



SPICES NEWS

Indian Institute of Spices Research
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Half yearly

Research update

Registration of *Piper* germplasm

A black pepper cultivar with proliferating spikes (IC 563950) and a unique accession of *Piper thomsoni* collected from the foot hills of Bhutan, male plant changed to bisexual type (IC 398868), were registered with NBPGR, New Delhi.

Development of PCR based diagnostics

A PCR-based species-specific marker technique was developed for detecting *Phytophthora capsici* from soil and infected plant tissues. A reverse transcription-based polymerase chain reaction (RT-PCR) technique was developed for the detection of *Cardamom mosaic virus* causing mosaic (*Katte / Marble*) disease in cardamom.

Incidence of *Erythrina* gall wasp in major black pepper areas

Surveys were conducted in 273 farmers' gardens in 4 districts (Idukki, Kozhikode, Kannur and Wayanad) in Kerala and 63 gardens in Kodagu district in Karnataka to study the incidence of *Erythrina* gall wasp (EGW) (*Quadrastichus erythrinae*). The EGW was present in all the districts surveyed in Kerala and Karnataka damaging the trees to various levels. The pest infestation on *E. variegata* (white-thorned type) was very serious, and resulted in malformation of almost all the new shoots and death of trees. Among the various districts, highest EGW infestation on trees (59.6%) and branches (41.4%) was recorded in Wayanad District. Kozhikode and Kannur districts recorded the lowest EGW infestation on trees (31.7%) and branches (15.6%), respectively.

New record of phyllody disease of fennel

Phyllody disease of fennel has been recorded for the first time and based on 16S rDNA analysis the Phytoplasma associated with, has been characterized as a strain of *Candidatus phytoplasma aurantifolia*.

Quality evaluation

Evaluation of constituents of essential oil by GC-MS

indicated that the essential oil from berries of black pepper cultivars grown at Peruvannamuzhi, and Panniyur contained high level of β -caryophyllene (20%–36%) where as the oil from leaf was dominated by germacrene-D (21%–44%) and elemol (24%–54%). The stem bark of *Cinnamomum cassia* accessions from Appangala contained 1.2%–3.7% essential oil with 65%–89% cinnamaldehyde and 7.5%–14.0% oleoresin.

Impact of black pepper production technologies

Studies on impact of black pepper varieties released from IISR in farmers' fields indicated that the mean yield for high yielding varieties was 1160 kg/ha as against 620 kg/ha for traditional varieties. The level of adoption of foliar spraying of Bordeaux mixture was 57.1% and application of bio control agents was 64.2%, for control of fungal diseases. The estimated cost-benefit ratio for cultivation of black pepper during the period 1998-2007 was 1:2.48.

Personalia

Awards/ Honours / Recognitions

Anandaraj M

Fellow, National Academy of Biological Sciences, Chennai.

Fellow, Indian Society for Plantation Crops

Board of Examiner for PhD, Calicut University.

Board of Examiner for PhD, Mangalore University.

President, Indian Society for Spices
Vice-President (South Zone),
Agricultural Research Service
Scientists' Forum, New Delhi.

Inside

1 Research update

1 Personalia

5 News and Events

6 Transfer of Technology

8 Publications

Deputation abroad**Devasahayam S**

Deputed for Experts Meeting on Integrated Pest Management (IPM) and Good Agricultural Practices (GAP) for Pepper, Ho Chi Minh City, Vietnam, 21–22 November 2008.

Bhat A I**Chempakam B****Devasahayam S****Hamza S****Johnson George K****Kumar A****Ramakrishnan Nair R****Sheeja T E****Suseela Bhai R**

Recognised as Research Guide by Kannur University.

Bhadramurthy V**Biny Y K**

Best research paper presentation (2007-08) for research scholars.

Hamza S, Srinivasan V & Dinesh R

Dr J S Pruthi Award - 2008 for the best research paper published in Journal of Spices and Aromatic Crops Vol.16 (2007) for the article entitled *Nutrient diagnosis of black pepper (Piper nigrum L) gardens in Kerala and Karnataka.*

Dinesh R**Nirmal Babu K****Srinivasan V****Utpala Parthasarathy**

Recognised as Research Guide by Mangalore University

Faisal K**Premachandran K P****Sreedharan P**

Institute Award of Excellence for the year 2007-08.

