantly recorded the maximum number of tillers (9.3) & (9.2) per plant respectively.

HOT PEPPER

LCA-26-4-5-8-1

At HRS, Lam, one hundred and seventy germplasm lines were collected, maintained and evaluated. LCA-26-4-5-8-1 was identified and selected in the segregation population (F5) of Hungarian wax type. This yielded 1.2 kg fresh fruits per plant. Fruits were white in colour, mild in pungency and very much suitable for stuffing / bajji making.

LCA-2-25

LCA-2-25, a unique line selected from indigenous dwarf lines collected from Arogyavaram, Madanapalli of Chittoor district and found suitable for bouquet making. The dwarfing nature of the line facilitates mechanical harvesting also.

Preliminary Hybrid yield trial of Hot pepper, the hybrid LCH 08-64 recorded highest dry pod yield 8933 kg/ha, followed by LCH 08-59 (8724 kg/ha) and LCH 08-32 (8292 kg/ha) over the check Indam-5 (7030 kg/ha).

In Replicated Row Yield Trial of Hot pepper, the entry RRYT T-21 recorded highest dry pod yield 5512 kg/ha, followed by RRYT T-26 (5482 kg/ha), over the checkLCA-334 (4834 kg/ha).

In Preliminary Yield Trial of Hot pepper, the entries LCA- 647 recorded highest dry pod yield 5722 kg/ha, followed by LCA-679 (5583 kg/ha), LCA-675 (5528 kg/ha) and LCA-667 (5472 kg/ha) over the check LCA -334 (4445 kg/ha).

In Advanced yield trail of Hot pepper, the entries LCA- 625 recorded highest dry pod yield 6750 kg/ha with 253 pod per plant, followed by LCA-620 (6292 kg/ha) and LCA-655 (6139 kg/ha) over the check LCA -334 (4834 kg/ha).

LCA-625 developed at Chillies Improvement Scheme, HRS, Lam is under minikit testing over the country.

PAPRIKA

At HRS, Lam, fifty germplasm lines were collected, maintained and were evaluated.

In Preliminary Yield Trial of paprika, LCA- 466 recorded highest dry pod yield 4888 kg/ha,) over the check LCA-436 (4053 kg/ha).

Advanced yield trail of paprika, LCA- 442 recorded highest dry pod yield of 5333 kg/ha followed by LCA-450 (4889 kg/ha) and LCA-445 (4778 kg/ha) over the check LCA-436 (3944 kg/ha)

CHILLIES

At HRS, Lam in IET, LCA-25 recorded the highest dry chilli yield (62.19q/ha) and was on par with HC-50 (58.66 q/ha) and VR-339 (55.75 q/ha).

In AVT-2, AKC-406 recorded the highest dry chilli yield (64.23q/ha) and found significantly superior to all the other entries tested including checks.

In IET, 09/CHIHYB-11 recorded the highest ripe chilli yield (222.78q/ha) followed by 09/CHIHYB-2 (215.76q/ha) and found significantly superior over the checks

In AVT-1, 08-CHHYB-3 (203.7q/ha) followed by 08-CHHYB-8 (195.54q/ha) and 08-CHHYB-7 (181.17q/ha) recorded the highest ripe chilli yield and found significantly superior to both the checks tested.

In AVT-2, NCH-250 recorded the highest ripe chilli yield (233.01q/ha) and found significantly superior to all other hybrids tested and over the checks

TURMERIC

At HRS, Pandirimamidi, CLS-369 recorded highest per plant yield of 0.96kg

CINNAMON

At HRS, Pandirimamidi, I- 63 recorded maximum plant height (4.43 m), plant spread (4.20 m E-W & 4.10 m N-S) and bark yield of 1095 g/tree.

CORIANDER

At HRS, Lam, LCC-303 recorded highest yield per ha (1770.8 kg) followed by LCC-301 (1728.2 kg), LCC-274 (1583kg/ha) and LCC-279 (1458kg/ha) were significantly superior to the best check Sudha (1072kg/ha)

In multi location trial, among ninety-five entries, CS-29 recorded highest single plant yield (3.17 g) followed by CS-30 (2.7 g), LCC-208 (2.6g) LCC-209 (2.4 g) and CS-2 (2.24 g) were significantly superior to the best check Sudha (1.2 g).

In Initial Evaluation Trial, LCC-219 recorded significantly highest yield of 1684kg/ha followed by LCC-224 with 1357kg/ha and LCC-229 with 1315 kg/ha which were superior over check Sudha (1055 kg/ha).

In Coordinated Varietal Trial on coriander, COR-30 (1159 kg/ha), recorded significantly higher yield than checks Sudha (937kg/ha), local (892kg/ha) and national check Hisar Anand (611kg/ha).
In mutation trial, D6-125 recorded highest single plant yield (4.17 g) followed by C7-71 (3.83 g), D6-25 (2.89 g), C9-70 (2.74 g) and A2-75 (2.7g) which are on par with each other and significantly superior to the best check Sudha (1.7 g).

In observation trial on MH assisted crossing of coriander, the F1 population from twenty two crosses were evaluated. Among the twenty two crosses, the crosses i.e. LCC-160 x Sudha, LCC-186 x Sudha, , LCC-149 x Sadhana, LCC-238 x Sudha LCC-139 x Sadhana, and LCC-121 x Sadhana were found superior over respective crosses in respect of yield.

FENUGREEK

At HRS, Lam, among 58 accessions evaluated, LFC-122 recorded highest yield of (1270kg/ha) followed by LFC-78 (1145kg/ha) and was significantly superior to checks Lam Selection-1 (635kg/ha), Hisar Sonali (614 kg/ha), LFC-84 (708kg/ha) and Local (583 kg/ha).

In multilocation trial, among the fifty four entries, JFG-253 recorded highest yield (1.28 g/plant) followed by LFC-76 (1.27 g/plant), which was significantly superior to the best check LS-1 (0.62 g/plant).

In Initial Evaluation Trial, among the twelve entries tested LFC-116 recorded significantly highest yield of 774 kg/ha over checks LS- 1 (677kg/ha) and PEB (430 kg/ha).

In Coordinated Varietal Trial, FGK-30 (1006 kg/ha), FGK-27 (937 kg/ha) and FGK-31 (854Kg/ha) recorded significantly higher yield than the check LS-1 (409 kg/ha) and Local (260 kg/ha)

FENNEL

At HRS, Lam, in multilocation trial, ninety five entries were evaluated, highest yield was recorded in JF-510-1 (18.34 g/plant) followed by JF-345 (15.68 g/plant) and was significantly superior to the best check Lam Selection-1 (10.10 g/plant).

AJOWAN

At HRS, Lam, in multilocation trial, the fifty-five entries were evaluated, highest yield was recorded in AA-22 (10.57) followed by LTA-35 (9.75 g/plant) as compared to check GA-1 (4.51 g/plant).

MEDICINAL & AROMATIC PLANTS

MAKOI (*Solanum nigrum*)

At AICRP on MAP & Betelvine, Venkataramannagudem, plant descriptors were developed. Twelve genotypes were collected and evaluated. Distinct and stable plant characters viz. leaf (margin & tip); stem (colour & pubescence) and fruit (colour) were identified under Andhra Pradesh conditions and will be confirmed over the country.

Leaf Margin

Entire

Serrated

Stem colour

Purple

Green

Fruit colour

Purple

Red

Leaf Tip

Acute

Obtuse

Stem Pubescence & ridges

Absent

Present

SWEET FLAG (*Acorus calamus*)

At AICRP on MAP & Betelvine, Venkataramannagudem, plant descriptors were developed. Eleven clones were collected and evaluated. Variation in morphological characters of leaf emergence and rhizome colour were observed. These characters were found to be stable under local agro-climatic conditions and will be confirmed over different locations, to fix DUS characters for future characterization.

Distance between Leaf emergences

More

Less

Rhizome colour

Brown

Red

PLANTATION CROPS

RUBBER

At HRS, Pandirimamidi, among growth parameters RRIM 600 recorded maximum plant height (11.4 m), spread (6.75 m E-W & 6.33 m N-S) and girth (75.00 cm). During 35 tapped days highest latex yield (5.56 lit/tree) and dry rubber (2.33 kg/tree) recorded in PB 28/59 with highest per cent (41.60 %) of rubber recovery.

PALMYRAH


At HRS, Pandirimamidi, of the 13 accessions, mean plant height was maximum in accession 4/91 (7.53 m) followed by Acc 6/91 (7.51m). Maximum Stem girth of 1.96 m. was recorded in eAccession- 4/91 followed by accession 13/91 (1.81m). Higher leaf parameters have been recorded with accession 08/91.

CASHEW

At CRS, Bapatla, among 56 genotypes evaluated for yield and other parameters, highest cumulative nut yield of 55.68 kg/tree was recoded with BLA-39-4 followed by Accession 5/1 which yielded 50.62 kg. Mean annual nut yield/tree was also highest in BLA-39-4 [7.8kg] followed by 7kg/tree in Priyanka.

At CRS, Bapatla, among the 13 varieties/genotypes evaluated in Multilocation Trial-II, Tree No10/19 recorded highest annual nut yield (16.04 kg/tree), cumulative nut yield (94.73kg/tree) and shelling percentage of 33.24%.

At CRS, Bapatla, among the 11 varieties evaluated in MLT-III, highest nut yield was recorded in BPP-8 [1.9kg/tree] followed by H-32/4 which yielded 1.7kg/tree. BPP-8 has also given highest cumulative nut yield of 6.5kg/tree.

At CRS, Bapatla, evaluation trial conducted on 23 released varieties, highest cumulative nut yield was recorded in Vengurle-5 [36.4kg/tree] followed by 30.46kg/tree in VRI-2. Mean annul nut yield was highest in BPP-8 which has given 3.92 kg/tree.

At CRS, Bapatla, hybridization was made in twelve combinations involving promising parents and obtained 2817 hybrid seed nuts and seedlings raised were transplanted. Among 60 existing hybrid progenies evaluated, H-67 [T.No71XT. No.273] gave highest cumulative nut yield of 26.03kg/tree while H-39[F.No-3XT.No.30/1] gave highest annual nut yield.

COCONUT

At HRS, Ambajipeta, the highest nut yield per palm per year was recorded in cross combinations Gauthami Ganga x Chandra Kalpa (129.54 nuts) & VHC - 1 (123.18 nuts) compared to the control Godavari Gganga (120.70 nuts). However, the cumulative nut yields during pre-cyclone period was highest in cross combinations Godavari ganga (232.32 nuts) followed by Konkan Bhatiya Coconut Hybrid - 1 (231.24 nuts), whereas the highest cumulative nuts during post cyclone period was recorded in cross combinations Gauthami ganga x Chandra kalpa (1580.06 nuts) and Gauthami ganga x Double century (1557.02 nuts) compared to 1469.03 nuts in the check Godavari ganga.

At HRS, Ambajipeta, the highest nut weight and water content was recorded in Gauthami ganga x Double century (1650.15 g/nut & 247.50 ml/nut) followed by Gauthami ganga x Kera bastar (1245.00 g/ nut & 210.89ml/nut) and the trend was vice versa in dehusked nut weight where 620.83 g/ nut was recorded with former and 630.24g/nut in latter cross combinations

The copra and oil content ranged from 16.4 to 22.41 kg/palm/year and 11.46 to 16.98kg/palm/ year respectively in various new cross combinations (Fig 1)

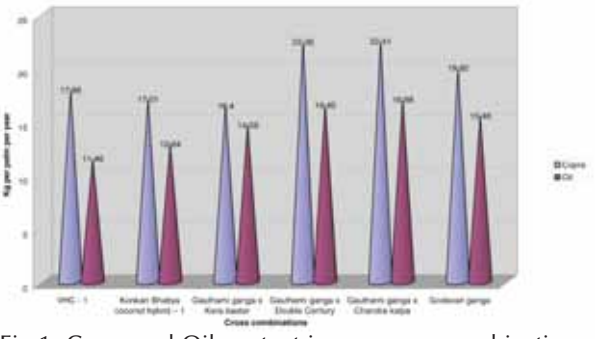


Fig 1: Copra and Oil content in new cross combinations

The highest nut yield/palm/year was registered by the cross combination PO x GB (114.81 nuts) followed by AO x GB (111.22 nuts) and LM x GB (109.64 nuts) & the lowest number of nuts were recorded by the cross combination LO x PO (95.60 nuts).

In all the cross combinations, with regard to nut quality parameters, the copra content ranged from 14.45 to 20.38 kg/palm/year and the oil content ranged from 7.65 to 14.92kg/palm/year (Fig 2)

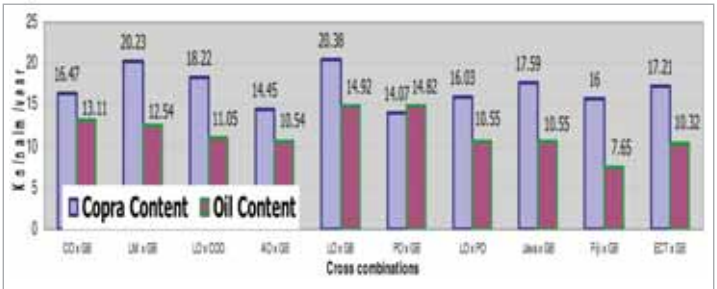


Fig 2 : Copra & Oil content in F_1 Crosses

The pre-bearing performance of the coconut hybrids and certain varieties showed that the highest mean nut yields/palm were recorded in Laksha Ganga (66.37) and Kera Ganga (66.11 nuts) compared to the check Godavari Ganga (63.09nuts).

Double Century and Chandrakalpa performed better recording highest economical triats when compared to the check Godavariganga

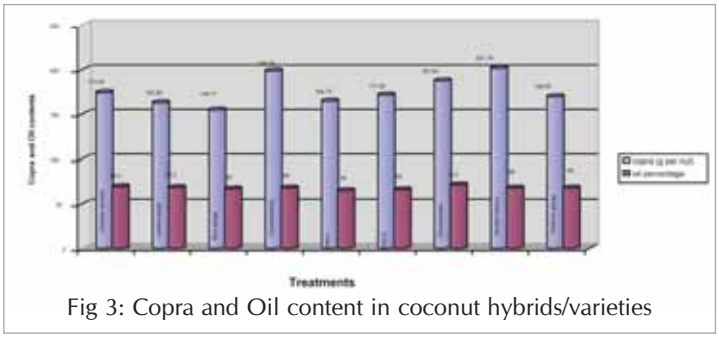


Fig 3: Copra and Oil content in coconut hybrids/varieties

The copra and oil content ranged from 154.77 to 201.78 kg/palm/year and 65 to 71.5kg/palm/year respectively in various new cross combinations (Fig 1)

At HRS, Ambajipeta, the crossing programme was initiated during 2008 with released varieties viz., Philippines Ordinary, Laccadeevi Ordinary, Fiji tall, Java and Cochin China. The cross combinations viz., Kalpa Mitra x CRP 509, Double Century x CRP 509, Kerabastar x CRP 509, Chandrakalpa x CRP 509, CRP 509 x Kalpa mitra, Kalpa pratibha x CRP 509, CRP 509 x Kerabastar.

COCOA

Six cocoa clones *viz.,* VTLCC – 1, VTLCH – 1, VTLCH – 2, VTLCH – 3, VTLCH – 4, VTLC – 1 (Control) were evaluated and maximum plant height (82.75 cm) was recorded by VTLC – 1 followed by VTLCH – 1 (80.50 cm).

FOREST PRODUCE

At HRS, Pandirimamidi, myrobalon ACC-2 recorded highest plant height (9.65 m), plant spread (6.12m EW & 6.23m NS) and highest (1.48kg) yield per tree in ACC-1respectively.

In marking nut maximum plant height 9.10 m was recorded in ACC-2 and plant spread (3.93m EW & 3.53 NS) in ACC-1.

ACC-1 in Gumkariya recorded maximum plant height (8.00 m) and plant spread (7.22 m E-W, 7.33 m N-S)

ACC-1 in nux vomica recorded highest plant height 7.57 m and plant spread 3.02 m E-W, 3.17 m N-S).

TAMARIND

At HRS, Pandirimamidi, Acc-1 recorded maximum height (12.85kg) and spread (8.83m EW & 9.13m NS). Highest yield per plant was observed in ACC-13 (34.4kg) and Acc-12 (23.6kg)

In annatto ACC-2 recorded highest plant height (4.81 m), plant spread (8.10 m EW & 6.10 m NS), pod number (19) and yield (2.7 kg) than other accessions.

SOAP NUT

At HRS, Pandirimamidi, Acc-4 recorded highest yield (0.683 kg/tree) than others.

CUSTARD APPLE

At HRS, Pandirimamidi, highest number of fruits were recorded in ACC-1 (18) followed by ACC-9 (12.0).

B. CROP PRODUCTION

FRUITS

MANGO

At MRS, Nuzvid, among the various varieties under high density planting Totapuri recorded significantly highest yield of 29.08 kg/tree and among hybrids Neelishan recorded highest yield of 27.67 kg/tree.

Three sprayings of potassium sulphate (K_2SO_4) at two percent concentration at 15 days interval starting from peanut stage on Baneshan mango variety recorded highest quantitative characters like fruit number / tree (67.75), fruit weight (295.2) and yield/tree (20.475 kg / tree) and qualitative characters like TSS (21.7 °B) when compared to other concentrations of potassium sulphate including control.

From the data collected in Nuzvid mandal of Krishna District it is found that among the different intercrops grown in mango ecosystems (Cereals, legumes, vegetables, commercial crops) mango intercropped with brinjal recorded significantly highest cost benefit ratio of 2.68 with mango equivalent yield of 21743 kg/ha.

At HRS, Aswaraopet, micronutrients sprays with $ZnSo_4$ @5g + $FeSO_4$@ 5g + Boron @ 2 g per litre of water to mango trees thrice during young flush stage after harvest, before flowering and during

pea nut stage gave highest yield (5.25 kg/tree) followed by $ZnSo_4$ @ 5g + Boron @2g per litre of water (50.33 kg/tree).

GRAPE

At HRS, Aswaraopet, four different varieties of Wine Grapes viz., Shiraj, Cabernet Sauvignon, Sauvignon Blanc and Chenin blanc were grafted on Dogridge root stock 'insitu' and noticed that flowering and fruit set were noticed in Shiraj (black) and cabernet sauvignon (white) only during first year & second year.

SWEET ORANGE

At HRS, Mallepally, application of 100 kg farm yard manure + 1 kg urea followed light irrigation 15 days after stress recorded maximum fruit number of 346.6 / tree.

Organic farming of sathgudi sweet orange, recorded maximum stem girth (8.43 cm) plant height (263.8 cm) and canopy spread East West (244.3 cm) and North South (247.88 cm) in NPK (N:P:K = 300:70:80) g/tree (treatment control) than the other treatments.

SAPOTA

AT HRS, Venkataramannagudem, highest fruit yield /tree was recorded in 10 x10 m spacing (111.41 kg $tree^{-1}$), while 7.50 x 7.50 m spacing recorded maximum fruit yield ha^{-1}(19.99 $t.ha^{-1}$) which was on par with 7.5 x 5.0 m spacing (19.81 $t.ha^{-1}$). Cumulative yield from 2000-2009 was maximum in 5 x 5 m spacing (72.52 $t.ha^{-1}$) followed by 7.5 x 5.0 m (67.45 t. ha^{-1}) and lowest is in 10 x 7.5 m spacing (36.41 $t.ha^{-1}$).

At HRS, Mallepally, the treatment combination of inorganic 50% + 25% FYM + 25% neem cake recorded highest fruit number (631.75) in Integrated Nutrient management on yield and quality of Sapota var Kalipatti

BANANA

At HRS, Kovvur, among all the treatments, control ie. application of 200,50,200 g NPK /plant at 45 days interval in 4 split doses recorded highest bunch weight of 32.66 Kg and yield of 75.62t/ha.

At HRS, Kovvur, application of poultry manure along with Azospirillum and AM fungi was found promising and recorded highest yield of 49 t/ha under sustainable organic banana (cv. Grand Naine) production.

At HRS, Kovvur, application of fertilizers @ 200:50:200g NPK at 15 days interval recorded highest yield of 59.90 t ha^{-1} in tissue culture banana cv. Grand Naine

At HRS, Kovvur, in plant crop, an additional yield of 33.1 t ha^{-1} and during ratoon crop an additional yield of 20.30 t ha^{-1} was obtained by spraying Sulphate of Potash 0.05 % at 5,15,25 and 35 days after last hand opening along with application of 100% RDF + Poultry manure @5Kg per plant in two splits and PSB + Azospirillum @50 gm each per plant.

JACK FRUIT

AT HRS, Venkataramannagudem, among three methods of propagation technique approach method of grafting has recorded maximum success of 86.67%.

FLOWERS

GLADIOLUS

At ARI, Rajendranagar, application of 75% of recommended dose of fertilizers (NPK @ 200:75:75kgs/ha) along with FYM @1kg/m^2/y + Vermicompost@300g/m^2 + Azospirillum @ 2g/m^2 + PSB @ 2g/m^2 resulted in maximum plant height(115.16cms), number of tillers (1.86), spike length(54.12cms) and maximum number of florets per spike(15.20) in Gladiolus var. "Arka Amar".

At ARI, Rajendranagar, pendimethalin@ 0.75 kg ai/ha was found to be the safest chemical for weed control in gladiolus and which recorded maximum rachis length (42.0cm), more no of spikes/plot (43.67) and maximum floret diameter (10.25 cm) while Atrazin @ 1.5kg ai/ha, recorded maximum spike length of 99.53 cm.

CHRYSANTHEMUM

At ARI, Rajendranagar, application of 75% RDF + FYM (1kg / m^2) + Vermicompost (300g/m^2) + Azo + PSB resulted in maximum plant height (32.47cms.) , number of flowers per spray(21.33) and number of flowers per plant (131.80) followed by application of 50% RDF + FYM (1kg / m^2) + Vermicompost (300g/m^2) + Azo + PSB in chrysanthemum var. Mayuri.

In chrysanthemum variety 'Punjab Anuradha', maximum plant growth with regard to plant height (43.7cms.), plant spread(23.53cms.), maximum spray length (26.58cms.) and number of flowers per plant were recorded in the media composition consisting of Soil + sand + FYM (2:1:1). Maximum number of shoots per plant (10.33) and early flowering (93.7 days) was recorded with the media cocopeat + sand + FYM(2:1:1) while maximum duration of flowering (59.39days) along with maximum flower diameter(4.46cms.) and flower weight(1.37g.) was observed with media consisting of soil + sand + vermicompost(2:1:1).

Application of Pendimethalin @ 0.75kg a.i/ha and 1.0Kg a.i/ha were very effective in controlling the weeds recording minimum weed count observed at 25 days interval from 25 to 150 days after application of herbicide in cv. Basanthi of chrysanthemum.

At ARI, Rajendranagar, significantly higher plant height, number of branches per plant and plant spread at 90 days after planting i.e at flowering time was observed with Pedimethalin application @ 0.75kga.i/ha & 1.0kga.i/ha. Maximum spray length (17.4cms.),flowers per plant(89.6) and average flower weight (1.5g)was recorded with the application of Pedimethalin @ 0.75kga.i/ha.

TUBEROSE

In tuberose cv. "Hyderabad single" earliest flowering and maximum shoots per plant(59.67 days &12.47) were recorded in 75%RDF + FYM (2kg/m2/yr) while maximum duration of flowering (185days) was recorded in 75%RDF + FYM (1kg/m2/yr) + Vermicompost (300g/m2 + Azospirillum + PSB. Maximum spike weight, spikes per bulb and spikes per m^2 were recorded in 75%RDF + FYM (1kg/m2/yr) + Vermicompost (300g/m2 + Azospirillum + PSB. Maximum florets per spike (49.83) were recorded in 100%RDF + FYM (2kg/m2/yr).

GERBERA

At HRS, Pandirimamidi, Plant spread was highest in Debora (E-W 42.90 cm & N-S 42.15 cm) followed by Banesa (E-W 42.20 cm & N-S 42.30 cm) while number of leaves per plant was highest in Debora (17.15) and least in Avemaria (10.90) at 60 DAP under polyhouse conditions in gerbera.

TUBER CROPS

ELEPHANT FOOT YAM

Organic and inorganic Elephant Foot Yam

At HRS, Kovvur, pooled data for 4 years revealed that highest yield (51.44 t ha^{-1}) recorded in FYM @ 25 t ha^{-1} +75 % RDF (as inorganic) + 25 % RDF (as organic) + AMF@ 5 kg ha^{-1} + Azospirillum@ 5 kg ha^{-1}. CB ratio (2.307) was also highest in above said treatment.

At HRS, Kovvur, recommended package of practices for conventional system (inorganic fertilizers and pesticides) 250:60:250 kg NPK ha^{-1} recorded significantly highest yield of 48.75 t ha^{-1}. Growth and yield attributing characters and CB ratio (2.30) were also significantly highest in above said treatment.

Intercropping spice crops in elephant foot yam

Intercropping Spice crops in Elephant foot yam. Amorphophallus and Turmeric 1:1

Intercropping Spice Crops in Elephant foot yam Amorphophallus and Turmeric 1:2

At HRS, Kovvur, when Elephant Foot Yam (EFY) intercropped with Turmeric (1:2), recorded significantly highest plant height (100.66 cm), Plant girth (15.21cm) and canopy diameter (117.87cm) compared to sole crop with plant height (81.08 cm), Plant girth (13.83 cm) and canopy diameter (97.64 cm) respectively. Highest EFY equivalent yield of 77.37 t ha^{-1} was recorded when EFY intercropped with Turmeric (1:2). Cost Benefit ratio was highest in EFY+Turmeric (1:1) followed by EFY+Turmeric (1:2).

AMARPHOPHALLUS

At HRS, Kovvur, tubers exposed to smoking for 72 hours were found to break the seed dormancy and sprout earlier (30 DAP) than other treatments.

VEGETABLS

GHERKINS

At HRS, Aswaraopet, three varieties namely Sparta, Ajax, Casata were tested with 3 different months of planting i.e. September, October & November and noticed that September month planting with Casata variety recorded the highest yield 470.5 gr/plant followed by Sparta 450 g and Ajax 416.8 g.

CAULIFLOWER

At HRS, Aswaraopet, four different varieties viz., NS 60 N, Basant, Silver cup 60, Swetha early tested at three different dates of planting viz., October, November and December and noticed that more yield was recorded in NS 60 N (4.51 tons/ac) followed by Banna (4.21 tons/ac) during October month transplanting.

CAPSICUM



At HRS, Pandirimamidi, Hybrid Indra recorded the maximum plant height (75.6cm); yield per plant (828.2g.); per plot yield (39.94kg) and fruit number per plant (7.0) compared to Orabelli hybrid under polyhouse conditions. August and September planting of hybrids recorded good yields compared to October and November plantings

SPICES

CHILLI

At HRS, Lam, LCA 625 had recorded highest yield (58.7 q ha^{-1}) at 450 kg ha^{-1} of nitrogen coated with neem cake and was on par with application of recommended dose of Nitrogen applied @ 300 kg/ha coated with neem cake (55.5 q ha^{-1}).

In chilli, Calcium nitrate 5 g/l sprayed at 10 days interval minimized whitened pods (2.37q ha^{-1}) and recorded highest dry pod yield of 49.2 q ha^{-1}

Polymer @ 30 g in 100 ml water per kg seed of chillies was superior in germination percentage and found to loose viability after 3 months of storage under ambient condition while in other polymer coated treatments, seeds lost their viability one month after storage.

CORIANDER

At HRS, Lam, seed treatment and soil application with FK-14 and FL-18 of rhizobacteria recorded highest yields (1076 kg/ha&1037 kg/ha) which were on par with each other and significantly superior over control (851 kg/ha).

Application of 100% N + Azospirillum + 5 t/ha FYM recorded maximum yield (954kg/ha) followed by FYM 50% + Vermicompost 50% (798 kg/ha), which was significantly superior over control (479 kg/ha). In irrigation management Sprinkler method of irrigation recorded higher yields (1188kg/ha) compared to Raingun and flooding in coriander.

Among the irrigation schedules, irrigation at 45 & 60 DAS recorded highest yield (1250 kg/ha) and was significantly superior to the control (611 kg/ha).

FENUGREEK

At HRS, Lam, seed treatment and soil application with FK-14 and FL-18 were evaluated and the results indicated that both the treatments were on par with each other in leaf yields (1.54t/ha &1.51t/ha) and superior over control (1.33 t/ha).

MEDICINAL & AROMATIC PLANTS

SWEET FLAG (Acorus calamus)

At AICRP on MAP & Betelvine, Venkataramannagudem, application of 15t/ha FYM with spacing 60 x 30 cm recorded higher rhizome weight & yield and was on par with the treatment 60 x 30 cm + 10t/ha FYM.

BLACK NIGHT SHADE (Solanm nigrum)

Planting with a spacing of 60 x 60 cm recorded higher growth and yield while yield per unit area was high with closer spacing 30 x 30cm.

Application of organic manures FYM 10t/ha + Bio-fertilizer Azospirillum + Phosphobacter of each 5kg/ha increased the growth and yield parameters viz. plant height, branches, LAI and herbage yield.

SARACA ASOCA

At Herbal Garden Scheme, Rajendranagar, among the different medicinal crops grown as intercrops in medicinal tree species (*Saraca asoca*) under rainfed conditions, *Clitorea ternetea* (Sankupushpi) recorded maximum dry herbage yield of 4.68 t/ha followed by *Ocimum sanctum* (2.88 t/ha).

Among the different concentrations of NAA (Naphthalein Acetic Acid) and BA (Benzyl Adenine) used in standardization of micro propagation of *Rauvolfia serpentina* the best shoot proliferation (92 %) was observed in MS medium containing 0.1 mg L^{-1} NAA + 2.5 mg L^{-1} BA. Maximum root formation (95%) was recorded in half strength MS medium supplemented with 0.4 mg L^{-1} NAA + 0.1 mg L^{-1} IBA.

Under rainfed conditions maximum dry root yield (3.42 q/ha) of Aswagandha was recorded with application of 50% RDF + 50% of N through Vermicompost.

Under Southern Telangana conditions among the medicinal climbers studied for their performance Glory lilly produced 67.5 kg of seed yield per acre.

Gymnema sylvestre cuttings treated with IBA 600 ppm recorded higher percentage (62) of rooting.

PLANTATION CROPS

COCONUT

HRS, Ambajipeta

At HRS, Ambajipeta, highest nut yield was recorded in crop combination of patchouli with coconut (104.80nuts/palm/year) as against 65.79 nuts/ palm/ year in the crop combination of coconut + mango ginger. The former recorded best benefit – cost ratio of 2.84 while latter recorded 1.79.

When fertilizer applied through micro-irrigation in a 25 years old garden of coconut var. East Coast Tall, maximum nut yield (81.25nuts/palm) was obtained in 100% RDF through fertigation, which was on par with 75% RDF through fertigation (79.18nuts/palm).

In coconut gardens, the intercrops *viz.*, cocoa, banana, pineapple, elephant foot yam, heliconia were planted for development of coconut based integrated farming system model to different agro-climatic regions. Increased organic carbon, nitrogen, phosphorus and potassium contents and decreased soil temperature were observed. The population of earth worms was also found to increase in this farming system.

Seedlings and tissue culture plants of *Morinda Citrifolia* (Noni) were grown as mixed crop in coconut gardens, the highest plant height (2.13 m) and mean number of branches per plant (25.35) were recorded in seedlings compared to tissue cultere plants (1.52 m & 11.75 bunches) respectively.

The highest canopy spread was recorded by taking up pruning in the month of August at 5 % intensity. On the other hand, the yield attributes *viz*. mean number of pods per plant; average pod weight and dry bean weight per tree were found to be at maximum by pruning 10 per cent closely followed by 15 per cent of shoot growth during the first week of August under Ambajipeta conditions. In organic farming of coconut, the highest nut yield per palm per year (61.60) was recorded under FYM @ 50 kg/palm/year under

PALMYRAH

At HRS, Pandirimamidi, the highest neera yields have been recorded with control (375.51)) followed by 50% defoliation (251.395). When yields of neera was verified month wise, highest neera yields have been recorded in March followed by February month.

For higher neera yields, temperatures of above 33ºC (max) and above 18ºC (Min), relative humidities below 95% (AM) and below 37% (PM) are found to be essential. Rain fall hinder the flow of neera yields.

Mean no of fruits per bunch, average weight of bunch and nungu yield was highest in 70%defoliation while mean no of bunches/palm was highest in 30% defoliation.

At HRS, Pandirimamidi, growth and development in Palmyra was studied. In the early juvenile phase [4 years' old plants] rate of petiole growth is very slow ranged from 0.42 mm to 1.65 mm. Growth rate is slower in the oldest leaf and comparatively faster in youngest leaf. Lamina growth also has exhibited the same pattern and it ranged from 0.81 cm to 4.84 cm. Time taken for successive leaf emergence varied from 60 to 71 days among the different plants.

In the juvenile phase [7 years' old plants] rate of petiole growth is ranged from 3.31 cm to 12.37 cm. Lamina growth ranged from 0.60 cm to 12.95 cm. Time taken for successive leaf emergence varied from 28.50 days to 30.50 days among the different plants.

In the adult palms, petiole growth rate in male palms varied from 4.88 to 10.43 cm where as in female it varied from 4.83 cm to 10.18 cm. Time taken for opening of successive leaf varied from 25.5 days to 28 days in female and 26 to 28 days male palms. Length of the unopened crown leaf at which emergence of petiole takes place ranged from 0.81 to 1.01 among different plants. Inflorescence growth rates varied from 6.45 cm to 10.55 cm among the plants.Male palms started giving out the inflorescences early in the months of November and December compared to female palms emergence of inflorescences as taken place in the month of January. Mean length of inflorescences was 1.21 in male palms and 0.69 in female palms. Growth rate of inflorescence varies 5.18 to 10.9 in male and 8.33 to 11.77 in female palms.

CASHEW

At CRS, Bapatla, in fertilizer trial with different levels of NPK, Cumulative nut yield was highest 58.77kg/tree in treatment applied with 500g of nitrogen, 125g of prosperous and 125g of potash per tree. In a study with spacing cum fertilizer levels, highest cumulative nut yield of 4476.67 kg/ha was obtained in trees planted at 4X4 m spacing and provided with NPK at 150:50:50 kg/ha.

In an observational trail to study the effect of High Density Planting it was found that in the initial year's canopy development, spread and yield was 3 times higher in trees planted at 4x4m spacing compared to the normal planting of 8x8m spacing.

In an inter crop study in cashew highest net profit of Rs 65967/- was recorded with marigold compared to other inter crops.

C. POST HARVEST TECHNOLOGY

FRUITS

MANGO

Spraying of two percent potassium sulphate (K_2SO_4) 30 days before harvest on kesar variety of mango resulted in minimum physiological loss of fruit weight of 5.32 % and 11.04 % at 5 and 10 days after harvest respectively. Significantly highest TSS content of 21°B was also recorded in the same treatment whereas lowest TSS of 18.2 °B was recorded in control

BANANA

At HRS, Kovvur, banana hands packed in polythene bag containing $KMno_4$ recorded highest shelf life of 11.6 days and 8 days in Karpura Chekkerakeli and Tella Chekkerakeli respectively under room temperature.

Karpura Chekkerakeli and Tella Chekkerakeli under controlled conditions, (14^0C&95% RH) extended shelf life upto 16 and 17 days respectively by spraying Ascorbic acid (0.1%) or by keeping banana hands in polythene bags containing $KMNO_4$.

VEGETABLES

CHILLIES

At HRS, Lam, among the cultivars LCA – 334 took less number of days for drying and had maximum physiological weight loss in 5 days with lower percentage of whitened pods.

Among the chemicals K_2CO_3 along with fungicides was effective for fast drying.

COLOCASIA (Taro)

At HRS, Kovvur, the shelf life of Taro Seed tubers was significantly highest (148.67 days) in cormels treated with carbendazim (0.05%) and stored on pacca floor.

FLOWERS

GLADIOLUS

At ARI, Rajendranagar, it was evident that increase in duration of storage beyond 6 days significantly decreased the vase life and quality of cut gladiolus spike.

Pre-storage pulsing of gladilous spikes (var. Arun) with sucrose 20% + $Al_2(SO_4)_3$. 16 H_2O 300 ppm + GA_3 50 ppm significantly increased vase life. Further, the spikes were also stored for 7 days, beyond which there was significant decrease in the vase life.

CHRYSANTHEMUM

At ARI, Rajendranagar, increased storage duration decreased the vase life. Significant decrease in vase life was noticed beyond 6 days of storage.

Among different holding solutions, sucrose 2% + $Al_2(S0_4)_3$.16H_20, 300ppm recorded maximum vase life of 7.8 days as compared to 6.1 days in control.

TUBEROSE

At ARI, Rajendranagar, among different holding solutions, sucrose 2% + $Al_2(S0_4)_3$.16H_20, 300ppm recorded maximum vase life of 7.0 days than control (5.5 days) in var. Hyderabad single

Increase in duration of refrigerated storage of cut tuberose stems beyond 3 days significantly decreased the vase life in var. Hyderabad double

Hyderabad single

Hyderabad double

CARNATIONS

At ARI, Rajendranagar, among all the pulsing solutions, the treatments T_3 (Sucrose 10% + STS + $Al_2(SO_4)_3$. 16 H_2O + Kinetin 25 ppm) and T_4 (Sucrose 10% + STS + $Al_2(SO_4)_3$. 16 H_2O + BAP 25 ppm) recorded maximum vase life of 15.1 days as compared to 14.0 days in control.

Cellophane sleeves as wrapping material registered significantly maximum vase life of 14.5 days as compared to 12.9 days in control.

Wet storage of cut carnation stems upto 6 days did not effect quality of flowers particularly vase life. However beyond 6 days there was a significant decrease in vase life.

PLANTATION CROPS

PALMYRAH

Among different holding solutions tested, $Al_2(SO_4)_3$. 16 H_2O 300 ppm + BA 25 ppm recorded the maximum vase life of 15.4 days compared to 14.0 days in control

At HRS, Pandirimamidi, it is observed that the yield of Neera from inflorescence is depending on skill of the tapper. V channel type of cut from inflorescence yields more Neera as compared to other type of cuts.

Chemicals were applied to improve the yield of neera from inflorescence and it was observed that application of ethaphan yields more Neera as compared to other chemicals i.e EDTA, $Ca(OH)_2$, BHT and Citric acid.

Neera can be preserved for 3 days under refrigerated conditions by treating with 100°C for 30 min with added preservative of 2% KMS.

10lt capacity of laboratory model crystallizer was designed

Physical properties were measured for tubers for developing tools for slicing of tubers.

Physical properties were measured for tender fruit of 45 days which is useful for developing tools for mungu extraction.

D. ENTOMOLOGY

FRUITS

MANGO

Survey was conducted in mango gardens of various mandals of Krishna district for the incidence of different pests during the year. Severe incidence of leaf Webber was observed during the month of December. Mango fruit borer incidence was recorded at low to medium level. Lot of flower feeding caterpillars were also observed causing damage to inflorescence.

Among the sucking complex in mango, thrips population peaked to a high of 150 no/12 panicles in first fortnight of February while hopper population of about 125 no/12 panicles in second fortnight of February.

Among the various insecticides tested Thiamethoxam 25% WG @ 0.005% (5 g / 20 Lit) and Imadacloprid 17.80% SL @ 0.3 ml / Lit of water was effective against both thrips and hoppers throughout the spray period.

Studies on compatibility of different pesticides, fungicides and hormones revealed that the following combinations are physically compatible without any phytotoxicity.

Diofenthiuron + planofix + KNO3
Cyypermethrin + planofix + KNO3
Lambda-cyholothrin + planofix + KNO3
Thiophenate methyl + planofix + KNO3
Carbendazim + Mancozeb + planofix + KNO3
Diofenthiuron + Thiophenate methyl + planofix + KNO3
Diofenthiuron + Carbendazim + Mancozeb + planofix + KNO3
Cypermethrin + Thiophenate methyl + planofix + KNO3
Cypermethrin + Carbendazim + Mancozeb + planofix + KNO3
Lambda-cyholothrin + Thiophenate methyl + planofix + KNO3
Lambda-cyholothrin + Carbendazim + Mancozeb + planofix + KNO3

JACK

At HRS, Kovvur, survey was conducted in stray orchards of Kovvur mandal of West Godavari district. Severe infestation of mealy bug was observed (fig. 2)

Mealy bug infestation on jackfruit

SPICES

CHILLIES

Studies on Screening of germplasm / Cultivars for resistance to thrips, mites, blossom midge and Pod borers indicated that none of the entry recorded nil population of Thrips & Mites.
PYT -13 recorded nil damage by blossom midge.where as AYT-7, 8, 10, 11 & 12 and PYT-1, 3 & 9 were recorded nil damage by pod borer:

Population dynamics of chilli pest complex in relation to abiotic and biotic factors at HRS, Lam revealed that Infestation of thrips started in 37th stdw and reached maximum (16.79 /leaf) in 44th stdw. Thrips population exhibited positive correlation with Temperature and negative correlation with the relative humidity during the crop period.

Mite population appeared in 46th stdw. & ended in 16th stdw. Mite population has positive correlation with relative humidity and rainfall and negative correlation with temperature. Mean population of *Spodoptera litura* per trap indicated that, incidence started in 4th stdw. Highest population per pheromone trap was observed (118) in 8th Stdw.

Studies on evaluation of certain insecticides against chilli blossom midge *Asphondylia capsici* Barnes (Diptera: cecidomyiidae) showed that Fipronil @ 2ml/lt was highly effective by recording highest (58.27) percent reduction in damage over control.Chlorfenpyr @2ml/lt (47.11) and Diafenthurion @1.5g/lt (46.96) were next best treatments.

Certain new molecules of insecticides were evaluated against chilli thrips and the results indicated that Spinosad @ 0.25 ml /lt recorded highest percent reduction in population. Chlorfenpyr @ 2ml/l, Difenthurion @ 1.5gm and Fipronyl @ 2 ml/lt next best treatments.

Fenpyroximate @1ml/lt, Abamectin@0.25 and Propergite@ 2ml were found to be effective against chilli mite , *Polyphagoparsonemus latus*.

Studies on certain synthetic and bio-pesticides for the management of pod borer complex showed that Spinosad@ 0.25 ml /lt recorded lowest percent pod damage followed by Chlorfenpyr@ 2ml, Emamectin benzoate @ 0.4gr, Lufenuron @ 1ml.

Integrated Pest management on chillies was revealed that Thrips, Mite population per leaf Blossom midge,% Bud damage, % Flower damage, and %fruit damage were found to be low in IPM plot than Non IPM plot Pod borer damage and pheromone trap catches also less in IPM plot than Non- IPM Similarly,Cost benefit ratio was found to be 1:2.21 in IPM plot and 1:1.31 in Non IPM plot.

Chilli bud borer :

In Andhra Pradesh chilli production had been greatly effected in the past few years due to severe infestation of chilli with chilli flower midge (*Asphondylia capsici* Barnes). The infestation occurs from bud stage of the flower to pod development. It extends from the months of September to March during the year. In the course of research to identify effective schedule to control the dipteran flower midge on chiili, another Hymenopteran insect *Goethella asulcata* Girault was noticed from the infested flowers. About 4-12 adult flies emerged from the infested bud in contrary to single fly in chilli flower midge. (Fig-7 & 8)

Research on identification and authentification of new pest on chilli *ie.,* Bud borer is under progress at HRS, Lam.

Infested flowers and flower buds

Ready to emerge maggots in the ovary of chilli flower

COCONUT:

Periodical surveys for monitoring of pests viz., black headed caterpillar, red palm weevil, rhinoceros beetle, eriophyid mite and other leaf eating caterpillars etc., were conducted by following 'Rowing' and 'Fixed Plot' survey in East Godavari dt.

High incidence of leaf eating caterpillars *Phelera* sp and *Acria* sp was observed in almost all the gardens of East and West Godavari district. These pests were observed in the months of January; February and March 2011.The light traps were installed in various coconut orchards for monitoring the incidence of coconut pests. Due to incessant heavy rainfall from May 2010 to December 2010 the leaf eating caterpillars like slug caterpillar [*Parasa lepida*], webworm [*Acria sp*], *Phelera sp* and button borer were observed feeding on the coconut foliage and the adults were mass trapped in the light trap [500 W incandescent bulb arranged at 1 $^{1/2}$ feet high above the water pan] from 6 pm to 5 am.