Parthasarathy VA

Fellow, National Academy of Biological Sciences.

Chairman, Pepper Task Force Committee, Spices Board.

Vice-President, Central Government Employees' Coordination Committee, Calicut.

Sathyanath V

Awarded Commendation Certificate-2008 for his contribution towards the Institute Development Activities.

Sudhakaran A

Awarded special prize for Novelty in designing the emblem for National Seminar on Piperaceae.

Participation in Symposia/Seminars/Workshops/ Conferences/ Meetings**All Scientists**

National Seminar on *Piperaceae–Harnessing Agrotechnologies for Accelerated Production of Economically Important Piper species*, IISR, Calicut, 21-22 November 2008.

Anandaraj M**Devasahayam S****Eapen SJ****Parthasarathy VA****Suseela Bhai R**

NABS Interactive Workshop on *Microbial interactions for food security*- Indian Institute of Spices Research, Calicut, 29-30 September 2008.

Anandaraj M**Parthasarathy V A****Srinivasan V****Suseela Bhai R****Thankamani C K**

National Conference on *Organic farming in Horticultural Crops with special reference to Plantation Crops*, 15-18 October 2008, CPCRI, Kasaragod.

Anandaraj M

Interactive Workshop on *Tuber Crops for Food Security*, CTCRI, Trivandrum, 24 November 2008.

Bhat A I

Monitoring Committee Meeting of the DBT-funded Network Project on *Development of virus-resistant transgenic crops*, Rohtak University, Haryana, 10 July 2008.

Devasahayam S

IX Annual Discussion Meeting on *Invasive insects in agriculture, forestry and medicine*, Chennai, 13 December 2008.

Hamza S**Leela NK**

National Seminar on *Phytochemicals for human welfare*, University of Calicut, 14 October 2008.

Jacob TK

Consultative Committee Meeting for the *Farm and home programme* of AIR, Calicut, at KAU, Trichur, 7 October 2008.

Seminar on *Zero- budget natural farming*, organized by the Malayora Karshaka Koottayma, Koodaranhi, Calicut, 24 November 2008.

Jacob T K**Nirmal Babu K****Parthasarathy V A**

Venugopal M N

ICAR Training-cum-Workshop on *Intellectual Property Rights and Technology Management - Trade mark Protection*, CTCRI, Trivandrum, 30 October to 1 November 2008.

Kandiannan K Srinivasan V

National Seminar on *Role of Intellectual Property Rights in the Knowledge era*, Malabar Botanical Garden, Calicut, 28-29 November 2008.

Krishnamoorthy B Prasannakumari N

42nd Town Official Language Implementation Committee Meeting, Calicut, 23 September 2008.

Krishnamoorthy B Mathew P A

X Scientific Advisory Committee Meeting at KVK, Peruvannamuzhi, 24 September 2008.

Mathew P A

Review Meeting of MOEF Project, Bangalore, 4 December 2008

Prakash K M

Website Design & Development, TNAU, Coimbatore, 4 July to 16 August 2008 & 1-10 September 2008.

Lan & Wan Technology, TNAU, Coimbatore, 18-24 October 2008.

Parthasarathy V A

DUS Guidelines on Cashew and Coconut, CPCRI, Kasaragod, 10 July 2008.

VIth Research Council Meeting of TBGRI, Trivandrum, 23-24 July 2008.

Licensing of ICAR Plant Varieties/Hybrids/Inbred Lines for Commercial use by Private Seed Agencies, SBI, Coimbatore, 28 July 2008.

Monitoring Committee for North-East Mission Programme of DBT, New Delhi, 30 July 2008.

Scientific Advisory Committee Meeting on Resource-specific Network Programme, DBT, New Delhi, 13 August 2008.

DPC Meeting, IIHR, Bangalore, 16 August 2008.