IPM package for coconut mite is being implemented in Coconut Research Station, Ambajipet as follows,

i. Phytosanitary measures.
ii. Root feeding of Azadirachtin 10,000 ppm @ 10 ml + 10 ml water. The treatments will be given three times in a year i.e., December – February, April – June, September – October.
iii. Recycling of organic waste.
iv. Raising of green manure crops in the basin.
v. Application of recommended dose of fertilizers.
vi. Recommended level of irrigation.
vii. Husk burial in basin.
viii. Soil moisture conversation measures.

The data was recorded on the intensity of Eriophyid mite from 3rd bunch of coconut in the selected plot at quarterly intervals. Mild intensity of mite i.e., 2.30 grade index was observed in the T_1 – treatment [IPM implemented garden] and in the T_2 – treatment [IPM treatment without root feeding] recorded 2.48 grade index [Mild] whereas 2.96 grade index [Medium] was recorded in control plot (T 3).

Evaluation of improved strains of parasitoids (Braconid) and predators (*Cardiastethus exiguus*) in the field against *O. arenosella* shows that the pest incidence reduced to 100 per cent at third week after release in the T_1 – treatment [conditioned parasite treatment], whereas in T_2– treatment [the unconditioned parasite treatment] the pest incidence reduced to 83.7 percent of after third week of release of parasite.

Studies on field efficacy of commercially available pheromones against coconut pest *viz.,* rhinoceros beetle and red palm weevil indicated that Maximum number of weevils were trapped in the month of May and throughout the year the highest number of weevils were trapped in Chem Tica lure catching 18.60 weevil/trap/month followed by PCI lure 17.69 weevils/trap/month.

The highest number of beetles were trapped in Chem Tica lure (2.21 beetles/trap/month) while PCI lure trapped 1.52 beetles/trap/month during the experimental period.

Performance of medicinal and aromatic plants as intercrops in coconut gardens revealed that Mild scale of mite incidence was observed in all the treatments *viz.,* 2.14 [Citronella], 2.30 [Lemon grass], 2.22[Patchouli], 2.36[Palmarosa]2.4 [Mango ginger] where as in control Medium scale of infestation was recorded. Leaf damage by the rhinoceros beetle was less than 18.73 per cent, while in control plot it was recorded as 23.31 per cent.

Mild to medium incidence of mite intensity and low to medium damage by rhinoceros beetle was recoded in the coconut garden where fertilizers were applied through micro-irrigation

In the garden where integrated cropping system was implemented the medium scale of mite incidence was observed, where as medium level of rhinoceros beetle was observed in addition to low level bagworm incidence.

NON – PLAN

About 8.76 lakhs parasitoids were reared in the laboratory during the year 2010-11. In response to the indents received from the farmers of above places 5.43 lakhs Parasitoids were supplied to the farmers to cover an area of 2085 acres.

Evaluation of efficacy of *Opisina arenosella* larval Parasites in Coconut gardens

Borassus palm tree serving as alternate hosts for *Opisina arenosella*

Collection of *Opisina arenosella* larvae from the Borassus palm tree

Date palm trees severely affected by *Opisina arenosella* larvae serving as alternate hosts

Release of *Bracon hebetor adults* in the *Opisina arenosella* infested coconut garden

Six treatments were imposed for studying the influence of crop habitat diversity on the occurrence of coconut pests in coconut gardens with different intercrops in East Godavari. Mild to medium intensity of Eriophyid Mite and Rhinoceros Beetle was noticed in all the gardens The results specify that the

intercropping of the coconut with banana, cocoa and High Density Multiple Species Cropping System is highly suggested in terms of lessening of pest intensity over the mono-cropped coconut garden.

Periodical visits were made to the cocoa garden; different pests, natural enemies were collected and categorized as per their feeding habitat. From the observations it is found that defoliator pests like, Brown leaf chaffer beetle, *Adoretus versutus* [Coleoptera : Scarabaedae : Rutelinae] and black leaf chaffer beetle, *Apogonia blanchardi* [Coleoptera : Scarabaedae : Melolonthinae], Bagworm *Pteroma plagiophelps* Hamps (Lepidoptera: Psychidae) and tussock caterpillar *Euproctis subnotata* , *Euproctis fraterna* and *Lymantria obfuscata* , on cocoa have been reported for the first time in Andhra Pradesh.

Natural enemies like *coccinellids*, *chrysopa* and spiders were observed during field visits.

Laboratory studies revealed that incubation period was ranged from 6.7 to 8.7 days.Where as larval period for above pests were 11, 23.25 & 26.57 days respectively.Incubation period was observed in the range of 6.7 days to 8.7 days. Total life cycles of these pests were 35.77 days 41.18 days and 36.77 days respectively.

PESTS OF COCOA IN AP

1. Defoliating pests.

Brown leaf chaffer beetle *Adoretus versutus*

Black leaf chaffer beetle *Apogonia blanchardii*

Bag worm *Pteroma plagiophelps*

Bag worm *Clania sp*

Slug caterpillar *Parasa lepida*

Tussock caterpillar *Euproctis subnotata*

Tussock caterpillar *Dasychira mendosa*

Hairy caterpillar *Euproctis fraterna*

Tussock caterpillar *Lymantria obfuscata*

Semilooper *Thallasododes sp*

2. Sucking pests.

Tobacco caterpillar *Spodoptera litura*

Mealy bug

Aphids

Tea mosquito bug

Thrips

Amongst the various insecticides tested against the bagworm *[Pteroma plagiophelps], Euproctis fraterna* and the web worm *Acria sp* 100 per cent reduction in the pest population at 1 Day after spraying was caused by Carbaryl 50% WDP, Acephate 75% SP and Quinalphos 25% EC while, 5.88, 60.00 and 61.54 per cent reduction was achieved through the Endosulfan 35% EC , Neem oil Azadirachtin EC 1500 ppm and Profenophos 50% EC .

Amongst the various insecticides tested against the mealy bug *[Dasychira mendosa]* Acephate 75% SP and Cholrpyriphos 20 % EC was very effective causing 100 per cent reduction in the pest population at three days after spraying . Whereas, Profenophos 50 % EC took four days to achieve the same result.

PLANTATION CROPS

CASHEW

At CRS, Bapatla, spray any one of the following insecticides *viz*., L-Cyhalothrin 0.003%, Profenophos 0.05% twice at flowering, nut &fruit development stage (s) and the recommended schedule involving Monocrotophos 0.05% at flushing, Chlorpyriphos 0.05% at flowering and Carbaryl 0.1% at fruit & nut development stage were fond equally effective against leaf and blossom webber, apple and nut borer and shoot tip caterpillar on cashew. None of the insecticides are safe either to spiders or ants.

In the curative, the treatment with Chlorpyriphos 0.2% could offer protection to the cashew trees after extraction of the immature stages of the cashew stem and root borer from the infested trees without re-infestation or persistent attack in 90.9 percent treated trees followed by Monocrotophos with 80.0 percent trees without re-infestation or persistent attack. Irrespective of the insecticides tried, 20.93 percent of the trees showed yellowing even after treatment.

Preferential zone of attack is collar + stem in 44.11 percent of trees (5/34) followed by collar + root in 38.23 percent of trees (13/34)

In screening germplasm entries against foliage and flower feeders the incidence of leaf and blossom webber and shoot tip caterpillar was observed to a low extent in different germplasm entries. The entries *viz*., T.No275,T.No.274,T.No.4/5, T.No.1/1, T.No.4/3,T.No.8/7 were found tolerant to the leaf and blossom webber which recorded 1.9 to 2.4 percent damage as against the highest damage of 7.2 percent in T.No.40/1.

During the surveys conducted the incidence of cashew stem and root borer was observed to be high (10-15%) in different coastal districts of Andhra Pradesh warranting immediate curative and prophylactic measures against the pest. The activity other foliage, flower and nut feeders was almost negligible.

The population dynamics of cashew pests indicated that, the incidence of leaf and blossom webber varied from a low of 0.09 to a high of 15.66 percent in different meteorological weeks. The highest incidence was recorded during the month of December, 2009 which touched 15.66 per cent. The activity of pest was dwindling from 0.09 to less than 3.80 percent in majority of the meteorological weeks, but relatively high during December second fort night to March months. The leaf miner appeared

on the crop ever since July and continued up to April. The percent damaged leaves by leaf miner were maximum during third week of March which touched 10.45 percent. The activity of apple and nut borer was observed only during the last week of February with a very low damage of 0.46 percent and continued to damage the fruits and nuts up to April ending with a highest 8.80 percent in March..

MEDICINAL & AROMATIC PLANTS

At AICRP on MAP & Betelvine, Venkataramannagudem, several insect pests on some medicinal crops were recorded and categorized based on their feeding habits during 2010-11. Crops, *viz.*, *Withania somnifera* (Aswagandha) & *Solanum nigrum* (Makoi) were found to be infested by Coleopteran pest, *Henosepilachna vigintiopunctata* and Red cotton bug *Dysdercus cingulatus*. Tiny galls developed on roots of Coleus crop due to nematode attack was identified as *Meloidogyne* Species. Thrips were found to be the major pest on *Solanum nigrum* during Rabi, 2010-11.

Among the natural enemies, Predators like Spiders, Coccinellids viz. *Chilomenes sexmaculata*, & *Coccinella transversalis* and Parasitoids viz, Braconids Ichnemonids & Eulophids were recorded on lepidopteran & Coleopteran pests of Coleus ,Senna, Makoi and Aswagandha crops.

PESTS OF MEDICINAL CROPS

Senna | **Aswagandha & Makoi** | **Coleus**

Catopsilia pyranthae

Henosepilachana vigintiopunctata

Dysdercus cingulatus

Leaf webber

LARVAL PARASITOIDS ON MEDICINAL CROPS

Sympiesis Sps on *Terminalia arjuna*

Diolcogaster naumani on *T.arjuna*

Cotesia sps on *Cassia occidentalis*

Ichnemonid sps on Coleus

VARIOUS COCCINELLID SPS REPORTED ON MEDICINAL CROPS

Anegleis cardoni on *T.arjuna*

Chilonemes sexmaulatus on Aswagandha

Brumus suturalis on Makoi

Coccinella transversalis on Aswagandha

E. PLANT PATHOLOGY

FRUITS

BANANA

At HRS, Kovvur, Sigatoka disease (42.49 %) was effectively controlled with three sprays of Propiconazole (0.1 %) followed by Propiconazole (0.05%) with mineral oil (1 %).

At HRS, Kovvur, Integrated disease management with seed treatment (0.2% Carbendazim), soil drenching (0.2% Carbendazim) injection of Carbendazim 2% solution @ 3ml/plant on 2nd , 4th and 6 th month after planting significantly reduced the Fusarial wilt incidence over control.

At HRS, Kovvur, twenty one isolates of banana rhizome rot pathogen were collected from different cultivars and characterized based on cultural, biochimical and pathogenicity tests using Tella chkkerakeli, Grandnine and Dwarf cavandish varieties.

At HRS, Kovvur, out of 107 genotypes screened, 43 genotypes showed resistance against *Fusarium oxysporum f sp cubense* race -1,VCG 0124.

VEGETABLES

RIDGEGOURD

At HRS, Lam, downy mildew disease was found to be significantly reduced with alliete / Aluminium - tris spray over seed treatment (Ridomil MZ 0.25%) + removal of infected leaves and spray with mancozeb @0.25%.

CHILLI

At HRS, Lam, the fungicides tested against anthracnose disease Azoxystrobin @ 0.1%, Propiconazole @ 0.1%, Difenconazole @ 0.06%, cabriotop @ 0.3% Copper hydroxide @ 0.25% were found effective.

OKRA

At HRS, Lam, Yellow Vein Mosaic Virus disease had negative correlated with maximum temperature, minimum temperature, Relative humidity (AN), rainfall and whitefly population were negatively correlated with disease incidence except Relative humidity (FN) with coefficient of multiple determination ($R^{2)}$ of 0.428.

At HRS, Lam, out of five entries tested for YVMV incidence in AVT II, lowest incidence (8.53%) was recorded in 09/OKYVRES-1 with 102.59q/ha followed by 09/OKYVRES-4 (14.88%) incidence and 100.66q/ha yield.

MEDICINAL & AROMATIC PLANTS

At AICRP on MAP & Betelvine, Venkataramannagudem, leaf spots & blights were recorded on medicinal plants viz., *Convolvulus microphyllus, Vitex negundo, Dioscorea sp, Piper longum, Artemisia vulgaris, kalanchoe pinnata, Rauvolfia serpentina, Withania somnifera, Curculigo orchiodis, Centella asiatica & Psoralea corylifolia* While powdery mildew was recorded on *Anethum graviolens* during surveys in the year 2010-11.

Senna leaf blight incidence was recorded on seedlings in nursery (70-90%) and also in the main field, the pathogen was isolated and identified as *Alternaria* sp.

On *Mucuna pruriens* (Cowhage) starting from 30 days after planting rust was recorded the pathogen was identified as *Uromyces mucunae*. Rust prevalence ranged from 20-25% with 11.6% PDI, while yellow mosaic virus incidence ranged from 5-10% (2010-11).

Diseases on *Mucuna pruriens*

Rust *Uromyces mucunae*

Yellow mosaic virus

Disease on Cassia angustifolia

Leaf blight *Alternaria sp*

PLANTATION CROPS

COCONUT

At HRS, Ambajipeta, out of Fourteen Ganoderma isolates tested for pathogencity seven isolates found to be more virulent and showed more symptoms 21- 24 days after planting on indicator plants Viz., red gram and bengal gram.

Bengal gram as indicator plant showing symptoms of *Ganoderma* sp

At HRS, Ambajipeta, horizontal spread of basal stem rot disease in coconut was more when intercropped with banana compared to sole crop, while vertical spread was more in sole coconut crop. At HRS, Ambajipeta, Molecular characterization of 24 isolates of Ganoderma with three enzymes, Esterase, Catalase and Peroxidase by native PAGE, indicated that all the three enzymes showed variation among the isolates. However, the enzyme, Esterase isozyme profile showed the highest variation in the profiles of isolates with number of bands ranging from 0 to 9.

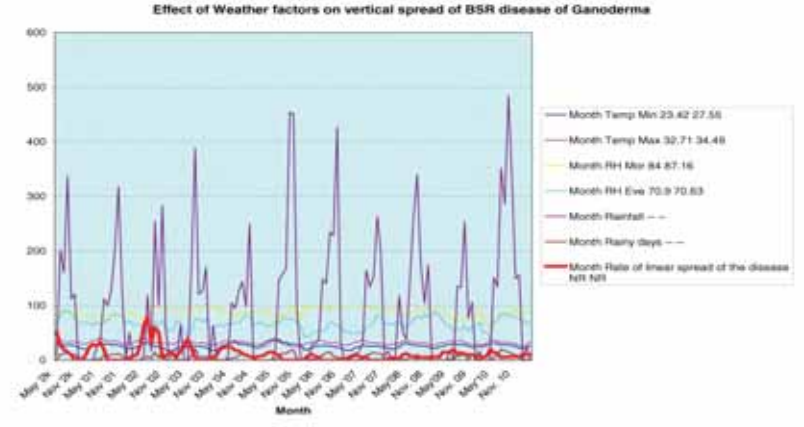
At HRS, Ambajipeta studies on the impact of other palms and intercrops on coconut basal stem rot disease occurrence and spread indicated that Horizontal spread of the disease was more in coconut intercropped with banana when compared to the sole crop where as vertical spread was found to be more in sole coconut crop.

At HRS, Ambajipeta, Correlation studies between weather factors and spread of basal stem rot disease indicated that number of rainy days, rainfall and relative humidity at 2 pm were found to have significantly negative relationship with vertical spread of basal stem rot disease in coconut (Fig). the following regression equation to predict the *Ganoderma* wilt disease spread in coconut.

Y = 21.99 + 5.42 (MIN TEMP) – 1.00 (MAX TEMP) + 0.848 (RH EVE) – 1.579 (RH MOR)

R^2 = 0.5417; R = (-) 0.7360; F = 5.31.

Fig: Effect of Weather factors on rate of linear spread of Basal stem rot disease of coconut



At HRS, Ambajipeta, Application of talc formulation of *pseudomonas fluorescens* was found effective against budrot disease.

COCOA

Surveys conducted on Cocoa by HRS, Ambajipeta, indicated that pod rot, stem canker and root rot are the major diseases and *Phytophthora palmivora* was isolated from diseased cocoa pods.

Fig: Pod rot, Stem canker and root rot symptoms on cocoa

V. EXTENSION

A. Dr.YSRHU SECOND ZREAC MEETINGS

ZREAC Meeting of Coastal Zone at Tadepalligudem held on 24-03-2011

ZREAC Meeting of Rayalaseema Zone at Tirupati held on 8-4-2011

ZREAC Meeting of Telangana Zone at Rajendranagar held on 21-04-2011

B. DIAGNOSTIC VISITS

Horticultural Research Station, Pandirimamidi

Name of the Scientist	Place of Diagnostic visit	Date of visit	Particulars
Sri.M.Satti Raju Scientist(Hort.) &Head	Kakinada, V J Kutam	24.01.2011	Visited the fields along with A.D.H. discussed with farmers
Sri.M.Satti Raju Scientist (Hort.) &Head	Inavilli , Kakinada	31.1.2011	Visited the fields along with A.D.H discussed with farmers
Sri.M.Satti Raju Scientist (Hort.) &Head	Annavaram, R. Kotturu, Tuni	28.10.2010	Visited fields along with H.O and collected information regarding farmers problems.

Horticultural Research Station, Mallepally

Name of the Scientist	Place of Diagnostic visit	Date of visit	Crop
K.Kaladhar Babu, Scientist(Hort.) & Head	Tadepalligudem	8.12.2010	Amla garden
Dr.T.Suresh Kumar, Scientist (Hort.)	Chinthapalli	17.3.2011	Sweet orange garden
K.Kaladhar Babu, Scientist (Hort.) & Head	Pasnur	24.3.2011	Sweet orange garden

Mango Research Station, Nuzvid

Smt. D.Aparna, Scientist (Hort), MRS, Nuzvid conducted field survey in Seetharampuram, Edara and Kothaedara villages for flowering and fruiting pattern in mango in Krishna Dist., on 13-1-11.

Dr. A.Sujatha, Principal Scientist (Ent.) & Head and Smt. D.Aparna, Scientist (Hort) MRS, Nuzvid conducted field survey on mango in Flanumanthulagudem, Kondaparva, Vissannapeta, Putrela and other villages along with Department of Horticulture and other officials on 2-2-11.

A team of Dr.YSRHU scientists from MRS, Nuzvid and FRS Sangareddy visited mango gardens in Siddardhanagar, Yanamadala and Rangapuram villages on 14-2-11.

Krishi Vigyan Kendra, Venkataramannagudem

Diagnostic Field visit to coconut gardens by KVK team and demonstration of root feeding techniques against red palm weevil on 11.02.2011

Krishi Vigyan Kendra, Venkataramannagudem along with team members visited to Krishna Puram Village, Coconut garden of Meka Surya Narayana. Most of the Coconut trees are dieing with the symptoms of exuding gum from the trunk and ringing sound if we knock on the trunk with sickle. The KVK team diagnosed the attack of Red Palm Weevil adult and grub and recommended root feeding technique for the control of RPW. Demonstrated the root feeding techniques in the field itself with 10 ml of monocrotophas + 10 ml of water to each palm.

Diagnostic Field visit by Krishi Vigyan Kendra team Venkataramannagudem scientists of HRS, Ambajipeta, along with the Scientist's team from HRS Ambajipet on 23.02.2011

Lankala Koderu village was visited to diagnose the problem of Felira species of catter pillar causing severe damage (Upto 35%) to Coconut gardens and then training was conducted in which nearly 60 farmers from surroundings villages like Venkatapuram, Kapavaram, Chintaparru, Palakollu, Ballipadu, Valameru were attended. Scientist's team identified that pest belongs to Felira species and adult moth lays around 150 eggs on coconut leaves. The total life cycle of pest is 49 to 56 days.

The Control measures suggested were 1. Light traps 2. Avoid weeds 3. Root feeding technique with 10 Ml of Manocrotophos +10 ml of water. 4. Spray of 5% NSKE (Neem Seed Kernal Extract). Root feeding technique was practically demonstrated by Scientists, farmers were interacted with scientists. The department officials Sri. P. Murali Krishna, ADA and Mrs. E.Sujatha, M.A.O, Palakollu participated.

Krishi Vigyan Kendra, Venkataramannagudem along with team members visited to Ganapavaram for diagnostic visit. There we have sampled some fish ponds and some fishes were suffering with argulus and bacterial diseases. We have given solution to apply chlorine/BKC @ 1litre/acre for control of argulus and bacterial diseases. Further we suggested salt application@ 100kg/acre and suggestions given for feed management.

Krishi Vigyan Kendra, Venkataramannagudem along with team members proceeded to Bhimavaram to visit L.Vannamei prawn ponds. There we observed heavy algal blooms in the pond and red gills have been observed in prawns. We have given suggestion 100% water exchange and reducing of feed. For controlling of red gills more oxygen should be needed then we suggested to keep aerators to overcome oxygen demand.

Diagnostic field visit to mango gadens in Bandapalli and recorded Hoppers and suggested control measures

Krishi Vigyan Kendra, Pandirimamidi

On 1st February, 2011, Krishi Vigyan Kendra scientists visited the Bandapalli village and identified the Hoppers infestation in Mango and suggested to spraying of Monocrotophos @ 1.5 ml/lit (or) carbaryl@ 3g/lit.


Identification of Hoppers infestation in Mango

Diagnostic field visit to Denduluru village and identified Tea mosquito bug on Cashew and suggested control measures on 2nd February, 2011


Identification of T-Mosquito bug on Cashewnut

On 3rd Februaty, 2011 visited Seetharam village of Devipatnam mandal and identified the Rice Blast in paddy fields and suggested to spray Tricyclozole @ 120 g/ac.

Identification of Rice blast


Identification Stem & Root borer

On 24th February, 2011, visited I-Polavaram village and identified the stem and root borer in Cashew and suggested that removal of grub from effected part and spraying of Monocrotophos @ 2ml/lit.

On 11th March, 2011, visited I-Polavaram village and identified the fruit borer in Tomato and shoot and fruit borer in Brinjal and suggested to spray endosulfan @ 2ml/lit for fruit borer in Tomato and carbaryl @ 3g/lit for the control of fruit and short borer in Brinjal.


Identification of Shoot & Fruit borer in Brinjal

Krishi Vigyan Kendra, Ramagirikhilla

Place	Problem Identified	Suggestions	Team Visited
Nagaram & Manthani, Manthani Mandal	Alkalinity in paddy fields	Discussed the problem in District level Co-ordination committee meeting (DLCC) and planning for Reclamation with DAATTC and Dept.of Agriculture.	1) Sri.Y.Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Sri.Sudha Jacob, Co-ordinator & Head, DAATTC, Karimnagar
Warangal District	Chilli wilt	Drenching with copper oxy chloride	1) Asst.Director of Horticulture, Warangal district. 2) Sri.Venkataramana, Scientist, Pathalogy, HRS, LAM 3) Sri. Hanuman Naik Scientist, Horticulture, HRS, Mallyal.
Raghavapur Village, Peddapalli Mandal	Delayed Flowering in Mango and flower drop	1) Spraying of Calcium Nitrate@10g/lt+Sugar 30g/lt for flower initiation & uniform flowering. 2) Spraying of Planofix@1ml in 4.5lt of water for reducing flower drop.	1) Sri. Y. Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms. D. Rajani, SMS (Horticulture), KVK, Ramagirikhilla. 3) Ms. K. Dhanasree, SMS (Home Science), KVK, Ramagirikhilla.
Raghavapur Village,Peddapalli Mandal	1) Termite problem in Mango 2) Leaf hoppers infestation 3) Powdery mildew 4) Sooty Mould	1) Application of folidal dust or Chloropyriphos for Termite control. 2) Spraying of Phosphome-don @ 0.5ml in 1lt of water for control of Leaf hoppers. 3) Spraying of Karathene@ 1ml in 1lt of water for management of Powdery mildew disease. 4) Mixing of 2kg Starch powder in 4lt of hot water and make up into 100lt solution and application of this solution on infested areas of mango for management of Sooty Mould.	1) Sri. Y. Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms. D. Rajani, SMS (Horticulture), KVK, Ramagirikhilla. 3) Ms. K. Dhanasree, SMS (Home Science), KVK,Ramagirikhilla
Forest Nursery in Sabitham Village, Peddapalli Mandal.	Collar rot disease in nursery in different forest species	Seed treatment with Carbendazim @3g/kg seed; Soil treatment with Redomil@2g/lit; Spraying of Copper oxy chloride@3g/lit on one week old germinated seedlings	1) Sri. Y. Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms. D. Rajani, SMS (Horticulture), KVK, Ramagirikhilla. 3) Ms. K. Dhanasree, SMS(Home Science), KVK, Ramagirikhilla
Raghavapur Village,Peddapalli Mandal.	Fruit drop in Mango	Spraying of Carbendazim @1g/1lt	1) Sri. Y. Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms. D. Rajani, SMS (Horticulture), KVK, Ramagirikhilla. 3) Ms. K. Dhanasree, SMS(Home Science), KVK, Ramagirikhilla

Cashew Research Station, Bapatla

Scientist (Entomology) have taken up the Diagnostic visits in Prakasam, East Godavari, West Godavari, Khammam, Visakhapatnam Districts on the incidence of pest complex on Cashew.

AICRP on MAP & Betelvine, Venkataramannagudem

Sl. No.	Name and Designation	Place of visit
1.	P. Rama Devi Scientist (PP) & Head	Visited the cyclone affected betelvine gardens for assessing the percent damage due to heavy gales at the time of cyclone on 24.5.10.
2.	P. Rama Devi Scientist (PP) & Head	Survey to betelvine gardens in Krishna (dt) for Phytophthora foot rot disease incidence on 12.8.10
3.	B. Tanuja Priya Scientist (Hort.)	Survey of betelvine gardens in W. Godavari (dt) for pest & disease incidence on 22.12.10
4.	Mrs. P. Sunitha, Scientist (Ento.)	Survey of betelvine gardens in W. Godavari (dt) for pest & disease incidence on 22.12.10
5.	P. Rama Devi, Scientist (PP) & Head	Diagnostic visit to betelvine gardens affected by Phytophthora foot rot disease incidence and suggested control measures in Ponnuru mandal along with officials of Department of Horticulture on 7.1.11.

Horticultural Research Station, Lam

20-10-10	Dr.P.Venkata Reddy, Principal Scientist (Hort) visited virus affected chilli fields at Kamepalli, Machavaram and Gamalapadu villages.
6-11-10	Dr.P.Venkata Reddy, Principal Scientist (Hort) visited virus affected chilli fields at Bayyaram, Bheeminenivaripalem and Medikonduru.
20-11-10	Dr.P.Venkata Reddy, Principal Scientist (Hort) Visited chilli fields at Dondapadu, Huzurnagar, Thallacheruvu and also participated in Rythusadassu at Dondapadu.
2-12-10	Dr.P.Venkata Reddy, Principal Scientist (Hort) visited seed problem fields (Sri Teja and Tejeswani) at Pilligundla Thanda, Somala Thanda and Modugadda Thanda of Warangal District.
14-12-10	Dr.S.Surya Kumari, Senior Scientist (Hort) visited virus affected and inundated fields of chilli in Ponnekallu, Pamulapadu, Mandapadu of Pedakuapadu mandal.
17-2-2011	Dr C.Venkata Ramana, Scientist (Hort), attended a diagnostic survey on chilli crop of Kesamudram Mandal regarding heavy incidence of fruit rot in Chilli Hybrid Capci of Vibha Seeds Pvt. and damage due to chilli wilt in Ghanapuram Mandal of Warangal.

HRS, Ambajipeta

S. No	Name of the scientist	Date	Place	Diagnosis
1.	Dr. B. Gautam	29-10-2010	Mukkamala, Vakkalanka and Munganda villages	Problems in crop management of Coconut and Cocoa
2.	Dr. B. Gautam	21-12-2010	Kadiyapulanka	Problems in crop management of Coconut and Cocoa
3.	Dr. B. Gautam	03-01-2011	Annavaram, Tuni	To monitor coconut wilt disease incidence
4.	A.V.D.D. Rao	21.11.2010	Ganti Pedapudi	Problems in crop management of Coconut and Cocoa
5.	A.V.D.D. Rao	12.4.2011	Errakaluva	Problems in crop management in coconut due to insufficient light
6.	A.V.D.D. Rao	23.4.2011	Bandarulanka	Problems due to heat shock in coconut gardens.
7.	Dr. N.B.V. Chalapathi Rao	15-09-2010	Razole, Chintalamori and Antervedipalem	Problems due to Coconut slug caterpillar in coconut gardens
8.	Dr. N.B.V. Chalapathi Rao	16-09-2010	Potailanka, Mukkamala	Explained about package and practices of coconut
9.	Dr. N.B.V. Chalapathi Rao	08-10-2010	Mandapeta	Explained about IPM packages of Coconut Blockheaded Caterpillar.
10.	Dr. N.B.V. Chalapathi Rao	12-10-2010	Chetagunta, Rautala-pudi, S. Agraharam, Lachireddy Palem	Problems due to insect pests of coconut
11.	Dr. N.B.V. Chalapathi Rao	29-01-2011	Allavaram, Vodalarevu	Monitored the incidence of Phalera and Acria Sp.
12.	Dr. N.B.V. Chalapathi Rao	07-02-2011	Chinchinada, Yelamanchili, Ballipadu, Palakollu Lankala Koderu,	Monitored the incidence of Leaf . Eating Caterpillers
13.	Dr. N. Emmanuel	12-10-2010	Annavaram	Observed the incidence of Proutista moesta (Westwood) in coconut gardens
14.	Dr. N. Emmanuel	12-01-2011	Munganda, Bandarulanka and Gangalakurru	Monitored the incidence of Phalera and Acria Sp.
15.	Dr. N. Emmanuel	13-01-2011	Bodasakurru, Vakkalanka and Peruru	Monitored the incidence of Phalera and Acria Sp.
16.	Dr. N. Emmanuel	28-01-2011	Dwarapudi and Mandapeta	Monitored the incidence of Coconut Black Headed Caterpillar
17.	Dr. N. Emmanuel	22-03-2011	Sakhinetipalli, Mori and Gondi	Monitored the incidence of Phalera, Acria Sp.
18.	Dr. A. Snehalatha Rani		Dagguluru, Poolapalli, Vedangi villages of West Godavari District and Sakhinetipalli, Gannavaram, Ambajipeta, Allavaram, Razole, Ainavilli, Rajahmundry, Tuni, Malkipuram (M) of East Godavari Dist	Diseases of economic importance in coconut are Basal stem rot, Stem bleeding and Bud rot where as in Cocoa are pod rot, stem canker and root rot.

Dr. N. Emmanuel examining the incidence of Phelera Damage in Coconut gardens in Sakhinetipalli village of East Godavari District

HRS, Aswaraopet

Sri M.Ravindra Babu. Scientist (H) along with department of Agriculture officials visited the Bhendi fields at Sulanagar village of Takulapally Mandal, Khammam District for assessing the reasons for poor flowering and fruiting on 10.07.2010.

Scientists of HRS, Aswaraopet made several diagnostic visits to the Farmers' Fields and given suggestions to the farmers on various crops like Mango, Cashew, Banana, Oil palm and Vegetables in Khammam Dist

C. TRAINING PROGRAMMES CONDUCTED:

KVK, Venkataramannagudem

Two days State Level Seminar on Cocoa was organized by Krishi Vigyan Kendra, Venkataramannagudem during 7th to 8th March, 2011 sponsored by Directorate of Cashewnut and Cocoa Development Board.

The seminar was sponsored by Directorate of Cashewnut and Cocoa development, Kochi. Farmers from Cocoa growing districts of Andhra Pradesh actively participated The Inaugural Session was preceded by Dr. S. Amarender Reddy, Director of Extension, APHU, Venkataramannagudem and ministry of Agriculture, Government of India was the Chief Guest. Other University Officers, Dr. K. Purushotham, Director of Research, Dr.P.Suryanarayanareddy, Registrar, Dr. K. Hari Babu, Dean of Horticulture, Dr. B. Srinivasulu Comptroller of Examinations Dr.YSR Horticultural University participated.

One day on farm training programme on Mango Pests and Disease Management on 07.02.2011

Organized Rythu Sadassu on Mango (Mamidi thotalalo Sasyarakshna) under the banner of Krishi Vigyan Kendra, Venkataramannagudem, Dr.YSR Horticultural University, at Sri. Bodepudi Venkateswara Rao mango garden on 7th February 2011. The programme was start-

ed at 10.00 A.M and was presided by Dr. S. Amarender Reddy, Director of Extension, Dr.Y.S.R.H.U, Dr. A. Sujatha Principal Scientist and Head, Mango Research Station, Nuzvid has given detailed lecture on management practices, Pest and diseases and their control. Dr. E. Karunasree, Programme Coordinator, Krishi Vigyan Kendra, Venkataramannagudem has interacted with farmers regarding seasonal problems especially flower and fruit drop management in Mango. Farmers from Tadepalligudem, Nallajerla, Unguturu and Chintalapudi mandals of West Godavari District were actively participated.

KVK, Pandirimamidi

District Level Seminar on advances in Cashew production technology Sponsored by ITDA, Organized by KVK- Pandirimamidi on 29-03-2011, ITDA, Rampachodavaram

Krishi Vigyan Kendra, Pandirimamidi Organized District level seminar on" Advances in Cashew production technology" on 29-03-2011 under SHM 2010-11.

Dr.S.Amarender Reddy, Director of Extension, Addressing the farmers

Smt.M.Jyothi, RDO, Rampachodavaram, Addressing the farmers

Tribal farmers T.C. banana field visit

Interaction with T.C. banana cultivating farmer

Exposure visit on Tissue culture Banana cultivation to the tribal farmers of Rampachodavaram agency area.

One day off campus training programme on inter cropping in rubber on 3.3.2011.

On 3rd March, 2011 – Conducted one day off Campus Training Programme on "Inter cropping in Rubber" at Lankapakala village of Rampachodavaram mandal along with Rubber Board and ITDA. Explained about Intercrops like Banana, Pineapple, Vegetables cultivation in Rubber, 105 farmers were attended from Akuru, Yarlamamidi, Lankapakala etc., villages.

On 4th March, 2011 & 10th March, 2011 – Conducted one day Off campus Training Programme on "Summer Management of Newly planted Rubber plantation" at D.V.Kota and Maredumilli villages along with Rubber Board and ITDA.

One day off campus training programmes organized on summer management of newly planted rubber plantation on 4th March, 2011 along with the rubber board

Rubber Stem Application with Lime

Rubber - New Plantation

Conducted one day Off Campus Training Programme on "Summer Vegetable Cultivation" on 11th March, 2011 – at I-Polavaram village. Explained about the vegetable crops varieties to be cultivated in Summer and their management (Bhendi, Tomato, Cluster Bean, Vine Vegetables.

Summer Brinjal Cultivation

Summer Tomato Cultivation

Summer Brinjal Cultivation

Summer Tomato Cultivation

On 16th March, 2011 – Conducted one day On Campus Training Programme on "Cultivation of Tissue Culture Banana" at Grievance Hall, ITDA Rampachodavaram Dr. Bhagavan, Senior Scientist, Dr. Rajasekhar, Scientist, Horticultural Research Station, Kovvur delivered the lectures on varieties suitable and cultivation practices to be followed in Banana. 150 farmers were attended from Rampachodavaram revenue division.

KVK, Ramagirikhilla

Title	Venue	Date	No. of Participants	Resource Persons
Management of Mango during Flowering and bearing stage.	Raghavapur Village, Peddapalli Mandal	08-02-11	20	1) Sri. Y. Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms. D. Rajani, SMS (Horticulture), KVK, Ramagirikhilla. 3) Ms.K. Dhanasree, SMS (Home Science), KVK, Ramagirikhilla
Management practices for Termite control in Orchards	Raghavapur Village, Peddapalli Mandal	08-02-11	20	1) Sri.Y.Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms. D. Rajani, SMS (Horticulture), KVK, Ramagirikhilla. 3) Ms.K.Dhanasree, SMS (Home Science), KVK,Ramagirikhilla

One day off campus training programme on management of mango during flowering bearing stage

COH, Mojerla

Dr. K.Ravinder Reddy, Professor (Horti.) on 12-5-10&13-5-10 given training at RHTI, Mahabubnagar for 55 trainees on" Kharief Vegetable cultivation".

Dr. K.Ravinder Reddy, Professor (Horti.) on 16-7-10&17-7-10 given training at RHTI, Mahabubnagar for 55 trainees on "INM in Vegetable cultivation".

Dr. K.Ravinder Reddy, Professor (Horti.) on 23-9-10&24-9-10 given training at RHTI, Mahabubnagar for 55 trainees on "Rabi Vegetable cultivation".

Dr. K.Ravinder Reddy, Professor (Horti.) on 12-11-10&13-11-10 given training at RHTI, Mahabubnagar for 55 trainees on "use of Hybrids in Rabi Vegetable cultivation".

Dr. K.Ravinder Reddy, Professor (Horti.) on 23-12-10&24-12-10 given training at RHTI, Mahabubnagar for 55 trainees on Fertilizer management in Rabi Vegetable cultivation".

Dr. K.Ravinder Reddy, Professor (Horti.) on 21-1-11&22-1-11 given training at RHTI, Mahabubnagar for 55 trainees on "Summer Vegetable cultivation".

Dr. K.Ravinder Reddy, Professor (Horti.) on 25-3-11&26-3-11 given training at RHTI, Mahabubnagar for 55 trainees on "Management of Drip Irrigation in Summer Vegetable cultivation.

Herbal Garden Scheme, Rajendranagar

One training programme on "Cultivation and Marketing of Aloe" was organized on 20-09-2010 jointly by the A.P. Medicinal and Aromatic Plants Board (APMAB) & Herbal Garden

On 12-10-2010 Herbal Garden Scheme, Rajendranagar and A.P. Medicinal and Aromatic Plants Board (APMAB), Hyderabad, jointly organized training programme on "Value addition of Medicinal Plants" at Sri Aurobindo Institute of Ruaral Development (SAIRD), KVK, Gaddipalli, Nalgonda district.

D. TRAINING PROGRAMMES PARTICIPATED

Horticultural Research Station, Pandirimamidi

Place	Date	Participant & Designation	Particulars
ITDA, R.chodavaram Revenue division	04.02.2011	Sri.M.Satti Raju Scientist (Hort.)	Participated in District level Training on Cashew production technology by NGO's
ITDA, R.chodavaram Revenue division	29.03.2011	Dr.K.Rajendra Prasad, Scientist (Hort.) & P.C. Vengaiah (Food Sci. & Tech)	Participated in District level Training on Cashew production technology by department of horticulture

HRS, Mallepally

Sri K.Kaladhar Babu, Scientist (Hort.) & Head participated in training programme on sweet orange at Konda Mallepally on 29.7.2010.

Sri K.Kaladhar Babu, Scientist (Hort.) & Head participated in training programme on sweet orange at HTI Mahaboobnagar on 13.12.2010.

Dr.T.Suresh Kumar, Scientist (Hort.) participated in training programme on mango at HTI Mahaboobnagar on 10.12.2010.

Dr.T.Suresh Kumar, Scientist (Hort.) participated in training programme on mango at HTI Mahaboobnagar on 11.01.2011.

MRS, Nuzvid

Dr. N. B.V.Chalapathi Rao, Senior Scientist (Ent) & Head and Smt. D. Aparna, Scientist (Hort), MRS Nuzvid participated in training programme on "Mamidilo kommakathirimpu" at Maddalacheruvu village, Vissannapet mandal organized by KVK, Garikapadu on 24-6-2010.

Smt. D.Aparna, Scientist (Hort), MRS, Nuzvid participated in T & V meeting organized by SRS, Vuyyuru & Dept of Agriculture at A.O Association hall, Vijayawada on 26.06.2010.

Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid attended farmers meeting at Nadavaluru, Chittoor Dt on 15-11-10.

Smt. D.Aparna, Scientist (Hort) MRS, Nuzvid participated in training programme on "Organic Farming - Importance in Agriculture" organized by Dept of Agriculture at Mylavaram on 18-11-2010.

Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid participated in T & V meeting in Vuyyuru, interacted with departmental officials and scientists on mango package to be adopted during November - December months on 20-11-2010.

Smt. D.Aparna, Scientist (Hort), MRS, Nuzvid participated in T & V meeting at ADH Camp office, Vijayawada and interacted with departmental officials and scientists on mango package to be adopted during January - February months on 22.01.2011.

Smt. D.Aparna, Scientist (Hort) MRS, Nuzvid participated in training programme on mango organized by Dept of Agriculture at Buruggudem, Reddygudem mandal on 24.01.2011.

Dr. A. Sujatha, Principal Scientist (Ent) & Head and Smt. D.Aparna, Scientist (Hort) MRS, Nuzvid participated in training programme on pests and disease management in mango organized by KVK, Garikapadu at Nuzvid on 27.01.2011.

Smt. D.Aparna, Scientist (Hort) MRS, Nuzvid participated in training programme on "Management practices to be followed in Paddy, Maize and Mango" organized by Dept of Agriculture at Mylavaram on 27.01.2011.

Dr. A. Sujatha, Principal Scientist (Ent) & Head and Smt. D.Aparna, Scientist (Hort) MRS, Nuzvid participated in training programme on "Good Agricultural Practices (GAP) in mango for export" organized by APEDA and Dept of Horticulture at Vissannapeta on 3-2-2011.

Cashew Research Station, Bapatla

Senior Scientist (Hort) & Head has participated in one day State level training programme on Cashew Production Technology at KVK Kalavacherla on 20-01-2010

Scientists of Cashew Research Station Bapatla Have attended Two days Orientation Training Programme at DCR Puttur on 05.10.11 and 06.10.11

SSPH Horticultural Polytechnic, Madakasira

Sri. R.Preetham Goud, Assistant Professor (Agronomy) participated in the Training Programme conducted on "Mushroom Cultivation" held from 17th to 21st January 2011 held at Indian Institute of Horticultural Research, Bangalore.

AICRP on Floriculture, ARI, Rajednranagar

Dr. A.S.Padmavathamma, Principal Scientist (Hort) & Head participated in Polyhouse farmers association meeting on 06.07.10 at Keesara mandal.

Dr. A. Girwani, Senior Scientist (Hort.) and Head attended the training class as resource person on "Package of practices for cultivation of Flower crops" at Horticulture Training Institute, Mahaboobnagar.

Smt. P. Lalitha Kameshwari, Scientist (Hort) imparted training on Commercial floriculture for the Horticultural officers of Orissa state at MANAGE, Hyderabad on 10-02-2011.

Dr.A.Girwani, Senior Scientist (Hort) attended the polyhouse growers association meeting on 16.2.2011 held at Manneguda village in chevella mandal. Interacted with the farmers and answered the queries on Gerbera cultivation.

AICRP on MAP & Betelvine, Venkataramannagudem

B. Tanuja Priya, Scientist (Hort.) participated in 21 days Training Programme on Newer Technologies in processing of foods at CAFT, college of Home Science, ANGRAU, Rajendranagar, Hyderabad from 19th November to 9th December

Horticultural Research Station, Lam

Date	Topic
16.7.2010.	Dr. P.Venkata Reddy, Principal Scientist (Hort) participated and delivered lecture on "advances in chilli production technology" in the training programme to the field extension staff of Zuari Industries Ltd. at RARS, Lam, Guntur
27-10-10	Dr.P.Venkata Reddy, Principal Scientist (Hort) Attended training programme on chillies to the Adarsha Rythu of Macherla and Piduguralla mandals.
15-11-10	Dr.P.Venkata Reddy, Principal Scientist (Hort) Attended as resource person for training programme entitled "Scaling up of water productivity in Agriculture for livelihood through teaching-cum-demonstration 3rd to 16th November 2010 (Water management in chillies)
26-1-2011	Dr C.Venkata Ramana, Scientist (Hort), delivered a lecture on chilli production technology at HRS, Lam to the farmers of Vinukonda mandal
29-1-2011	Dr C.Venkata Ramana, Scientist (Hort), delivered a lecture on chilli production technology at HRS, Lam to the farmers of Guntur rural mandal
5-2-2011	Smt. P.Vijaya lakshmi, Scientist (Ento) delivered a lecture on chilli production technology at HRS, Lam to the farmers of Rangareddy district
4-3-2011	Dr.P.Venkata Reddy, Principal Scientist (Hort) attended verification of R&D facilities of M/S Sun seeds India Pvt Ltd. at Pedaparimi, Tullur mandal and M/S NRI Agritech Pvt Ltd, Nidumukkala, Tadikonda mandal
5-3-2011	Dr.P.Venkata Reddy, Principal Scientist (Hort) attended verification of R&D facilities of M/S Sun seeds India Pvt ltd at Balijepalli, Rajupalem mandal and M/S Indo Global Agri genetics at Ankireddypalem, Guntur rural mandal
5-3-2011	Dr C.Venkata Ramana, Scientist (Hort), attended as a resource person for the training programme on Production technology of Curry leaf at Pedavadlapudi of Mangalagiri mandal organized by Dept. of Horticulture, Guntur
5-3-2011	Dr S.Surya Kumari, Senior Scientist (Hort), attended as a resource person for the training programme on master training on quality production of chillies for Agriculture and Horticulture officers organized by Spices Board at Ongole
6-3-2011	Dr.P.Venkata Reddy, Principal Scientist (Hort) attended verification of R&D facilities of M/S GV seeds, Nuzvidu, at Nyayampalli, Pedavegi mandal, West Godavari dt.
7-3-2011	Dr S.Surya Kumari, Senior Scientist (Hort) & Dr C.Venkata Ramana, Scientist (Hort), attended as resource persons on Chilli production technology organized by BLAGON at Guntur.
9-3-2011	Dr C.Venkata Ramana, Scientist (Hort), delivered a lecture on chilli production technology at HRS, Lam to the farmers of Nanded district of Maharashtra state

HRS, Ambajipeta

I. Dr. N. Emmanuel, Scientist (Entomology), attended training programme on "SAS TRAINING FOR TRAINERS" held at NAARM, Hyderabad from 28-06-2010 to 02-08-2010

II. HRS, Ambajipeta has conducted " One day Training Programme on Cocoa " on 4th November, 2010. 150 progressive farmers of Konaseema area have participated in the programme.