EFC Meeting, New Delhi, 9 September 2008.

PLACROSYM Standing Committee Meeting, CPCRI, Kasaragod, 25 October 2008.

Pepper Task Force Meeting, Spices Board, Cochin, 7 November 2008.

National Project Steering Committee of the International Project on Coffee leaf rust, Central Coffee

Research Institute, Bangalore, 10 November 2008.

Expert Committee Meeting of Tamil Nadu Agricultural University, Coimbatore, 12-14 November 2008 & 2-5 December 2008.

PLACROSYM, XVII, National Research Centre for Cashew, Puttur, 13-14 December 2008.

Pepper Task Force Meeting, Spices Board, Cochin, 18 December 2008.

Rajeev P

Workshop on *Data Mining and Data Warehousing*, Centre for Soft Computing Research, ISI, Kolkata, 15-20 September 2008.

Suseela Bhai R**Thankamani C K**

District Level Inter-phase on *Advanced Technology in Spices Development with special emphasis on Pepper*, Calicut, 27 November 2008.

Shanmugavel S

Website Design & Development, TNAU, Coimbatore 21 July to 1 August 2008.

Lan & Wan Technology, TNAU, Coimbatore, 27 - 31 October 2008.

Membership in committees/ Professional societies**Biju C N****Parvez Rashid**

Life Member, Indian Society for Spices

Devasahayam S

Expert, Committee for Formulation of Good Agricultural Practices for Black Pepper, International Pepper Community, Jakarta.

Expert, Committee for Formulation of Integrated Pest Management for Black Pepper, International Pepper Community, Jakarta.

Mathew PA

Member, ATMA Programme of Department of Agriculture, Calicut.

Parthasarathy VA

Member, Expert Committee to assess the Research Advisory Work at Upasi Tea Research Foundation.

Member, National Project Steering Committee of International Project on Coffee Leaf Rust.

Member, Monitoring Committee for North-East Mission Programme, DBT.

Utpala Parthasarathy

Member, Executive Council for Indian Society for Spices.

Lectures delivered

Anandaraj M

Microbial control of soil borne diseases, National Academy of Biological Sciences Meeting and Interactive Workshop on Microbial Interaction for Food Security, IISR Calicut, 30 September 2008.

Potentials for organic production of spices, National Conference on Organic farming in Horticultural Crops with special reference to Plantation Crops, 15-18 October 2008, CPCRI Kasaragod.

Role of AICRPS in shaping black pepper research in India, National Seminar on Piperaceae, 21-22 November 2008, IISR Calicut.

Plant Growth Promoting Rhizobacteria (PGPR) for Food Security, Interactive Workshop on Tuber Crops for Food Security, 24 November 2008, CTCRI Trivandrum.

Integrated management of diseases and pests of spice crops, National Seminar on Organic spices, OUAT, Kraput, Orissa, 14-15 December 2008.

Locating Phytophthora Resistance in Spice Crops-Short course organized by Sugarcane Breeding Institute, Coimbatore, 19 December 2008.

Ankegowda S J

Scientific cultivation practices in cardamom and black pepper, Training Programme organized at Kaloor by Spices Board, Madikeri, 23 August 2008.

Cultivation practices on black pepper and cardamom at Birunani, Training Programme organized by Spices Board, at Virajpet, 25 August 2008.

Scientific cultivation practices in cardamom and black pepper at Malenadu, Training Programme organized by Spices Board, Madikeri, 28 August 2008.

Bhat A I

Molecular tools for Detection of Plant pathogens, Short course on Application of molecular tools in identifying disease resistant genes/mechanisms in crop plants, SBI, Coimbatore, December 2008.

Devasahayam S

Integrated management of pests and diseases of black pepper in India, Experts Meeting on Integrated Pest Management (IPM) and Good Agricultural Practices (GAP) for Pepper, Ho Chi Minh City, Vietnam, 21-22 November 2008.

Eapen S J

Role of Bioinformatics in microbial research, NABS Interactive Workshop, IISR, Calicut, 30 September 2008.

Biological databases, Bioinformatics training: Agri-

bioinformatics - Tools and Applications, 20 October 2008, IISR, Calicut.

Phylogenetic analysis & primer designing, Bioinformatics training: Agri-bioinformatics - Tools and Applications, IISR, Calicut, 22 October 2008.

Phylogenetics Bioinformatics training: Principles and applications of Bioinformatics, CPCRI, Kasaragod, 6 November 2008.

Jacob T K

Erythrina gall wasp (Quadrastichus erythrinae Kim)-an emerging threat to Erythrina spp. in South India. National seminar on Piperaceae, IISR, Calicut, 21-22 November, 2008.

John Zachariah T

Processing and value addition in spices for entrepreneurship development, National seminar on Food Security through Innovations in Food Processing and Entrepreneurship development, KAU, Thrissur, 29-30 September, 2008.

Post harvest technology of ginger and turmeric, The training to Agricultural Assistants of Govt. of Kerala, IISR, Calicut, 2 December 2008.

Leela N K

Phytochemicals in spices and their bioactive potential, National seminar on Phytochemistry and its ethnobotanical significance, NSS College, Manjeri, 25 November 2008.

Rajeev P

Space technology enabled village resource centres in Kerala, Brainstorming session on innovative extension strategies for horticulture development, IIHR Bangalore, 25 July 2008

Saji K V

Biodiversity informatics, Training programme on Agribioinformatics tools and application, 20-24 October 2008, IISR, Calicut

Radio talk

Ankegowda S J

Harvesting and quality maintenance in cardamom, 11 August 2008, AIR, Madikeri.

Zachariah T J

Spices in industry, traditional medicine, food and beverages as colourants, flavourants, and anti oxidants (Malayalam), 5 November 2008, AIR, Calicut.

TV Programme

Diseases of black pepper and their control,

Krishidharsan, 5 September 2008, Doordarshan, Bangalore (Ankegowda SJ).

Cultivation practices in cardamom, Krishidarshan, 26 September, Doordarshan Kendra, Bangalore (Ankegowda SJ).

Disease management in cardamom, Krishidarshan, 29 October 2008, Doordarshan Kendra, Bangalore (Ankegowda SJ).

Video conference

Nematodes and their management for farmers of Wayanad District, 19 August 2008 (Eapen S J)

Ginger cultivation, ATIC, IISR, Calicut, 26 November 2008 (Thankamani C K)

News and events

NABS Meeting and Interactive Workshop

National Academy of Biological Sciences Meeting and Interactive Workshop on Microbial Interactions for Food Security was held at IISR, Calicut during 29-30 September 2008.



Institute Management Committee Meeting

The first meeting of the Sixth Institute Management Committee was held on 20 October 2008. Dr V A Parthasarathy, Director, IISR, Calicut, Dr Umesh Srivastava ADG(H-II), ICAR, New Delhi, Dr P Shukla, Principal Scientist, CISH, Lucknow, Dr M Unnikrishnan, Principal Scientist, CTCRI, Trivandrum, Dr S Natarajan, Dean, HC & RI, Periyakulam, Tamil Nadu, Mr G P Sharma, Senior Finance and Accounts Officer, CMFRI, Cochin, Dr M Anandraj, Project Coordinator (AICRPS), Calicut, Dr S Devasahayam, Principal Scientist, IISR, Calicut, Mr K G Jagadeeshan, Assistant Finance and Accounts officer and Farmers' representatives Mr M J Ommen, Kannur and Mr Rathikumar, Kollam attended the meeting.

Sri Jairam Ramesh, Union Minister of State for Commerce visits the Institute

Shri Jairam Ramesh, Union Minister of State for Commerce, visited the Institute on 21 November 2008. During his speech he stressed the need for replanting of black pepper, organic cultivation of spices and expansion of black pepper cultivation to nontraditional areas to enhance the production and productivity. He also emphasised the need to obtain Geographical Indication in Wayanad pepper and Alappuzha Green cardamom so that the growers would get financial benefits from the high demand and reputation of these produces in the international market.