III. Dr. N.B.V. Chalapathi Rao underwent training programme on " Bio control of Papaya Mealy Bug" at NBAII, Bangalore from 26-09-10 to 01-10-10.

HRS, Aswaraopet

Name & Designation	Date	Place	Particulars
Sri D.Lakshmi Narayana, Scientist (H) &Head	11.11.2010	Malkavaram, Dibbagudem and Rachuripalli villages of Dhammapet Mandal, Khammam district	Delivered a lecture on Mango and Cashew rejuvenation
Sri M.Ravindra Babu, Scientist (H)	27.11.2010	Annarigudem villages of Tallada Mandal Khammam district along with Department of Horticulture Officer Tallada.	Delivered a lecture on Production technologies in different vegetables.
Sri M.Ravindra Babu. Scientist (H)	28.11.2010	Gangadevi padu Village of Penuballi mandal. Khammam district along with Department of Horticulture Officer. Sathupally.	Delivered a lecture on Improved managements practice in Mango.
Sri. D.Lakshminarayana Scientist(H) & Head,	12-02-2011	Kommugudem and Mogaralaguppa villages of Mulakalapally Mandal of Khammam District.	Delivered a lecture on Cashew rejuvenation.
Sri. D.Lakshminarayana Scientist(H) & Head	14-02-2011	Mangapeta village of Mulakalapally Mandal of Khammam District.	Delivered a lecture on Cashew rejuvenation.
Sri. D.Lakshminarayana Scientist(H) & Head	04-03-2011	Ramachandrapuram village of Mulakalapally Mandal of Khammam District.	Delivered a lecture on Mango rejuvenation.
Sri. D.Lakshminarayana Scientist(H) & Head	04-03-2011	Pandurangapuram village of Paloncha Mandal of Khammam District.	Delivered a lecture on Mango rejuvenation.

E. METHOD DEMONSTRATIONS

Krishi Vigyan Kendra, Venkataramannagudem conducted two method demonstrations on mango and coconut.

Method demonstration on fungicide application in mango for control of root rot

Conduction one on farm demonstration in shrimp farms


Method demonstration on root feeding in coconut for the control of red palm weevil on 22.2.2011


Method demonstration on fixation of aerators on 20.2.2011.

On 20.2.2011, Krishi Vigyan Kendra, Venkataramannagudem visited shrimp farms of Sri.M.Rambabu located nearby Tadepalligudem. There we demonstrated on fixation of aerators in L.vannamei prawn culture. The number of aerators depend on density of shrimps per acre It may vary with 4-5 number per acre. The placement of aerators is atleast 2mts from the edge of the bundh and aerators were fixed clockwise then the water waves rotate clockwise and dust and other trash material comes to the centre point of the pond and other parts of the pond remains clean. This type of fixation of aerators will be useful not only to overcome oxygen demand but also maintains clean pond bottom leads to healthy shrimp culture.

Krishi Vigyan Kendra, Pandirimamidi conducted on farm demonstrations on Banana and Cashew on 17.2.2011.

On farm Demonstration on "seed treatment in Banana"


Banana suckers treated with Monocrotophos & Plantation

On 10th February, 2011 & 24th February, 2011 – Conducted method demonstration on "Preparation and application of spray fluid" Mosquito bug in Cashew.


Bandapalli – Control of Mosquito bug – Application


I – Polavaram - Control of Mosquito bug – Application of Endosalphon

Krishi Vigyan Kendra, Ramagirikhilla organized two method demonstrations on mango

Title	Venue	Date	No. of Partici-pants	Resource Persons
Spraying of Calcium Nitrate@10g/lt + sugar 30g/lt for Flower initiation &Uniform flowering in Mango.	Raghavapur Village, Peddapalli Mandal	07-02-11	20	1) Sri.Y.Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms.D.Rajani, SMS (Horti-culture), KVK, Ramagirikhilla. 3) Ms.K.Dhanasree, SMS(Home Science), KVK, Ramagirikhilla

Horticultural Research Station, Pandirimamidi organized method demonstration on grafting technique in mango and cashew on 16.11.2010.

Place	Date	Participant & Designation	Particulars
HRS, Pandirimamidi	16.11.2010	Sri M.Satti Raju, Scientist (Hort) & Dr.K.Rajendra Prasad, Scientist (Hort)	Method demonstration on Grafting technique in mango and Cashew" to the farmers of KVK, Kalavacharla.

Cashew Research Station, Bapatla

A centrally sponsored scheme on Front line technology demonstration on cashew is being under implementation in four districts i.e. Prakasam, Krishna, West Godavari and East Godavari Districts

Participated in the Joint field inspection of FLTD plots by the Senior Scientist& Official from DCCD-Cochin on 10th and 11th March 2010 in Prakasam and East Godavari Districts

HRS, Ambajipeta

S.No	Technique	Date	Village
1.	Root Feeding with Monocrotophos	10-10-2010	Vakkalanka
2.	Root feeding with Calixin	15-10-2010	Mukkamala
3.	Selection of Seedlings for better establishment	24-10-2010	Munganda
4.	Basin management in Coconut	03-11-2010	Vakkalanka

F. GROUP DISCUSSIONS

Krishi Vigyan Kendra, Venkataramannagudem

Scientist of KVK, Venkataramannagudem along with line department officials had five group discussions with the farmers.

Participated in district level cocoa workshop conducted by KVK, Pandirimamidi, ITDA on 29.3.2011.

KVK, Pandirimamidi

Date	Village	Topic
03-02-2011	Sitharam	Pests & Disease of Paddy
24-02-2011	I-Polavaram	Fodder Production
15-03-2011	Bandapalli	Kitchen Gardening
22-03-2011	Chinna Giddada	Organic Farming




Krishi Vigyan Kendra, Ramagirikhilla

Date	Title of Programme	Place Conducted	Topic of the lecture	Name of the Scientist
3-3-2011	Participatory rural Appraisal (PRA)	Kurmapalli Hamlet, Kalwacherla Village, Karimnagar Dist.	Timeline exercise to record developmental activities.	1) Sri.Y.Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms.D.Rajani, SMS (Horticulture), KVK, Ramagirikhilla. 3) Ms.K.Dhanasree, SMS (Home Science), KVK, Ramagirikhilla 4) Dr.A.Lalitha, SMS (Agri.Ext), KVK Ramagirikhilla.

Horticultural Research Station, Anantharajupet

Date	Title of Programme	Place Conducted	Topic of the lecture	Name of the Scientist
16-7-2009	Polam badi	Ontimitta, Dept. of Agril. Kadapa Dist	Management of Insects and diseases in citrus crop	Dr.D.Srinivasa Reddy Scientist (E)

G. MASS COMMUNICATION

(Press notes, TV coverage, Radio scripts etc.)

a. Radio Programmes

Date	Topic	Name of the Scientist
5.7.2010	Mamidilo kotha anantharam purugula nivaranaku thisukovalasina charyalu	Dr. N.B.V. Chalapathi Rao, Senior Scientist (Ent), HRS, Kovvur
6.7.10	Aratirakalu Vati Saagulo Melakuvalu-Teesukovalasina Jaagrathalu	Dr.B.V.K.Bhagavan, Senior Scientist (Hort) HRS, Kovvur
22.7.10	Pasupu rakaalu- Saagulo melakuvalu	Smt.K.Mamatha, Scientist (Hort), HRS, Kovvur
4.9.10	Tissue cultire Arati saagulo melakuvalu	Dr.M.M.Naidu, Scientist (Hort), HRS, Kovvur
5.10.10	Arati lo dumpa kullu mariyu panama tegulla yajamanyam	Dr.T.Rajasekharam, Scientist (pl. path), HRS, Kovvur
9.12.10	Pucha saagulo melakuvalu	Smt.E Padma, Scientist (Hort), HRS, Kovvur
20.12.10	Pasupu allam pantalalo panta kotha anantharam chepatta valasena charyalu	Dr.M.M.Naidu, HRS, Kovvur
10.1.11	Vesavi Bhenda sagu-melakuvalu	Smt.R.Nagalakshmi, Scientist (Hort) HRS, Kovvur
19.2.11	Arati mariyu antarapantala saagulo teesukovalasina jagrattalu	Dr.B.V.K.Bhagavan Senior Scientist (Hort) HRS, Kovvur
5-8-10	High yielding techniques in Pomegranate	Dr. M. Rama Krishna, Principal, SSPGHP, Madakasira
16-12-10	Koora Mirapa Sagu	Dr. M. Rama Krishna, Principal, SSPGHP, Madakasira
1-3-11	Flower and Fruit Dropping Control Techniques in Mango	Dr. M. Rama Krishna, Principal, SSPGHP, Madakasira
14-7-10	Rainy Season Vegetable Cultivative Techniques	Mr.R. Preetham Goud, Assistant Professor, SSPGHP, Madakasira
16-10-10	Package of Practices in French Beans	Mr.R. Preetham Goud, Assistant Professor, SSPGHP, Madakasira
12-1-11	Important techniques to be followed in Mango before flowering stage	Mr.R. Preetham Goud, Assistant Professor, SSPGHP, Madakasira
28-3-11	Package of Practices in Jasmine	Mr.R. Preetham Goud, Assistant Professor, SSPGHP, Madakasira
21.8.10	Betelvine diseases and their management	P. Rama Devi Scientist (PP) & Head, AICRP on MAP & Betelvine, Venkataramannagudem
17.11.10	Tamalapaku tegullu-Yajamanyam	P. Rama Devi Scientist (PP) & Head, AICRP on MAP & Betelvine, Venkataramannagudem
8.1.2011	Tamalapaku tegullu-Yajamanyam	P. Rama Devi Scientist (PP) & Head, AICRP on MAP & Betelvine, Venkataramannagudem
31.10.10	Tamalapaku thotalo purugulu vati yajamanya paddathalu	P. Sunitha Scientist (Ento.), AICRP on MAP & Betelvine, Venkataramannagudem
15.12.10	Seethakalamlo Tamalapaku sagu	B. Tanuja Priya Scientist (Hort.), AICRP on MAP & Betelvine, Venkataramannagudem
13.7.10	Mirapa rakalu – Naarumalla yajamanyam - Interview	Dr.C.Venkata Ramana, Scientist(Hort), HRS, Lam
21.7.10	Mirapalo adhika digubadiki pantamarpidi – patchirotta avasyakata - Interview	Dr. P.Venkata Reddy, Principal Scientist(Hort)

Date	Topic	Name of the Scientist
5.8.2010	Benda saagu- melaina yajamanya paddathulu - Interview	Dr.S.Surya Kumari, Senior Scientist(Hort)
11-10-10	Dhaniyalu, Vamu saagu	Sri K.Giridhar, Scientist (Hort)
11-11-10	Mirapalo Natam Kaliginche Purugulu-Yajamanyam	Smt.P.Vijaya Lakshmi, Scientist (Ento)
3-12-10	Mirapalo tegulla yajamanyam	Smt.T.Vijaya Lakshmi, Scientist (Pathology)
9-2-11	Mirapalo thalukayala nivaranalo chepattavalasina yajamanyam	Dr.P.Venkata Reddy, Principal Scientist (Hort)
4-8-10	RythNestham Programme on topic Mirapa Sagu yajamanyam	Dr.S.Surya Kumari, Senior Scientist (Hort)
5-11-10	Dhaniyala Saagu (Saptagiri)	Sri K.Giridhar, Scientist (Hort)
18-11-10	Eenadu – Rythulatho Mukhamukhi (Phone-in-live, District Edition)	Dr.P.Venkata Reddy, Principal Scientist (Hort) Dr.S.Surya Kumari, Senior Scientist (Hort)
2-12-10	Eenadu – Rythulatho mukhamukhi (Phone-in-live , District Edition)	Dr.S.Surya Kumari, Senior Scientist (Hort) Dr.C.Venkata Ramana, Scientist (Hort)
22.4.10	Oushadha Sugandha Mokkala Sagu	Dr.G.Sathya yana Reddy, Senior Scientist & Head, Herbal Garden Scheme
8.7.10	Pandla thotallo Antharapantaluga Oushadha pantalu	Dr G. Satyanarayana Reddy, Senior Scientist
11.8.10	Kalabanda Oushadha gunalu mariyu saagu paddatulu	Dr. T. Susila, Scientist (SG) (Hort.)

b. Television Programmes:

Date	Topic	Name of the Scientist	Recorded by
4.1.2010	Research Station activities and Nursery programme	K.Kaladhar Babu, Scientist (Hort.) & Head HRS, Mallepally	HMTV
27.7.2010	Pruning techniques to be followed along with fertilizer schedule for mango and guava	Smt D. Aparna , Scientist (Hort), MRS, Nuzvid	Doordarshan
2.2.2011	Mango pest management	Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid	Doordarshan, Sakshi & ETV
14.3.2011	Summer vegetable cultivation	Dr.K.Ravinder Reddy, Professor (Hort.), COH, Mojerla	Raj News
15.3.2011	management practices to be followed during fruit growth and development of mango	Smt. D. Aparna Scientist (Hort.) MRS , Nuzvid	Doordarshan
1.4.2010	Vesavi kaalam lo Arati pantalo Teesukonavalasena Jaagrathalu	Dr.M.M.Naidu, Scientist (Hort), HRS, Kovvur	Doordarshan
16.7.2010	Aratilo Sandra Vyavasaya Padaathulu	Dr.B.V.K.Bhagavan, Sr. Scientist (Hort) HRS, Kovvur	Doordarshan
20.9.2010	Arati lo virus tegulla samagra yaajamanya paddatulu	Dr.T.Rajasekharam, Scientist (Hort) HRS, Kovvur	Doordarshan
6.10.2010	Dumpa Kullu – Yaajamanyam	Dr.T.Rajasekharam, Scientist (pl.path) HRS, Kovvur	Doordarshan
22.10.2010	Dumpa kullu mariyu panama tegulla samagra yaajamanya paddatulu	Dr.T.Rajasekharam, Scientist (pl.path) HRS, Kovvur	Doordarshan
1.12.2010	Arati lo pilaka naate padhati	Dr.M.M.Naidu	Doordarshan
18.1.2011	Arati lo Neeti Yaajamanyam	Smt.K.Mamatha, Scientist (Hort) HRS, Kovvur	Doordarshan
18.2.2011	Dumpa kullu mariyu panama tegulla samagra yaajamanya paddatulu	Dr.T.Rajasekharam, Scientist (pl.path) HRS, Kovvur	Doordarshan

Date	Topic	Name of the Scientist	Recorded by
22.3.2011	Vesavi arati lo paatinchavalasina Yaajamanya paddathulu	Smt.E Padma, Scientist (Hort) HRS, Kovvur	Doordarshan
2.04.2010	Cultivation of annual flower crops and answered the queries of farmers.	Dr. A.S.Padmavathamma, Principal Scientist (Hort)	Sapthagiri TV
8.04.2010	Cultivation of annual flower crop for rainy season	Smt. P. Lalitha Kameswari, Scientist (Hort.)	Saptagiri T.V.
24.6.2010	Cultivation of flower crops in poly houses	Smt. P.Lalitha Kameswari, Scientist (Hort.)	Sapthagiri TV
16.12.2010	Chamanthi lo kotha mariyu market lo melakuvalu	Smt. P.Lalitha Kameswari, Scientist (Hort.)	Sapthagiri TV
21.12.2010	Banthi sagu lo melakuvalu	Dr. A.Girwani, Sr.Scientist(H)	Sapthagiri TV
21.12.2010	Kanakambaram pulasagu	Smt. P.Lalitha Kameswari Scientist (Hort.)	Sapthagiri TV
21.1.2011	Malle sagu lo melakuvalu	Dr. A.Girwani, Senior Scientist(H)	Doordarshan
24.1.2011	Malle lo yeruvula vajamanyam	Dr. A.Girwani, Senior Scientist(H)	Saptagiri TV
11.03.2011	Tamalapaku sagulo melakuvalu	P. Rama Devi Scientist (PP) & Head, AICRP on MAP & Betelvine, Venkataramannagudem	Doordarshan
3.7.2010	Benda yerula yajamanyam	Dr.S.Surya Kumari, Senior Scientist(Hort)	(ETV Annadata)
3.7.2010	Mirapalo naarumalla yajamanyam	Dr. P.Venkata Reddy, Principal Scientist(Hort)	ETV Annadata
7.7.2010	Mirapalo naarumalla yajamanyam	Dr. P.Venkata Reddy, Principal Scientist(Hort)	Saptagiri
7.7.2010	Mirapa salu thotala yajamyam	Dr.S.Surya Kumari, Sr Scientist(Hort)	Saptagiri
2.6.2010	Mirapa rakalu	Dr.S.Surya Kumari, Sr. Scientist(Hort)	ETV Annadata
4.8.2010	Mirapa sagu yajamanyam (Phone in live)	Dr.S.Surya Kumari, Sr. Scientist(Hort)	ETV
10.8.2010	Banthi yajamanyam	Dr.S.Surya Kumari, Sr. Scientist(Hort)	ETV
10.8.2010	Pasupulo yeruvula yajamanyam	Sri. K.Giridhar, Scientist(Hort)	
11.8.2010	Pasupulo poshaka lopalu	Sri. K.Giridhar, Scientist(Hort)	
11.8.2010	Mirapa salu thotala yajamyam	Dr.S.Surya Kumari, Sr. Scientist(Hort)	
11.8.2010	Mirapa naarumallalo tegulla yajamanyam	Smt. T.Vijaya Lakshmi, Scientist (Path)	
30.8.2010	Vaamu saagu, Dhaniyala saagu	Sri. K.Giridhar, Scientist(Hort)	
30.8.2010	Miraaplo prasthuta vatavaranamlo tisukovalasina jagrattalu	Dr.S.Surya Kumari, Sr. Scientist(Hort)	
30.8.2010	Miraaplo naatla samayamlo tisukovalasina jagrattalu	Dr.S.Surya Kumari, Sr Scientist(Hort)	
30.8.2010	Mirapalo yeruvula yajamanyam	Dr.S.Surya Kumari, Sr Scientist(Hort)	
31.8.2010	Mirapa kothala ananthara parignanam	Dr.P.Venkata Reddy, Pr.Scientist(Hort)	
31.8.2010	Mirapa tegullu – yajamanyam		
31.8.2010	Mirapa rakalu	Dr.C.Venkata Ramana, Scientist(Hort)	
31.8.2010	Mirapa naarumalla yajamanyam	Dr.C.Venkata Ramana, Scientist(Hort)	
31.8.2010	Mirapa purugulu - yajamanyam	Smt. P.Vijaya Lakshmi, Scientist (Ento)	
4-10-10	Mirapalo prasthutaparishitulalo Theesuko valasina jagarthalu	Dr.C.Venkata Ramana, Scientist (Hort)	
21-10-10	Mirapalo yeruvulayajamanyam	Dr.S.Surya Kumari, Sr. Scientist (Hort)	
21-10-10	Pasupulo yeruvula yajamanyam	Sri K.Giridhar, Scientist (Hort)	
21-10-10	Mirapalo choanephora Endutegulu – Nivarana	Smt.T.Vijaya Lakshmi, Scientist (Path.)	
22-11-10	Mirapalo melaina yajamanaya padhatulu	Dr.C.Venkata Ramana, Scientist (Hort)	
25.4.2010	Vesavilo kotha mamidi thotalalo yajamanyam	M.Ravindra Babu, Scientist (H)	ETV
7.6.2010	Mamadi kotha taruvatha thotalalo yajamanyam	M.Ravindra Babu, Scientist (H)	ETV
19.6.2010	Jeedi Mamadilo eruvula yajamanyam	M.Ravindra Babu, Scientist (H)	ETV
17.3.2011	Vesavilo kottha mamidi thotalallo theesukovalasina jagrathalu	M.Ravindra Babu, Scientist (H)	ETV

SSPGHP, Madakasira

Guest Lecture:

Lecture on "Anti Plastics" was delivered by Sri. R.Preetham Goud, Assistant Professor (Agronomy) & NSS Programme Officer on 24th February 2011 at SSPG Horticulture Polytechnic, Madakasira.