Institute Research Council Meeting

Mid-term Research Council Meeting of the Institute was held during 22-23 October 2008. Dr V A Parthasarathy, Director, IISR, Calicut chaired the session on Crop Improvement and Biotechnology. The session on Crop Protection was chaired by Dr M Tamil Selvan, Director, Directorate of Arecanut and Spices Development, Calicut. The sessions on Crop Production and Post Harvest Technology and Social Sciences were chaired by Dr S J K Annamalai, Head, CIPHET Research Centre, Coimbatore and Dr S Arulraj, Project Coordinator, AICRP (Palms) respectively.

News from Bioinformatics

The Bioinformatics Centre has organized a five day-training programme on *Agri-bioinformatics: Tools and applications* during 20-24 October 2008. The workshop was inaugurated by Dr Achuthsankar S Nair, Director, Centre for Bioinformatics, University of Kerala, Thiruvananthapuram. Fifteen candidates from various ICAR institutions and Agricultural universities participated in this programme.

The Centre has worked out biological and druggability properties of various phytochemicals from black pepper and major tree spices namely, clove, nutmeg,

allspice, cinnamon and garcinia. The black pepper germplasm database was revamped and updated with various additional features. Two trainees and one M.Sc. student completed their traineeship/MSc project.

National Seminar on Piperaceae

Two-day National Seminar on Piperaceae was held at IISR Calicut, during 21-22 November 2008. The theme of the Seminar was *Harnessing Agro-technologies for Accelerated Production of Economically Important Piper Species*. The seminar was jointly organized by IISR Calicut and National Research Centre for Medicinal and Aromatic Plants, Boriavi, Gujarat and sponsored by Directorate of Arecanut and Spices Development, Calicut. The seminar was inaugurated by Dr D P Ray, Vice-Chancellor, OUAT, Bhubaneswar. During the inaugural session four books namely, Souvenir of the seminar, IISR at a glance, Package of practices of black pepper and Plant pathogens and biocontrol agents-diagnostics and characterization and a database on Piper, *Piper base* were released.



There were five technical sessions—crop improvement, crop production, crop protection, post harvest and value addition and interactive session for farmers. Two hundred and fifty delegates including farmers from Assam, West Bengal, Karnataka, Tamil Nadu and Kerala participated in the seminar. Dr V A Parthasarathy, Director, IISR Calicut, chaired the valedictory session and Dr S Maiti, Director, NRC for Medicinal and Aromatic Plants and Dr M Tamil Selvan, Director, DASD co-chaired.

Consultancy Processing Cell

During July-December 2008, the revenue generation through consultancy activities was Rs. 2.79 lakhs. A share of 55% of the amount was generated from analysis of samples for different nutrients and the remaining amount was from licensing of bio control agent technology know-how. Other consultancy services offered were analysis of biocontrol agents,

biochemical constituents and visits to private farms based on request.

News from Human Resource Development

An online portal (<http://www.spices.res.in/msconline>) was developed for submitting applications for MSc project work and training of PG students which enabled students from all over the country to apply for the same. Sixteen students were admitted for MSc. project work, five for post-MSc training and seven for Ph D work. IISR was recognized as a PG research centre of Kannur University and nine scientists were recognized as research guides.

Transfer of Technology

Technology inputs and Advisory services from ATIC

The technology inputs distributed from the centre include quality planting material of improved varieties of spices, bio control agents, vermi compost, fresh whole spices and scientific publications including extension literature. During the period, planting material worth Rs. 17,659 was distributed from the centre. The proceeds from sale of publications amount to Rs. 19,890. The revenue from sale of bio agents was Rs. 6207. Two hundred and sixty farmers who visited the centre were benefited from advisory services. This includes 151 farmers from Calicut district, 67 from other districts of Kerala and 42 from outside the state. During this period 904 students from various educational institutions visited the centre.

A training course on *Production and processing technology of ginger and turmeric* was organized during 1-5 December 2008 for Agricultural assistants of Kerala State Department of Horticulture.