A Lecture on Anti Plastics was delivered on 26th February 2011 at Agricultural Polytechnic, Madakasira by Sri. R.Preetham Goud, Assistant Professor (Agronomy) & NSS Programme Officer.

c. Press Notes

KVK, Venkataramannagudem

Name of the article	Authors	Name of the Magazine
Management practices in mango	E.Karunasree	Sakshi, 1.12.2010
Chepala pempakamlo neeti gunala pramukhyatha	Sri.N.Veerabhadra rao	Chepala sandadi, January-2011
Pest and Disease management in mango	E.Karunasree	Eenadu, Sakshi, 8.2.2011
Advances in Cocoa cultivation Vaartha, 8th-9th March, 2011	E.Karunasree	Eenadu, Sakshi, Andhrajyothi,

HRS, Mallepally

Name of the article	Authors	Name of the Magazine
Bathiyilo susthiramayana adhikadigubadiki melaina yajamanya paddatulu	K.Kaladhar Babu	Annadata, August-2010
Cheedapeedalaku ika check	K.Kaladhar Babu	Sakshi 29.4.2010
Sendriya yeruvulatho Bathayi sagu	K.Kaladhar Babu	Sakshi 8.4.2010
Mamidilo Bank Nivarana	Dr.T.Suresh Kumar	Eenadu 2.5.2010
Bathayilo mangunalli-Nivarayana	K.Kaladhar Babu	Andhra Jyothi 9.8.2010
Karonda sagu	K.Kaladhar Babu	Sakshi 15.8.2010
Bettaku sahaja paddatule melu	K.Kaladhar Babu	Sakshi 8.1.2011
Bathayilo sahaja paddatule melu	K.Kaladhar Babu	Sakshi 5.3.2011

HRS, Aswaraopet

Name & Designation	Date	Aspect	Type of paper
Sri. D. Lakshmi narayana. Scientist (H) & Head	13.07.2010	Tolakarilo Mamidi Yajamanya Paddatulu	Eendau district edition
Sri. M.Ravindra Babu, Scientist (H)	12.08.2010	Kuragayala Endu Thegulu Nivarana	Sakshi district edition
Sri. M.Ravindra Babu, Scientist (H)	14.01.2011	Mamidilo kayatholuchu purugu - Nivarana	Eendau district edition

H. RYTHU SADASSUS

Krishi Vigyan Kendra, Venkataramannagudem

Krishi Vigyan Kendra, Venkataramannagudem organized Rythu Sadassu on Mango on 30th November, 2010.

SKPP Horticultural Polytechnic

Sri P.V.Subbaiah, Technical Officer (SS & AC), participated on Banana Nutrition Management at Sherlanka village on 26.11.2010 along with ATMA team.

Horticultural Research Station, Mallepally

Name of the scientist participated	Date	Venue
K.Kaladhar Babu, Scientist (Hort.) & Head	7.6.2010	Nalgonda
K.Kaladhar Babu, Scientist (Hort.) & Head	10.6.2010	Bhungiri
B.Ramesh Babu, Scientist (Hort.)	8.6.2010	Miryalguda
B.Ramesh Babu, Scientist (Hort.)	9.6.2011	Suryapet

Mango Research Station, Nuzvid

Scientists of MRS, Nuzvid participated as resource persons in sixteen rythusadassus on various aspects of mango organized by the Department of Horticulture in Krishna District.

Dr. N.B.V.Chalapathi Rao, Senior Scientist (Ent) & Head MRS, Nuzvid participated as resource person at divisional Rytu sadassu conducted on 7-7-10 at Pedana, 8-7-10 at Vijayawada, 10-7-10 at Pamarru and 11-7-10 at Tiruvuru divisions in Krishna district.

Smt D. Aparna, Scientist (Hort) MRS, Nuzvid participated in divisional Rythu sadassu conducted on 11-7-10 at Tiruvuru division in Krishna district.

Dr. N.B.V.Chalapathi Rao, Senior Scientist (Ent) & Head MRS, Nuzvid participated as resource person at Rytu sadassu conducted on 12-7-10 at Swaraj Maidan, Vijayawada organized by Krishna Industrial and Agriculture Exhibition Society.

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated as resource person and delivered a lecture on "Pruning techniques and fertilizer management in mango'" in Rythu sadassu conducted by department of Horticulture at Katrenepadu, Nuzvid mandal on 24-7-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated as resource person and delivered a lecture on "Role of pruning and dead wood removal in controlling pests and diseases in mango" in Rythu sadassu conducted by department of Horticulture at Kalaturu, Agiripalli mandal on 26-7-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated as resource person on "Fertilizer and water management in mango" conducted by department of Horticulture at Kothaedara, Agriripalli mandal on 26-7-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated as resource person on "Pruning and fertilizer management in mango and guava" conducted by department of Horticulture at Borwancha, Digavalli, Nuzvid mandal on 27-7-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated as resource person and delivered a lecture on "Role of pruning and management practices in pest and disease incidence in mango" in Rythusadassu conducted by department of Horticulture at Mettlapalli, Gannavaram mandal on 28-7-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated as resource person and delivered a lecture on "Pruning and fertilizer management in mango" in Rythusadassu conducted by department of Horticulture at Kommuru, Gannavaram mandal on 29-7-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated as resource person and delivered a lecture on "Pruning and fertilizer management in mango" in Rythusadassu conducted by department of Horticulture at Buruggudem, Chaatrai mandal on 5-8-10

Dr N.B.V.Chalapathi Rao, Senior Scientist (Ento) & Head, MRS, Nuzvid participated in DLCC meeting for Rabi 2010 - 11 at Dr K.L Rao KVK Garikapadu organised by ANGRAU, DATTC Krishna Dt. on 6-8-10

Dr. N.B.V.Chalapathi Rao, Senior Scientist (Ento) & Head and Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated in Mamidilo kommakathirimpulu, Tegullu mariyu purugula yagamanyam pi avagahana sadassu conducted by department of Horticulture at Nuzvid mandal on 11-8-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated as resource person and delivered a lecture on "Management practices to be followed during mango pruning under high density planting in mango" in Rythusadassu conducted by department of Horticulture at Shobanapuram, Agiripalli mandal on 12-8-10

Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid participated in Rythusadassu at Arugolanupeta, Chatrai mandal on 30-11-10 Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid participated in rythusadassu at Rangapuram, Reddygudem mandal on 4-12-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated in DLCC meeting for Rabi 2011 - 12 at Vuyyuru organized by ANGRAU, DATTC Krishna Dt. on 19-2-11

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated in rythu sadassu at Buruggudem (Reddygudem mandal) organized by Dept of Agriculture on 24-1-11.

Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid participated in rythu sadassu at Venkataramannagudem organized by KVK on 7-2-11.

Cashew Research Station, Bapatla

Scientists from Cashew Research Station-Bapatla have participated in the Rythu Sadassu organized in the Agricultural College campus-Bapatla on 08-06-2010.

ARI, Rajendranagar

Dr. A.S.Padmavathamma, Principal Scientist (Hort) & Head participated in Rythu sadassu on 7.06.2010 at Maheswaram mandal.

AICRP on MAP & Betelvine, Venkataramannagudem

P.Ramadevi, Scientist (PP) & Head and B.Tanuja Priya, Scientist (Hort.) participated in Rythu sadassu organized in view of visit of Hon'ble Chief minister visit to Agricultural college, Bapatla and displayed exhibits on 8.6.10

Horticultural Research Station, Lam

Date	Scientist attended	Place
20.3.2010	Dr. P.Venkata Reddy, Principal Scientist(Hort), Dr.S.Surya Kumari, Senior Scientist(Hort) Dr.C.Venkata Ramana, Scientist(Hort	M/S Srivin Agrofarmers at Reddigudem
12.6.2010	Dr.S.Surya Kumari, Senior Scientist (Hort)	Vijayawada Krishna exhibition Grounds
21.7.2010	Dr.S.Surya Kumari, Senior Scientist (Hort)	ATMA, Sattenepalli
18.8.2010	Dr. P.Venkata Reddy, Principal Scientist (Hort) Dr.S.Surya Kumari, Senior Scientist (Hort)	M/S Paradeep Phosphate Ltd, Guntur, Dharanikota
27.8.2010	Dr. P.Venkata Reddy, Principal Scientist (Hort)	NSP, Hyderabad, Vegendla
30.8.2010	Dr. P.Venkata Reddy, Principal Scientist (Hort)	Salapadu, Chebrolu
13-10-10	Dr.P.Venkata Reddy, Principal Scientist (Hort)	Markapur
28-10-10	Dr.S.Surya Kumari, Senior Scientist (Hort)	Market yard Sattenepalli
3-11-10	Dr.S.Surya Kumari, Senior Scientist (Hort)	Tadikonda and Dharanikota
24-1-11	Dr C.Venkata Ramana, Scientist (Hort)	Marutur mandal, Ongole
5-2-2011	Dr.P.Venkata Reddy, Principal Scientist (Hort)	KVK, Jaggaiahpet

HRS, Ambajipeta

1. Dr. B. Gautam, Principal Scientist & Head, HRS, Ambajipeta, Dr. N.B.V. Chalapathi Rao, Senior Scientist (Entomology) and Dr. N. Emmanuel, Scientist (Entomology) participated in the farmers meet on World Coconut day on 02-09-2010 held at Bheemavaram.
2. Dr. B. Gautham, Principal Scientist & Head, HRS, Ambajipeta, Dr. N.B.V. Chalapathi Rao, Senior Scientist (Entomology) and Dr. N. Emmanuel, Scientist (Entomology), Dr.Ch. Snehalatha Rani, Scientist (Pathology) and Dr. Dorajee Rao, Scientist (Horticulture) participated in the 8th anniversary of Bharatiya Kisan Sangh on 16-09-2010 held at Potailanka and Mukkamala of Ambajipeta Mandal, East Godavari District
3. Dr. N. Emmanuel and Dr. NBV Chalapathi Rao participated in the farmers meet at Lankala Koderu (Palakollu Mandal) and advised the farmers towards vigillence of damage potential of Phelera in the region, and its management.

Horticultural Research Station, Aswaraopet

Sri M.Ravindra Babu, Scientist (H)	07.06.2010	Khammam	Participated in the Rythu Sadassu, 2010 at Khammam
Sri M.Ravindra Babu, Scientist (H)	08.06.2010	Kothagudem	Participated in the Rythu Sadassu, 2010 at Kothagudem
Sri D.Lakshmi Narayana, Scientist (H)&Head,	09.06.2010	Palvoncha	Participated in the Rythu Sadassu at Palvoncha
Sri D.Lakshmi Narayana, Scientist (H)&Head,	11.06.2010	Bhadrachalam	Participated in the Rythu Sadassu at Bhadrachalam

I. RYTHU CHAITANYA YATRAS

Horticultural Research Station, Pandirimamidi

Place	Date	Participant & Designation	Particulars
Utla, Folkspeta Rampachodavaram(M)	17.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew & Vegetables
Pitapuram, Kakinada, A.V.Nagaram	17.05.2010	Sri M.Satti Raju Scientist (Hort)	Vegetables, Oil palm & Coconut.
Nallagonda, Jagametlapalem, Usirijonnalu,Gotalhgudem Rampachodavaram(M)	18.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.) & Sri M.Satti Raju Scientist (Hort)	Cashew, Mango & Vegetables
I.Polavaram, Seetapalli, Jagarampalli, Irlapalli, Pandirimamidi,& Rampachodavaram(M)	19.05.2010	Dr.K.Rajendra Prasad (Hort.) Scientist, Smt.R.Naga Lakshmi. Scientist (Hort.)	Cashew, Mango & Brinjal, TomatoBeans and Tapioka.
Rangapuram Bikkavole(M)	19.05.2010	Sri M.Satti Raju Scientist (Hort)	Cashew, Mango, Oil palm & Vegetables
Gopavaram, Eethalapadu & Kannavaram Rampachodavaram(M)	20.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew & Vegetables
Gonchala (Samalkot)	20.05.2010	Sri M.Satti Raju Scientist (Hort)	Bhendi & Brinjal
Bornagudem, Rampachodavaram(M)	21.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew & Mango
Rampa, Tativada Rampachodavaram(M)	22.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.), Smt.R.Naga Lakshmi. Scientist (Hort.)	Mango, Cashew, Tapioca & Brinjal.
Marrivada & Daramadugula Rampachodavaram(M)	24.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew
Nadiveedhi & Rampachodavaram	25.05.2010	Smt.R.Naga Lakshmi. Scientist (Hort.)	Mango, Cashew, Tomato & Brinjal.
Govindapuram Jaggampet(M)	25.05.2010	Sri M.Satti Raju Scientist (Hort)	Mango, Cashew, Tapioca.
Bandapalli Rampachodavaram(M)	26.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew, Tapioca.
Chupparapalem & Bolagonda Rampachodavaram(M)	27.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew & Brinjal.
Gandepalli Z.Rangampet(M)	27.05.2010	Sri M.Satti Raju Scientist (Hort)	Oil palm & Coconut
Madicherla & Vaadapalli Rampachodavaram(M)	28.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew & Mango
Maamidada Jaggampet(M)	28.05.2010	Sri M.Satti Raju Scientist (Hort)	Manga, Tapioka & Banana
Busigudem & Kothapakala Rampachodavaram(M)	29.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew & Mango
Narendrapatnum & Bavaram Jaggampet(M)	29.05.2010	Sri M.Satti Raju Scientist (Hort)	Cashew, Tapioka & Mango
Pedagaddada & Cheruvupalem	31.05.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew & Mango
Kondapalli Peddapuram(M)& Vetlapalem (Saamalkot)	31.05.2010	Sri M.Satti Raju Scientist (Hort)	Oil palm & Coconut
Vemulakonda Rampachodavaram (M)	01.06.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew, Mango& Brinjal
P.Venkatapuram Kakinada rural	02.06.2010	Sri M.Satti Raju Scientist (Hort)	Vegetables, coconut & banana
Koyyalagudem Rampachodavaram(M)	02.06.2010	Dr.K.Rajendra Prasad Scientist (Hort.)	Cashew, Mango& Brinjal

Horticultural Research Station, Mallepally

Name of the scientist participated	Date	Venue
K.Kaladhar Babu, Scientist (Hort.) & Head	25.5.2010	Kalwapally
K.Kaladhar Babu, Scientist (Hort.) & Head	28.5.2010	Gumadavalli
B.Ramesh Babu, Scientist (Hort.)	17.5.2010 to 31.5.2010	Chandampet

Mango Research Station, Nuzvid

Dr N.B.V. Chalapathi Rao, Senior Scientist (Ent) & Head, MRS, Nuzvid participated in Ryhtu Chaitanya Yatra's in Nuzvid mandal, Krishna Dt from 17-5-10 to 2-6-10

Smt D. Aparna, Scientist (Hort), MRS, Nuzvid participated in Ryhtu Chaitanya Yatra's in Tiruvur mandal, Krishna Dt from 17-5-10 to 2-6-10

Horticultural Research Station, Kovvur

Center	Name of the participant	Date
Gowripalli	Dr. B.V.K. Bhagavan	17.5.10
Arikirevula	E. Padma Scientist (Hort)	17.5.10
Chidipi	Dr. B.V.K. Bhagavan	18.5.10
Kumaradevam	Dr. B.V.K. Bhagavan	18.5.10
Duddukur	Smt.K.Mamatha	18.5.10
Mallavaram	Dr. T.Rajasekharam	18.5.10
Chandravaram	Dr. B.V.K. Bhagavan	19.5.10
Penakanamatta	Smt.E.Padma	19.5.10
Vadulagunta	Dr. T.Rajasekharam	19.5.10
Vedullagunta	Dr. T.Rajasekharam	19.5.10
Markondupadu	Dr. B.V.K. Bhagavan	20.5.10
Dharmavaram	Smt.K.Mamatha	20.5.10
Kurukuru	Smt K.Mamatha	21.5.10
Dommeru	Smt.E.Padma	21.5.10
Thirugudumetta	Dr. T.Rajasekharam	21.5.10
Nandugudem	Dr. T.Rajasekharam	21.5.10
Pallantla	Smt K.Mamatha	22.5.10
Kapuvaram	Smt.E.Padma	22.5.10
Govardhanagirigutta	Smt.E.Padma	
Karagapadu	Dr. T.Rajasekharam	22.5.10
Bucchiapalem	Dr. T.Rajasekharam	
Purushotapalli	Dr. B.V.K. Bhagavan	24.5.10
Pandalaparru	Dr. B.V.K. Bhagavan	

Center	Name of the participant	Date
Peddevam	Dr. T.Rajasekharam	24.5.10
Ravuripadu	Dr. T.Rajasekharam	
Kovvur	Smt.E.Padma	25.5.10
Malakapalli	Dr. T.Rajasekharam	25.5.10
Pendyal	Dr. B.V.K. Bhagavan	26.5.10
Pasivedala	Smt.K.Mamatha	26.5.10
Hukumpeta	Dr. T.Rajasekharam	26.5.10
Gangulu	T.Rajasekharam	26.5.10
Kalavalapalli	Dr. B.V.K. Bhagavan	27.5.10
Dhumanthunigudem	Smt.E.Padma	27.5.10
Subbarayapuram	Smt.E.Padma	27.5.10
Gopavaram	Dr. T.Rajasekharam	27.5.10
Rampalem	Dr. T.Rajasekharam	27.5.10
Vemuluru	Smt.K.Mamatha	28.5.10
Chikkala	Dr. T.Rajasekharam	28.5.10
Vadapalli	Smt.E.Padma	29.5.10
Yadavolu	Dr. T.Rajasekharam	29.5.10
Madduru	Smt.K.Mamatha	31.5.10
Chagallu	Dr. T.Rajasekharam	31.5.10
Veegeswarapuram	Smt.E.Padma	31.5.10
Sangayagudem	Dr. T.Rajasekharam	31.5.10
Gandhinagar	Dr. T.Rajasekharam	01.6.10
Togummi	Smt.K.Mamatha	02.6.10

Cashew Research Station, Bapatla

Scientists from Cashew Research Station-Bapatla have participated in the Rythu chaitanya yatra 2010 programmee in Bapatla, Amruthaluru, Chebrolu Mandals during 18th May to 3rd June.

ARI, Rajendranagar

Smt.P.Lalitha Kameswari Scientist (Hort.) participted in the Rythu Chaitanya Yatras on 20.5.10 and 26.5.10 at shamshabad mandal and answered the queries of the farmers.

Dr. A.S.Padmavathamma, Principal Scientist (Hort) & Head participted in the Rythu Chaitanya Yatras on 20.5.10 , 21.5.10 and 25.5.10 at Chevella mandal and Shamirpet mandal and answered the queries of the farmers.

Dr. A.L.N. Prasad, Sr. Scientist (Pl.Phy) participted in the Rythu Chaitanya Yatras on 2.6.10 at Maheswaram mandal and answered the queries of the farmers.

AICRP on MAP & Betelvine, Venkataramannagudem

Scientists from Betelvine research station participated in Rythu chaitanya yatra from 17.5.10 to 2.6.10 at Ponnuru, Chebrolu & Tsunduru mandal of Guntur districts

HRS, Ambajipeta

Scientist of HRS, Ambajipeta	Date	Village
Dr. B. Gautam	20.5.10	Mungandapalem
	21.5.10	Pulletikurru
Dr. N. Emmanuel	18.5.10	Mukkamala
	19.5.10	Isakapudi & Chirathapudi
	20.5.10	Irusumanda
	21.5.10	Pulletikurru
	22.5.10	K.Peddapudi
	25.5.10	Vakkalanka
	26.5.10	K.V.Lanka
	28.5.10	Gangalakurru Agraharam
	01.6.10	Gunnepuram Agraharam

Scientist of HRS, Ambajipeta	Date	Village
	02.6.10	Sakurru
Dr. A. Sujatha	20.5.10	Mungandapalem
	21.5.10	Pulletikurru
	24.5.10	Machavaram
	28.5.10	Munganda
Smt. T. Nagalakshmi	18.5.10	Bellam pudi
	19.5.10	P.Gannavarm
	22.5.10	Narendra puram
	24.5.10	Machavaram
	27.5.10	Y.Kottapalli
	29.5.10	Udimudi
	31.5.10	Nandampudi
	01.6.10	Thondavaram
	02.6.10	Pothavaram

Horticultural Research Station, Aswaraopet

Sri M.Ravindra Babu, Scientist (H)	18.05.2010	Anantharam, Ramannagudem of Aswaraopet Mandal practices in Mango and Cashew"	Participated in Rythu Chaityana Yatras and delivered" Management
Sri M.Ravindra Babu, Scientist (H)	25.05.2010	Kuppenguntla and chintagudem Villages of Penubally mandal	Participated in Rythu Chaityana Yatras and delivered "Production Technologies in Mango , Cashew and Oil palm".
Sri M.Ravindra Babu, Scientist (H)	26.05.2010	Agharam, Kuppenguntla and Karavayagudem Villages of Penubally mandal	Participated in Rythu Chaityana Yatras and delivered "Production Technologies in Mango , Cashew and Oil palm".
Sri D.Lakshmi Narayana, Scientist (H) & Head,	27.05.2010	Uttalapally village of Aswaraopet Mandal	Participated in Rythu Chaityana Yatras and delivered "Production Technologies in Mango , Cashew and Oil palm".
Sri D.Lakshmi Narayana. Scientist (H) & Head.	27.05.2010	Vinayakapuram village of Aswaraopet Mandal	Participated in Rythu Chaityana Yatras and delivered "Production Technologies in Mango. Cashew and Oil palm".

J. VILLAGE ADOPTION PROGRAMME

Krishi Vigyan Kendra, Venkataramannagudem

On 13.1.2011, Krishi Vigyan Kendra, Venkataramannagudem team proceeded to Nallajarla to generate data base like problems, resources available, cropping systems in all disciplines for adapting those villages for the year 2011-12.

On 25.1.2011, Krishi Vigyan Kendra, Venkataramannagudem team visited Prakasraopalem along with AEOs of Agriculture and Horticulture to generate data base like problems, resources available, cropping systems in all disciplines for adapting those villages for the year 2011-12.

On 27.1.2011, Krishi Vigyan Kendra, Venkataramannagudem team proceeded to Telikacherla along with village President to generate data base like problems, resources available, cropping systems in all disciplines for adapting those villages for the year 2011-12.

Krishi Vigyan Kendra, Pandirimamidi

Five villages namely Bandapalli, Peda giddada, I-Polavaram of Rampachodavaram mandal, R-Yerrampalem and Gangampalem of Gokavaram mandal were adopted by Krishi Vigyan Kendra, Pandirimamidi under village adoption programme.

Grama Sabha, individual household survey and PRA Techniques were conducted at in adopted villages to develop the rapport know the socio - economic condition problems of the villages and technological gaps in Animal Husbandry and Fisheries and Horticultre.

Bandapalli

I-Polavaram

R-Yerrampalem

Gangampalem

HRS, Ambajipeta

Rural Horticultural Work Experience Programme (RHWEP) was organized from 21-09-2010 to 02-11-2010 under the guidance of Horticultural Research Station, Ambajipeta. A total of 24 students were allotted to three different villages of East Godavari District, viz., Vakkalanka, Munganda and Mukkamala. They were trained in various Horticultural crop production and protection techniques, village socio – economic surveys and extension methods.

VI. PUBLICATIONS

(Books, Laboratory manuals, Technical bulletins, Research papers etc.)

A. Research papers

Books/ Book Chapters

"Recent progress in monitoring and management of coleopteran pests of coconut through pheromone traps in AP" by Sujatha A., Chalam M.S.V and Kalpana M published in Annals of Plant Protection Sciences, 18(1): 34 – 40

"Record of leaf chafer beetles Adorelus versutus Harold and Apogonia blunchurdi Ritsema on Cocoa crop (Theobroma cacao L) in Andhra Pradesh" by Emmanuel N, Sujatha A and Gautam B published in Insect Environment, 16(1): 23

Presented paper on "Antibiosis resistance to CBHCP, Opisina arenosella walker in coconut genotypes" by Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid at International conference on " Coconut Biodiversity for Prosperity" from 25th - 28th October 2010 at CPCRI, Kasaragod.

Presented paper on "Design of an ecologically based IPM programme against CSCP (Macroplecira mararia) in coastal districts of Andhra Pradesh" by Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid at International conference on " Coconut Biodiversity for Prosperity" from 25th - 28th October 2010 at CPCRI, Kasaragod

"Occurance of bag worms Pleroma plagiophelps Hamps and Clania sp on Cocoa crop" by Emmanuel N, Sujatha A and Gautam B published in Insect Environment, 16(2) 60-61.

"Explorative research and current status of coconut crop in Andhra Pradesh" by Sujatha A published in 30lh Anniversary Souvenir of Coconut Development Board organized in January 2011 at Banglore (P.No 90 - 106)

The following abstracts were published in the special issue "Global Conference on Meeting the challenges in banana and plantain for emerging biotic and abiotic stresses" organized by AIPUB and NRCB.

Growth and productivity of banana cv. Tella Chakkerakeli as influenced by different intercrops under paired row planting system. B. V. K. Bhagavan, M. Sattiraju, R. Nagalakshmi, D. Madhava Rao and J. K. Prasadji

Standardization of nutrient requirements for banana cv. Grand Naine (Cavendish, AAA) under high density planting system. P. Babu Ratan, K. Mamatha, BVK. Bhagavan and D. Madhava Rao

Influence of age on growth and productivity of micropropagated banana cv. Dwarf Cavendish (Cavendish, AAA) plants M. M. Naidu, E. Padma, K. Mamatha, P. Babu Ratan and D. Madhava Rao

Influence of chemical fertilizers application through solution on growth and yield of banana cv. Grand Naine (Cavendish, AAA) M. M. Naidu, E. Padma, K. Mamatha and D. Madhava Rao

The following papers were presented in National Seminar on "Climate change and food security: Challenges and oppurtunities for Tuber Crops" –January 20-22,2011 at CTCRI, Sreekariyam, Thiruvananthapuram, Kerala

Standardization of storage methods and conditions for Amorphophallus seed corm B.V.K. Bhagavan, R. Naga Lakshmi, J.K.Prasadji and D.Madhava Rao

Standardization of nutritional requirement for raising Amorphophallus seed crop B.V.K. Bhagavan, R. Naga Lakshmi, J.K.Prasadji and D.Madhava Rao

Effect of Biofertilizers on growth, yield attributes and yield of French Beans (Phaseolus vulgaris L) by V Ramana, M. Ramakrishna, K. Purushotham and K. Balakrishna Reddy 2010, Legume Research Vol. 33 (3): 178-183

Water Management in Chillies – Training Manual of scaling up of water productivity in Agriculture for livelihood through teaching cum demonstration. – Page no. 93 - 97 –In the year 2009

Water Management in Vegetable crops – Training Manual of scaling up of water productivity in Agriculture for livelihood through teaching cum demonstration. – Page nos. 85 - 92 – In the year 2009.

Water Management in Fruits – Training Manual of scaling up of water productivity in Agriculture for livelihood through teaching cum demonstration. –Page Nos 180 – 187 –In the year 2009.

N. Emmanuel, A. Sujatha and B. Gautam. 2010. Occurrence of Bag Worms Pteroma plagiophelps Hamps and Clania sp. on Cocoa Crop. Insect Environment, Vol.16 (2) pp: 60-61.

Emmanuel. N, Sujatha. A and B. Gautham. 2010 . Record of Leaf Chafer Beetles Adoretus versutus Harold and Apogonia blanchardi Ritsema on Cocoa (Theobroma cacao L.) in Andhra Pradesh. Insect Environment, Vol 16 (1), Pp 23

N. Emmanuel, N.B.V. Chalapathi Rao and B. Gautam. 2010. Status of Emerging Pests of Cocoa in Cocoa-Coconut Inter-Planted Farming System in Godavari Districts of Andhra Pradesh. In the proceedings of National Symposium on "Emerging Pest Management Strategies Under Changing Climatic Scenario" on 20th to 21st December, 2010 held at OUAT, Bhubaneswar. Pp: 3-4.

N. Emmanuel, N.B.V. Chalapathi Rao and B. Gautam. 2010. Impact of Various Intercropping Systems on the Occurrence of Coconut Pests in Godavari Districts of Andhra Pradesh. In the proceedings of National Symposium on "Emerging Pest Management Strategies Under Changing Climatic Scenario" on 20th to 21st December, 2010 held at OUAT, Bhubaneswar. Pp: 73-74.

N.B.V. Chalapathi Rao and K. Purushottam. 2010. Efficacy of Combination Treatment of Chloripyriphos + Dichlorovas against Mango Fruit Borer Deanolis Albizonalis In Andhra Pradesh. In the proceedings of National Symposium on "Emerging Pest Management Strategies Under Changing Climatic Scenario" on 20th to 21st December, 2010 held at OUAT, Bhubaneswar. Pp: 170-171.

N.B.V. Chalapathi Rao and K. Purushottam. 2010. Studies on Efficacy of Various New Insecticides against Mango Hoppers and Thrips in Andhra Pradesh. In the proceedings of National Symposium on "Emerging Pest Management Strategies Under Changing Climatic Scenario" on 20th to 21st December, 2010 held at OUAT, Bhubaneswar. Pp: 172-173.

Sujatha, A., Emmanuel, N, Gautam, B, and Arulraj, S. 2010. Design of an ecologically – based IPM programme against coconut slug caterpillar Macroplecta Nararia Moore in Coastal districts of Andhra Pradesh. In the proceedings of International Symposium on "Coconut Biodiversity for Prosperity from 25th to 28th October, 2010 held at CPCRI, Kasaragod. Pp: 131-132.

Sujatha, A, Emmanuel, N, Gautam, B and Arulraj, S. 2010. Antibiosis resistance to Coconut black headed caterpillar, Opisina arenosella Walker in coconut genotypes. In the proceedings of International Symposium on "Coconut Biodiversity for Prosperity from 25th to 28th October, 2010 held at CPCRI, Kasaragod.pp:125

Sujatha, A., Nagalakshmi, T., Gautam, B and Arulraj, S. 2010. Survey on narural occurrence of entomopathogenic fungi associated with coconut slug caterpillar (Macroplecta nararia Moore) and field evaluation of Beauveria bassiana. . In the proceedings of International Symposium on "Coconut Biodiversity for Prosperity from 25th to 28th October, 2010 held at CPCRI, Kasaragod.

Nagalakshmi, T., Sivaraj, K and Gautam, B. 2010. Evaluation Genetic diverisy among isolates of Ganoderma spp. Infecting coconut palms using RAMS and RAPD markers. In the proceedings of International Symposium on "Coconut Biodiversity for Prosperity from 25th to 28th October, 2010 held at CPCRI, Kasaragod.

Kalpana, M, Ramakrishna, Y and Gautam, B. 2010. Organic manure production from tender coconut waste. In the proceedings of International Symposium on "Coconut Biodiversity for Prosperity from 25th to 28th October, 2010 held at CPCRI, Kasaragod.

Kalpana, M., Dorajee Rao, A.V.D., Gautam, B., and Ramakrishna, Y., (2011), "Effect of time and Intensity of pruning on Cocoa under coastal Eco-system of Andhra Pradesh". Seminar on "Strategies for enhancing productivity of Cocoa" from 28 – 29 January, 2011 held at CPCRI, Vittal.

Dorajee Rao, A.V.D., Kalpana, M., Ramakrishna, Y., and Gautam, B., (2011), "Status of Cocoa under oil palm in Andhra Pradesh". Seminar on "Strategies for enhancing productivity of Cocoa" from 28 – 29 January, 2011 held at CPCRI, Vittal.

S. No.	Title of the paper	Authors Name (as 1st author, 2nd, 3rd etc.) in that order	Details
1.	Induced polygenic variability in coriander and scope of selection	Dr.C.Sarada, Dr.V.Srinivasa Rao, Dr.P.V. Reddy, Dr.K.Umajyothi and Dr.C.Panduranga Rao	Proceedings of National consultation on Seed Spices Biodiversity and Production for Export - Perspective, Potential, Threats and Their Solutions held at National Research Center for Seed Spices, Ajmer, Rajasthan on 8th July 2010.
2.	Mutagenic effectiveness and efficacy of gamma rays and EMS in coriander	Dr.C.Sarada, Dr.V.Srinivasa Rao, Dr.P.V. Reddy, Dr.K.Umajyothi and Dr.C.Panduranga Rao	-do-
3.	Threats, Perspectives and Potential of seed spices in Andhra Pradesh	Dr. C.Sarada , K.Giridhar and Dr.P.Venkat Reddy	-do-
4.	Behavior of drought tolerant coriander genotypes under different receding soil moisture regimes	Giridhar Kalidasu, C. Sarada and P.Venkata Reddy	-do-
5.	Identification of drought tolerant genotypes for rainfed vertisols	Giridhar Kalidasu, C. Sarada and P.Venkata Reddy	-do-
6.	Genetic analysis of peanut bud necrosis virus (PBNV) in Tomato (Lycopersicon esculentum Mill.)	Dr.C.Venkata Ramana	Paper presented in third International Symposium on tomato diseases (3ISTD) held at Ischia, Naples, Italy from 25th to 30th July 2010
7.	Variability and genetic divergence studies in paprika (Capsicum annum.L)	S.Surya Kumari, K.Uma Jyothi, D.Srihari, A.Siva Sankar and C.Ravi Sankar	Journal of Spices and Aromatic crops 2010.
8	Studies on Character Association in Paprika (Capsicum annum L)	S.Surya Kumari, K.Uma Jyothi, D.Srihari, A.Siva Sankar and C.Ravi Sankar	Forth coming issue of Journal of Spices and Aromatic crops 2010

B. Popular Articles:

MRS, Nuzvid

"Prastutam mamidilo thisukovalasina jagratalu" - by Dr. N.B.V. Chalapathi Rao, Senior Scientist (Ent) & Head and Smt D. Aparna Scientist (Hort) in Padipantalu agricultural magazine May 2010 (P.No 37 - 38)

"Mamidilo kothala anantharam purugu nivaaranaku theesukovalasina charyalu" - by Dr. N.B.V. Chalapathi Rao, Senior Scientist (Ent) & Head and Smt D. Aparna Scientist (Hort) in Padipantalu agricultural magazine July 2010 (P.No 43 - 45)

"Seandriya vyavasaayam - samagra poshaka mariyu samagra sasyarakshana" - by Dr. N.B.V. Chalapathi Rao, Senior Scientist (Ent) & Head and Smt D. Aparna Scientist (Hort) in Rythuvaani agricultural magazine September 2010 (P.No 3 -5)

"Mamidilo antla thayarilo melukuvalu" - by Smt D. Aparna Scientist (Hort) and Dr. N.B.V. Chalapathi Rao. Senior Scientist (Ent) & Head in Padipantalu agricultural magazine October 2010 (P.No 40-42)

"Mamidithotalalo neeti yajamaanyairT - by Smt D. Aparna Scientist (Hort) and Dr. N.B.V.Chalapathi Rao. Senior Scientist (Ent) & Head in Padipantalu agricultural magazine November 2010 (P.No 41 - 42)

Mamidilo pootha pinde parirakshanaku teesukovalasina charyalu - by Dr. A.Sujatha Pr. Scientist (Ent) & Head and Smt D.Aparna Scientist (Hort) in Padipantalu agricultural magazine March 2011 (P.No 30-31)

Mamidikaaya tholuchupurugu - Yaajamaanyam - by Dr. A.Sujatha Pr. Scientist (Ent) & I lead, P. Vijayalakshmi and B. Gautam Pr. Scientist (Hort) in Manarythuvaani agricultural magazine March 2011 (P.No 7-8)

Krishi Vigyan Kendra, Ramagirikhilla

Title	Authors	Magazine
"Mamidilo Mogga,Putha,Pinda Mariyu Kaaya dasalo Chepattavalasina yajamanya paddathulu"	Ms.D.Rajani Sri.Y.Venkanna, Ms.K.Dhanasree	Communicated to Rythu Nestham, Monthly Magazine.
"Vesavi Kuragayala saagulo chepattavalsina yajamanya Paddathulu"	Ms.D.Rajani, Sri.Y.Venkanna, Ms.K.Dhanasree	Annadatha,Monthly Magazine.

HRS, Lam

Date	Topic
Vyavasayam, Novamber'2010	Vamu sagulo melakuvalu – Sri K.Giridhar, Scientist (H) & Smt. A. Rajani, Scientist (H)
Vyavasayam, Novamber'2010	Rabilo Dhaniyala Yajamanyam - Sri K.Giridhar, Scientist (H) & Smt. A. Rajani, Scientist (H)
Rytheraju column of Eenadu on 4-12-10	Mirapaku gemini virus – Smt.T.Vijaya Lakshmi, Scientist (Pathology) & Dr.P.Venkata Reddy, Principal Scientist (Hort)
Rytheraju column of Eenadu on 6-12-10	Mirapalo tegullanivarana - Smt.T.Vijaya Lakshmi, Scientist (Pathology) & Dr.P.Venkata Reddy, Principal Scientist (Hort)
Rytheraju column of Eenadu on 19-12-10	Urakettina Mirapa thotallo melukavulu – Dr. S.Surya Kumari Senior Scientist (H) & Dr.P.Venkata Reddy Principal Scientist(H)
Rytheraju column of Eenadu on 1-2-2011	Mirapalo puthapurugu yajamanyam-P.Vijayalakshmi, Scientist(Ento)&Dr P.Venkata Reddy,Principal Scientist (H)
Rytheraju column of Eenadu on 9-2-2011	Neetithadulu- Jagrathalu, Dr. P.Venkata Reddy, Principal Scientist (Hort) & Dr. S.Surya Kumari Senior Scientist (H)
Rytheraju column of Eenadu on 18-2-2011	Mirapalo talukayala eriveta – , Dr. P.Venkata Reddy, Principal Scientist (Hort) & Dr. S.Surya Kumari Senior Scientist (H) & Dr.C.Venkata Ramana Scientist(H)
Rytheraju column of Eenadu on 4-3-2011	Mirapalo endutegulu – Nivarana, T.Vijaya lakshmi, Scientist(Path) & Dr. P.Venkata Reddy, Principal Scientist (Hort)
Rytheraju column of Eenadu on 15-3-2011	Mirapalo kayakullu tegulu – Nivarana, T.Vijaya lakshmi, Scientist(Path) & Dr. P.Venkata Reddy, Principal Scientist (Hort).

ARI, Rajendranagar

S. No.	Name of the Scientist	Designation	Particulars	Name of the Magazine
1	Smt. P. Lalitha Kameswari	Scientist (Hort.)	"Nursery management in chrysanthemum for obtaining higher yields"	Annadata June, 2010 edition with page no. 16-18.
2	Smt. P. Lalitha Kameswari	Scientist (Hort.)	Kuragayala sagu lo vithana pramukyatha	Annadata July, 2010 edition with page no. 22-23.
3	Smt. P. Lalitha Kameswari	Scientist (Hort.)	Gundumalle sagu lo melaina yajamanya padhuthalu	Vyavasayam: December, 2010 edition with page no. 16-17.
4	Dr. A.Girwani Smt. P.Lalitha Kameswari	SS (H) & Head Scientist(Hort)	Kanakambaram sagu lo melakuvalu	Shakshi paper on 12.1.2011.
5	Smt. P. Lalitha Kameswari	Scientist (Hort.)	Pulathotala pempakam	Padipantalu March, 2011 P.P 32-33

HRS, Ambajipeta

Gautam, B., Dorajee Rao, AVD., Kalpana, M., 2010 "Kobbari totalaku mumpu muppu", Sakshi, dated 15-11-2010.

Chalapathi Rao, NBV., Emmanuel, N., 2011 "Keetakalato Apramattam ga vundali", Eenadu, 18-01-2011

Chalapathi Rao, NBV., Emmanuel, N., 2011 "Kobbariki perugutunna muppu ", Sakshi, 18-01-2011

Chalapathi Rao, NBV., Emmanuel, N., 2011 "Vruddhi chedutunna gongali purugulu ", Andhra Bhoomi, 18-01-2011

Chalapathi Rao, NBV., Emmanuel, N., 2011 "Kobbaripai kottarakam gongali purugula daadi ", Andhra Jyothi, 18-01-2011

Chalapathi Rao, NBV., Emmanuel, N., 2011 "Kobbarini naasanam chesey keetakanni gurtinchina sastravettalu", Vaartha, 18-01-2011

Chalapathi Rao, NBV., Emmanuel, N., 2011 "Deepapu era lato purugula nivaarana ", Sakshi, 24-01-2011

Chalapathi Rao, NBV., Emmanuel, N., 2011 "Yaajamaanya paddatulu patistey adhika digubadulu ", Sakshi, 24-02-2011

Chalapathi Rao, NBV., Dorajee Rao, AVD., 2011 "Phelera purugu nivarana charyalu chepattali", Eeenadu, 25-02-2011

Chalapathi Rao, NBV., Emmanuel, N., 2011 "Deepapu era lato purugula nivaarana " Eeenadu, 06-03-2011

Kalpana, M., Ramakrishna, Y., Gautam, B., 2010 " Kobbarilo antara pantaga patchouli saagu", Annadata, November 2010

Dorajee Rao, AVD., Gautam, B., Kalpana, M., and Ramakrishna, Y., 2010 "Kobbari chetla Pempakam", Vaartha, November 2010

Gautam, B., Ramakrishna, Y., and Kalpana, M., 2011 "Kobbari thotallo misrama pantalu", Padi Pantalu [Department of Agriculture], 30th – 31st January, 2011.

Dorajee Rao, AVD., Kalpana, M., Ramakrishna, Y., and Gautam, B., 2011, "Kobbari parisodhanalo 55 vasantalu", Agri clinic, 20th to 22 March 2011

Gautam, B., Dorajee Rao, AVD., Chalapathi Rao, NBV., and Snehalatha Rani, A., 2011 "Cocoa Sagu sastriya yajamanya paddhathulu", Agri Clinic, 29th to 31st March 2011.

Dr. N. Emmanuel, Scientist (Entomology), HRS, Ambajipeta, delivered a talk to HM TV on important

pests of Coconut and their IPM broadcasted on 11-09-2010.

Dr. N. Emmanuel, Scientist (Entomology), HRS, Ambajipeta, gave a talk to DD Sapthagiri on "Management of Blackheaded Caterpillar in coconut" and "Incidence of Phelera in East Godavari district of Andhra Pradesh" on 03-03-2011.

Dr. N. Emmanuel, Scientist (Entomology), HRS, Ambajipeta, spoke to Gemini TV on "Incidence of Phelera in East Godavari district of Andhra Pradesh" on 04-03-2011.

Dr. N. Emmanuel, Scientist (Entomology), HRS, Ambajipeta, gave a talk to ETV2 on "Outbreak of Phelera in East Godavari district of Andhra Pradesh" on 10-03-2011.

Dr. N. Emmanuel, Scientist (Entomology), HRS, Ambajipeta, delivered a talk to ZEE TV on "Prevalence of Phelera in East Godavari district of Andhra Pradesh" on 11-03-2011.

Dr. N. Emmanuel, Scientist (Entomology), HRS, Ambajipeta, gave a talk to I NEWS on "Damage of Phelera in East Godavari district of Andhra Pradesh" on 09-03-2011.

Dr. NBV. Chalapathi Rao, HRS, Ambajipeta gave a radio talk at AIR, Visakhapatnam on "Management of Coconut Rhinocerous Beetle" on 14-03-2011.

Dr. NBV. Chalapathi Rao, HRS, Ambajipeta gave a radio talk at AIR, Vijayawada on "Management of Coconut Rhinocerous Beetle" on 11-01-2011.

Dr. N. Emmanuel, HRS, Ambajipeta gave a radio talk at AIR, Visakhapatnam on "Management of Coconut Red palm Weevil" on 14-03-2011.

Dr. A. Snehalatha Rani attended an Interview at All India Radio, Vijayawada on 16.11.2011 on "Kobbarilo Movvakullu Tegulu- Yajamanyam"

Dr. A. Snehalatha Rani gave a talk to HM TV on "Diseases of Coconut" on 31.08.10.

Dr. AVD Dorajee Rao, HRS, Ambajipeta gave a radio talk to AIR, Vijayawada on "Kobbari thotallo labhasati antara panataga cocoa" on 11-10-2010

Dr. AVD Dorajee Rao, HRS, Ambajipeta delivered a radio talk to AIR, Vijayawada on "Vesavilo Kobbari thotala yajamanyam" on 03-11-2010

Dr. AVD Dorajee Rao, HRS, Ambajipeta delivered a talk to MANA TV on Onion Agronamy on 11-09-2010.

Dr. AVD Dorajee Rao, HRS, Ambajipeta delivered a talk to E TV on Prospects of Coir Industry on 12-10-2010.

Dr. AVD Dorajee Rao, HRS, Ambajipeta delivered a talk to DD Sapthagiri, on "Fruit and leaf vegetables suited for Rabi" on 20-01-2010.

Dr. B. Gautam delivered a talk to ETV on advantages of "Intercropping system in Coconut" on 06-08-2010

Dr. B. Gautam delivered a talk to DD Sapthagiri on advantages of "Green manuring in Coconut" on 17-09-2010

Dr. B. Gautam delivered a talk to SAKSHI TV on the "Current status of coconut and its byproducts in Andhra Pradesh "on the occasion of World Coconut Day on 02-09-2010

Dr. B. Gautam delivered a talk to E TV on the "Coconut Integrated Pest Management with special emphasis on Leaf eating Caterpillars" on 01-04-2011

Herbal Garden Scheme, Rajendranagar

1. Coleus Sagu (Telugu), Padipantalu P. 36 July, 2010 – Dr. G. Sathyanarayana Reddy and Dr. T. Susila.
2. Pamarosa Sagu (Telugu), Padipantalu P. 38 July, 2010 – Dr. T. Susila and Dr. G. Sathyanarayana Reddy.