RSYV / VSAT Video Conferencing Sessions

Under the Rashtriya Sam Vikas Yojana /VSAT programme, sponsored jointly by ISRO and Kerala State Planning Board, seven conferencing lessons were broadcast to the four Village Resource Centres

in Wayanad District of Kerala during July-December 2008.

Krishi Vigyan Kendra

During the period Krishi Vigyan Kendra conducted 27 training programmes on various subjects. A total of 1387 persons participated in these programmes.

The first batch of trainees which included sixteen participants completed six-month training for gardeners on 21 August 2008 and the second batch of training started on 1 August 2008.

Front Line Demonstration

Front line demonstration programme on Performance of improved varieties of black pepper released from IISR, is in progress for the second year, in 18 farmers plots in Anakkampoyil, Koorachundu and Thamarassery in Calicut District. A multi-disciplinary team of scientists visited these plots as per a schedule to follow-up and provide advisory services. Under the programme fifteen follow-up visits were carried out. The following programmes also were carried out during the period:

- Bud-rot management of coconut
- Green manuring of coconut using cowpea



On-Farm Testing

The programme aims at testing the new technologies developed at research stations in the field of crop husbandry, horticulture, animal husbandry, fisheries, etc. to ensure their suitability and sustainability to the specific locations and to suggest or refine the technology accordingly. The major OFT programmes carried out during the period were

- Effectiveness of Ivermectin on control of parasites in goats in 15 farmer's fields.
- Control of foot rot of black pepper using biocontrol consortium in 5 farmer's fields.

हिन्दी अनुभाग

जुलाई से दिसंबर, 2008 तक की अवधि में राजभाषा कार्यान्वयन समिति की तिमाही बैठकें दो बार आयोजित हुईं! संस्थान के स्टाफों में हिन्दी के प्रति रुचि पैदा कराने के लिए प्रस्तुत अवधि में दो हिन्दी कार्यशालाएँ आयोजित कीं! श्रीमती बी बिन्दु हिन्दी प्राध्यापक, हिन्दी शिक्षण योजना, कालिकट ने “हिन्दी टिप्पण एवं आलेखन” के बारे में 15.09.2008 को कक्षा ली! श्रीमती सी मृदुला, सहायक निदेशक (राजभाषा) बी एस एन एल, कालिकट ने राजभाषा हिन्दी के बारे में दिनांक 17.12.2008 को कक्षा चला दी! संस्थान में 15 सितंबर 2008 को हिन्दी सप्ताह का उद्घाटन हुआ! हिन्दी सप्ताह के अवसर पर संस्थान में हिन्दी गीत, आशुभाषण, सुलेख, स्मरण परीक्षण, टिप्पण एवं आलेखन, प्रश्नोत्तरी, अन्ताक्षरी आदि हिन्दी में विभिन्न प्रतियोगिताएँ आयोजित कीं! हिन्दी सप्ताह का समापन समारोह 22 सितंबर 2008 को संपन्न हुआ! नगर राजभाषा कार्यान्वयन समिति की संयुक्त हिन्दी समारोह 2008 में संस्थान के स्टाफ हिन्दी गीत, कविता पाठ, प्रश्नोत्तरी, सुलेख आदि प्रतियोगिताओं में भाग लिये! सुश्री पी.वी. साली, निदेशक का निजी सचिव ने नराकास द्वारा 2 दिसंबर 2008 को होटल मलबार गेट, कालिकट में आयोजित हिन्दी कार्यशाला में भाग ली! संस्थान के सुश्री पी. वी. साली और सुश्री एन. प्रसन्नकुमारी ने 2 दिसंबर 2008 को होटल मलबार गेट, कालिकट में आयोजित नराकास की संयुक्त हिन्दी समारोह 2008 के समापन समारोह में भाग लिया! प्रस्तुत अवधि में दो तिमाही प्रगति रिपोर्ट तैयार करके भेजी गईं! श्री. बी. कृष्णमूर्ति और सुश्री. एन. प्रसन्नकुमारी ने 23.09.2008 को होटल अस्मा टावर, कालिकट में आयोजित नगर राजभाषा कार्यान्वयन समिति की 42वीं बैठक में भाग ली! हिन्दी अनुभाग ने स्पाइसस न्यूज़ जनवरी .जून 2008 एवं रिसर्च हाइलाइट्स 2007-08 का हिन्दी रूपान्तर तैयार करके प्रकाशित किया!