3. Yegumatiki Anuvaina Oushadha Mokka- Sunamukhi (Telugu), Vyavasayam, October, 2010, P.No.26-27- Dr.G.Sathyanarayana Reddy and Dr.T.Susila -

Horticultural Research Station, Aswaraopet

Sri. D.Lakhminarayana, Scientist(H) & Head, "Unnatha parvatha sreni girijana pranthallo Miriyala pantanasinchu pradhana clieedapeedalu - Nivarana' - Annadatha March. 2011 issue.

M.Ravindra Babu, Scientist (H) 'Agriclinic' monthly agricultural magazine :- June, 2010 issue "Krushi yunta thotalu serulu kurepestaie"

'Agriclinic' monthly agricultural magazine :-July, 2010 issue "Tolakarilopandla thotallo Yajamanyani"

Agriclinic monthly agricultural magazine :- November, 2010 issue "Nimma Bathailo Sukshma Poshaka lopalu Nivarana""

"Aratilo poshakalopahi - Nivarana'' Agriclinic - agriculture magazine January, 2011 issue.

"Labhadayakamaina Kakarasagu" Agriclinic - agriculture magazine January,2011 issue.

C. Participation of Teachers / Scientists in International and National conferences/ symposiums/workshops.

Horticultural Research Station, Pandirimamidi

Place	Date	Participant & Designation	Particulars
Nasik, YCM open University	20.10.2010 to 22.10.2010	Sri. M. Satti Raju Scientist (Hort) & Head	Participated in KVK annual zonal workshop
Udaipur	22.12.2010 to 24.12.2010	Sri. M. Satti Raju Scientist (Hort) & Head	Participated 5th national conference of KVK- 2010

Mango Research Station, Nuzvid

Dr. A. Sujatha, Principal Scientist (Ent) & Head, MRS, Nuzvid attended International conference on "Coconut Biodiversity for Prosperity" from 25th - 28lh October 2010 at CPCRI, Kasaragod.

Krishi Vigyan Kendra, Pandirimamidi

On 04th February, 2011 – Dr. A.Srinivas, Sri B.Bhaskar Rao, Sri V.Govardhan rao, Sri Ch.Kiran Kumar Participated in District level seminar workshop on Cashew conducted by Varadhi at Ramapachodavaram.

District level workshop on Cashew-Rampachodavaram

On 7th, 8th, March-2011– Dr. A.Srinivas, Sri B.Bhaskar Rao, Sri V.Govardhan rao, Sri Ch.Kiran Kumar, Dr.M.Venkata Ramulu Participated in two days state level seminar on advances in Cocoa production technology at Dr.YSR Horticultural University, Venkataramannagudem conducted by Krishi Vigyan Kendra, Venkataramannagudem in association with Directorate of Cashew and Cocoa Development, Kochhi.

Krishi Vigyan Kendra, Ramagirikhilla

Title of the seminar	Venue	Duration	SMS attended
Advances in COCOA Cultivation	Dr.YSRHU,Venkataramanna gudem	Two days 7&8th March,2011	1) Sri.Y.Venkanna, PC (i/c), KVK, Ramagirikhilla. 2) Ms.D.Rajani, SMS (Horticulture), KVK, Ramagirikhilla.

ARI, Rajendranagar

The chapter on package of practices of flower crops in Vyavasaya panchangam , and Udyana panchangam -2011 has been revised and sent for publication to the University press.

Smt.P.Lalitha Kameswari Scientist (Hort.) participated in the Brain storming session "Mango-Its impact with climate change" on 6.05.2010 organized by Fruit Research station, Sanga Reddy.

Smt.P.Lalitha Kameswari, Scientist(Hort) attended the short course on "Landscaping and interior plantscaping", held from 11-10-2010 to 20-10-2010, at the Department of Pomology and Floriculture, College of Horticulture, Vellanikkara, Kerala Agricultural University.

All the Scientists of Floriculture Scheme attended the Annual Group Meeting of AICRP on Floriculture at BCKV, Kayani, West Bengal from 13-15th November, 2010

Participation of Scientists at XX Group Meeting of AICRP on Floriculture at BCKV, Kalyani

AICRP on MAP & Betelvine, Venkataramannagudem

P. Rama Devi, Scientist (PP) & Head, B. Tanuja Priya, Scientist (Hort.) and Mrs. P. Sunitha, Scientist (Ento.) participated in Eighteenth group meeting of AICRP on Medicinal, Aromatic plants and Betelvine at MPKV, Rahuri from November 8-11, 2010.

Horticultural Research Station, Lam

Dr.C.Venkata Ramana, Scientist (Horticulture), Horticultural Research Station, Lam, Guntur attended the Third International Symposium on tomato diseases (3ISTD) held at Ischia, Naples, Italy from 25th to 30th July 2010.

Dr.C.Sarada, Scietist(Hort) & Sri. K.Giridhar, Scientist(Hort) have attended XXI All India Coordinated Research Project on Spices annual workshop on 5-6th July 2010 at NRC, Ajmer

Dr.C.Sarada, Scietist(Hort) & Sri. K.Giridhar, Scientist(Hort) have attended National consultation on Seed Spices Biodiversity and Production for Export - Perspective, Potential, Threats and Their Solutions held at National Research Center for Seed Spices, Ajmer, Rajasthan on 7th July 2010.

Dr.S.Surya Kumari, Senior Scientist(Hort) participated one day workshop on "Post harvesting handling of horticultural crops" organized by Department of Horticulture and NABARD on 8.7.2010

Sri K. Giridhar, Scientist (Horticulture) attended the Review meeting on NHM under CSS sponsored by Directorate of Arecanut and Spices Development, Calicut during 4-5th August 2010 at Hyderabad

Dr S.Surya Kumari, Senior Scientist (Hort), attended Summer School on "Advances in Quality Seed Production, Processing and Marketing" at College of Agriculture, GKVK Campus, UAS Bangalore during September 14 to October 4th, 2010.

Dr C. Venkata Ramana, Scientist (Hort), attended Winter School on "Designing Nutraceutical and Food Colorant Rich Vegetable Crop Plants: Conventional and Molecular Approaches" at Division of Vegetable Crops, IARI, New Delhi during October 15 to November 4, 2010.

Dr.S.Surya Kumari Senior Scientist (Hort) & Dr.C.Sarada, Senior Scietist(Hort) & Sri. K.Giridhar, Scientist(Hort) have attended XXIX Annual Group Meeting on Vegetable Research held at Vegetable Research Station, Junagarh Agricultural University, Junagarh, Gujarat from 27.01.2011 to 30.01.2011

Smt. P.Vijaya lakshmi, Scientist (Ento) attended training on Insect bioinformatics at NBAII, Bangalore from 7-17th February, 2011.

HRS, Ambajipeta

1. Dr. N.B.V. Chalapathi Rao and Dr. N. Emmanuel participated in the National Symposium on "Emerging Pest Management Strategies Under Changing Climatic Scenario" on 20th to 21st December, 2010 held at OUAT, Bhubaneswar. Dr. N.B.V. Chalapathi Rao and Dr. N. Emmanuel have presented two Research Papers each as oral presentations.
2. Dr. A.V.D.D. Rao and Dr. A. Snehalatha Rani attended International Conference on Coconut Bio Diversity for Prosperity at CPCRI, Kasargod, from 25th to 28th October, 2010.
3. Dr. A.V.D.D. Rao and Dr. A. Snehalatha Rani attended Review Meeting at CPCRI, Kasargod, conducted by Project Co-ordinator, AICRP on Palms on 29th October, 2010.
4. Dr. N. Emmanuel, Dr. AVD Dorajee Rao and Dr. A. Snehalatha Rani acted as resource person in "State level Cocoa seminar" held at V.R.Gudem from 07-03-2011 to 08-03-2011

Dr. N. Emmanuel, delivering a lecture on "Cocoa pests in Andhra Pradesh and their management" in "State level Cocoa seminar" held at V.R.Gudem from 07-03-2011 to 08-03-2011

Herbal Garden Scheme, Rajendranagar

"Effect of Organic Manures on Seed Yield of Isabgol (Plantago ovata)"	Research paper	2010	T. Susila, G. Sathyanarayana Reddy	South Indian Horticulture Vol. 58, 2010. P. 194-196.
Effect of organic manures and inorganic fertilizers on growth and development of Medicinal Coleus".	Research paper	2010	J. Sailaja, G. Sathyanarayana Reddy, D. Vishnu Vardhan Reddy,	South Indian Horticulture Vol. 58, 2010. P. 194-196. 197-200.
Mukhyamina Oushadhapantala Sagu	Booklet (Telugu)	2010	G. Satyanarayana Reddy T. Susila	
Effect of planting time on biomass yield of Kalmegh (Andrographis paniculata) under SouthernTenlangana conditions of Andhra Pradesh	Research paper	2010	T. Susila and M. Raj Kumar	Biomed 5(4): 199-203
Collection and Cultivation of medicinal plants	Abstract	2010	T. Susila, G. Sathyanarayana Reddy	Souvenir & abstracts of National Seminar on Conservation of Medicinal Plants - Herbal Products and their Uses by Arts and Science College for Women, Andhra Mahila Sabha, OU campus, Hyderabad.
Standardization of Protocol for in vitro Propagation of an Endangered Medicinal Plant Rauwolfia serpentina Benth.	Abstract	2010	T. Susila, G. Sathyanarayana Reddy and D. Jyothsna	Souvenir & abstracts of International Seminar on Medicinal Plants and Herbal Products by Sri Venkateswara University, Tirupathi.
Effect of seed rate and spacing on yield of Aswagandha (Withania somnifera dunal)	Abstract	Nov, 2010	G.Satyanaayana Reddy , T. Susila and M. Raj kumar	Souvenir & abstract of International conference on "challenging and emerging dimensions of Medical/ Herbal plants and their products : A Global prospective 26-28 Nov, 2010 Chennai, India organized by Society for Conservation and resource development of Medicinal Plants.

Dr. T. Susila, Scientist (SG) (Hort.) has participated in National Seminar on "Technological Interventions for Sustaining Production of Commercially viable Medicinal crops in India" held at TNAU, Coimbatore from 24th -26th September, 2010 and presented paper on "Effect of organic manures on seed yield of Isabgol (Plantago ovata)".

Dr. G. Sathyanarayana Reddy, Senior Scientist participated in International Conference and Asian Herbal Show on "Challenging and Emerging Dimensions in Medicinal / Herbal plants and their products: A Global prospective" from 26th to 28th November, 2010 at Chennai Trade Centre, Chennai,

organized by Society for Conservation and Resource Development of Medicinal Plants, New Delhi and presented paper on Effect of seed rate and spacing on yield of Aswagandha (Withania somnifera Dunal.)

Dr T. Susila, Scientist (SG) (Hort.) has participated and delivered invited lecture on Collection and Cultivation of Medicinal Plants at National Conference on Conservation of Medicinal Plants- Herbal Products and their Uses held from 25th -26th November 2010 at Arts and Science College for Women, Andhra Mahila Sabha, Osmania University Campus, Hyderabad.

Dr G. Satyanarayana Reddy Senior Scientist has participated in 4th World Ayurveda Congress and Arogya Expo 2010 held at Bangalore from 9th – 13th December 2010.

Dr G. Satyanarayana Reddy Senior Scientist and Dr T. Susila Scientist (SG) (Hort.) participated in Oushadi 2010 and Herbal Expo on Foods, Dietary Supplements, Medicines, Cosmetics and other products of Herbal origin organized by A.P. Medicinal and Aromatic Plants Board from 16th – 20th December 2010 at NTR Stadium, Near Indira Park, Hyderabad.

Dr. T. Susila, Scientist (SG) (Hort.) has participated in 2nd International Seminar on Medicinal Plants and Herbal Products 2010 held at S.V.University, Tirupathi from 27th -30th December 2010 and presented paper on "Standardization of Protocol for in vitro Propagation of an Endangered Medicinal Plant Rauwolfia serpentina Benth.

VII. FINANCE AND BUDGET

The major financial grants to the Dr.YSR Horticultural University come from the A.P. Government under Plan by way of grants-in-aid for running the institution. The block grants approved in the budget for the year 2010-11 was Rs.2618.51 lakh, including salaries grant of Rs.1456.75 lakh and other grants-in-aid of Rs.1161.76 lakh.

The ICAR assistance was Rs.775.60 lakh (including NAIP) and the Govt. of India assistance was Rs.84.93 lakh while the amount received from other agencies was Rs.227.84 lakh and Departmental sponsored schemes Rs.1160.35 lakh.

Thus, the total budget of the University for the year 2010-11 was Rs.4867.23 lakh.

VIII. AWARDS AND HONOURS

MRS, Nuzvid

Dr. A. Sujatha. Principal Scientist (Ent) & Head. MRS, Nuzvid received Andhra Pradesh Scientist Award for 2010 on 7-8-2010 for her outstanding contributions in agricultural field by Andhra Pradesh State Council of Science & Technology (Environment, Forests, Science & Technology Department, Govt., of Andhra Pradesh), Hyderabad

COH, Rajendranagar

Dr.D.Srihari, Professor of Horticulture, College of Horticulture, Rajendranagar, Hyderabad received 'State Best Teacher Award' from the hands of Sri D.Sridhar Babu, Hon'ble Minister for Higher Education, Government of Andhra Pradesh on 5th September, 2010.

Dr.R.Chandrasekhar, Professor of Horticulture, College of Horticulture, Rajendranagar, Hyderabad received 'State Best Teacher Award' from the hands of Sri D.Sridhar Babu, Hon'ble Minister for Higher Education, Government of Andhra Pradesh on 5th September, 2010.

HRS, Mallepally

Rolling trophy presented for winning 5 first prizes and 2 second prizes in Seethaphal show conducted by Agricultural Horticultural Society, Hyderabad on 9.10.2010.

Rolling Trophy presented in Seethaphal Show

HRS, Lam,

Dr.S.Surya Kumari, Senior Scientist (Hort), HRS, Lam was honoured as Outstanding Participant of Summer School on "Advances in Quality Seed Production, Processing and Marketing" organized at College of Agriculture, GKVK Campus, UAS Bangalore during September 14 to October 4th, 2010.

Dr.S.Surya Kumari, Senior Scientist (Hort) and Dr.C.Venkata Ramana Scientist (Hort) HRS, Lam was awarded certificate of appreciation for the meritorious service rendered at HRS, Lam during the year 2010 on the occasion of Republic Day celebrations on January 26 of 2011 by the Collector and Distract Magistrate, Guntur.

Dr. N. Emmanuel, Scientist (Entomology), has been awarded with best Oral Presentation of Research Paper "Status of Emerging Pests of Cocoa in Cocoa-Coconut Inter-Planted Farming System in Godavari Districts of Andhra Pradesh" in the National Symposium on " Emerging Pest Management Strategies Under Changing Climatic Scenario " on 20th to 21st December, 2010 held at OUAT, Bhubaneswar.

HRS, Aswaraopet

We have received 5 prizes for mango varieties in Mango show 2010 in open competition organasized by Department of Horticulture at Jubliee Hall, Public gardens, Hyderabad from 30th May to Is' June. 2010. Among them one is second prize and remaining four are third prizes.

Category	Name of the variety	Mode of prize
Section - II	Panchadara kalasa	II Prize
Section - II	Cherukurasam	III prize
Section - II	Jalal	III Prize
Section - II	M.Vikarabad	III Prize
Section - II	A.Baneshan	III Prize

IX. OTHER SIGNIFICANT EVENTS IF ANY

HRS, Pandirimamidi

Place	Date	Participant & Designation	Particulars
University Auditorium, ANGRAU, Rajendranagar	11.5.2010 to 15.5.2010	Sri. M. Satti Raju Scientist (Hort) Dr.K.Rajendra Prasad Scientist (Hort), Er.P.C.Vengiah Scientist (Food Sci. & Tech)	Attended and participated in SLTP-2010
HRS, Pandirimamidi	26.6.2010	All staff of HRS, Pandirimamidi	Celebrated Dr.YSRHU Formation day along with dignitaries.
Bhagalpur dist, Bihar	2.09.2010 to 6.09.2010	Er.P.C Vengaiah Scientist (Food Sci.Tech)	Participated in the Joint survey & collection of Palmyra germplasm

Krishi Vigyan Kendra, Ramagirikhilla

Sowing of summer vegetables in the farmer's field at Ratnapur

FLD on Paddy Drum Seeding method at Raghavapur village, Peddapalli Mandal

Farmer sharing his experience of FLD (Paddy drum seeding) with Director of Extension

Review of progress at KVK construction site by Director of Extension

Subject Matter Specialists at Proposed Adopted Village Gram Sabha

Director of Extension reviewing progress at KVK, Ramagirikhila office

HRS, Lam

The Research Monitoring and Evaluation committee was constituted for monitoring the research work with the following members on 25.10.10

- Dr.B.M.C.Reddy, Former Director, CISH, Lucknow-2
- Dr.Venugopala Rao, Rtd.Entomologist, ANGRAU
- Dr.S.Amarendar Reddy, Associate Dean, College of Horticulture, Rajendranagar
- Sri.J.Devi Prasad, Member, Board of Management, Dr.YSRHU, Secunderabad

- Sri.V.Jaya Rami Reddy, Member, Board of Management, Dr.YSRHU, Hyderabad
- Dr.K.Purushotham, Director of Research, Dr.YSRHU, Tadepalligudem.

The team evaluated the performance of HRS in the conduct of research and had appreciated for its considerably good work.

Dr.Anandraj, Project Coordinator, AICRP on Spices visited HRS, Lam for technical inspection of ongoing AICRP experiments on 2.2.2011. He also visited the front line demonstration of "Role Rhizobacteria in growth promotion of Coriander" at Jonnalagada Village of Guntur rural mandal and Choutuppal village of Nalgonda District. The Project Coordinator, AICRP on spices appreciated the commendable research work done by HRS, Lam on Seed spices. He was pleased the planning, lay out and maintenance of the experimental plots. (Fig-11 &12)

Visit of Dr.Anandraj, Project Coordinator, AICRP on Spices at HRS, Lam

Dr.Anandraj, Project Coordinator, AICRP on Spices visited the front line demonstration on "Role Rhizobacteria in growth promotion of Coriander" at Jonnalagada Village

1) Sri Vijay Kumar Gavit, Hon'ble Minister for Horticulture for the State of Maharashtra along with his Project Directors of State and Chief Secretary visited HRS, Lam and had given laurels for the development of high yielding varieties in Chilli which had made Andhra Pradesh stand first in Chilli area and production in Andhra Pradesh. He also stated that with the observations he made in Andhra Pradesh in Chilli cultivation and the recommendations of Dr.YSRHU followed by the farmers, he will try to implement in Maharastra and enhance the State Chilli production. (Fig-13 &14)

Hon'ble Minister for Horticulture along with ADR of RARS, ANGRAU & Staff of Dr.YSRHU, HRS, Lam.

Progressive Farmers interaction with Hon'ble Minister for Horticulture along with ADR of RARS, ANGRAU & Staff of Dr.YSRHU, HRS, Lam.

Herbal Garden Scheme, Rajendranagar

- Dr G. Satyanarayana Reddy Senior Scientist and Head attended State level Steering Committee (SLSC) of National Mission on Medicinal plants (NMMP) of Medicinal and Aromatic Plants Board at secretariat, Hyderabad on 22-7-2010.
- Review meeting of National Horticultural Mission Developmental Programmes of Directorate of Arecanut and Spices Development Board was organized on 4th and 5th August, 2010 by Herbal Garden Scheme, Dr.YSR Horticultural University, Rajendranagar, Hyderabad. Dr. S. D Sikhamani, Hon'ble Vice Chancellor of Dr.YSRHU was the chief guest of inaugural function. Dr. Tamil Selvan Director, Directorate of Arecanut and Spices Development has reviewed the programmes sponsored by DASD, Calicut. Dr. S. B. Dandin, Hon'ble Vice-Chancellor, University of Horticultural Sciences, Bhagalkot, Dr. K. Purushotham, Director of Research, Dr.YSRHU, Dr. H.S. Srinivasa, Director Spices Board, Calicut, Kerala, Dr. M. Anandaraj, Project Co-ordinator, AICRP, Spices, Calicut, Kerala, Dr. M. M. Anwar, Director, NRCSS, Ajmer, Rajasthan graced the occasion.

- Research monitoring and Evaluation team visited Herbal Garden Scheme, Rajendranagar on 24-8-2010 and evaluated the research programmes.

- Dr. G. Sathyanarayana Reddy, Senior Scientist & Head visited Kadapah, Chittoor, Medak and Ranga Reddy Districts from 6-9-2010 to 10-9-2010 as a member of Joint Inspection team of National Horticultural Mission to Evaluate the Centrally Sponsored Schemes.

- National Horticultural Mission Evaluation team visited Herbal Garden Scheme, Rajendranagar on 22 -11-2010 and inspected the equipment purchased under Sanitary and Phytosanitary Scheme.

- Dr T. Susila, Scientist (SG) (Hort.) has delivered guest lecture on Production Technology for the cultivation of Patchouli and Davana at CIMAP resource centre, Boduppal, Hyderabad during the training programme on Enterprenureship Development through cultivation and processing of Medicinal and aromatic plants held from 24th -26th November 2010.
- On 10-12-2010 Dr T. Susila, Scientist (Hort.) delivered guest lecture on Cultivation of Medicinal Plants to trainees of Enterprenureship development Programme through Agri clinics sponsored by PRDIS, Hyderabad.
- On 23-12-10 Dr T. Susila, Scientist (Hort.) delivered guest lecture on Cultivation of Medicinal Plants to trainees of MANAGE, Hyderabad

Teaching: P.G. Courses handled by Dr. G. Satyanarayana Reddy during the year 2010-11

PSMA-503 3(2+1): Production Technology of Medicinal & Aromatic crops

PSMA 508 2(1+1) (P.G. course) under exploited Medicinal and Aromatic crops

College of Horticulture, Rajendranagar

PSMA-603 2(1+1) Advances in Medicinal and Aromatic crop