Vigilance awareness week

Vigilance awareness week was observed during 3-7 November 2008. The theme for this year was *Public interest disclosure and protection of informers' resolution*, popularly known as *Whistleblowers' Resolution*. The observance of the week started with

the administration of a pledge. Competitions were conducted on slogan writing for the staff and essay writing for children from the nearby schools. The celebration came to a close on 10 November 2008 with a valedictory function. The chief guest, Mr R Madhavan Nair, Special Correspondent of *The Hindu*, distributed prizes to the winners and Dr M Anandaraj, Project Coordinator (Spices) presided over the function.

News from Library

A demonstration of EBSCO online database was given by Mr. Shaji John on 14 July 2008. A trial access of these databases was provided through the library portal, SpicE-Lib. A demonstration on use of Consortium for electronic Resources in Agriculture (CeRA), an ICAR initiative, was done by Mr B S Ravisankar of M/s Informatics India Ltd. The resource sharing meeting of the library professionals of CPCRI Kasaragod, NRCC Puttur and IISR Calicut was held at IISR on 26 July 2008 to finalise the subscription of foreign journals for the year 2009. A meeting of the library professionals of the above Institutes was held on 25 October 2008 at IISR, Calicut, to discuss the subscription of on-line databases on consortium basis. During the period, 46 reference books, 3 project reports, 13 technical reports and 17 gratis-books were added to the stock. The library facilities were utilized by 941 internal users and 20 external users during the period.

IJC Meeting

The Institute Joint Council Meeting was held on 27 September 2008 and 19 December 2008 under the chairmanship of Dr VA Parthasarathy, Director, IISR, Calicut.

News from SARANI

SARANI, the recreation club of the Institute, celebrated Onam, the festival of Kerala with colour and gaiety. The inter-divisional floral carpet competition, cookery competition, *anthakshary* and Onam feast elicited good participation. The institute also participated in the district level inter-departmental floral carpet competition organized by the Central Government Employees Welfare Coordination Committee.

Farewell functions were held on the occasion of superannuation of staff members and inter-institutional transfer of Dr K Abhirami, Scientist (Hort.) to NRC for Medicinal Aromatic Plants, Boriavi, Gujarat. A demo lecture on Postal Life Insurance by the Senior Superintendent of P&T Department was organized for the benefit of the staff on 13 November.

Publications

Review

Eapen S J & Riju A (2008) Agro-biodiversity informatics with special reference to spices. *Biobytes* 3: 14-19.

Research papers

Asish G R, Utpala Parthasarathy, Zachariah T J, Gobinath P, Mathew P A, Johnson K George & Saji K V (2008) A comparative estimation of (-) hydroxy citric acid in different species of *Garcinia*. *The Horticultural Journal* 21(1):26-29.

Bhadramurthy V, Bhat A I, George J, Thankamani CK & Mathew PA (2008) Variation in the concentration and indexing black pepper plants for PYMoV and CMV through DAS-ELISA. *Journal of Spices and Aromatic Crops* 17: 197-201.

Bhat A I, Jiby M V, Anandaraj M, Bhadramurthy V, Patel K D, Patel N R, Jaiman R K & Agalodia A V (2008) Occurrence, Identification and Characterization of a Phytoplasma associated with Phyllody Disease of Fennel (*Foeniculum vulgare* Mill) in India. *Journal of Phytopathology* 156: 758-761.

Dhanya K, Syamkumar S, Jaleel K & Sasikumar B (2008) Random amplified polymorphic DNA technique for detection of plant based adulterants in chilli (*Capsicum annuum*) powder. *Journal of Spices and Aromatic Crops* 17:75-81.

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New Appointments

Dr Rashid Pervez, joined as Senior Scientist (Nematology) on 5 September 2008.

Sri K G Jagadeesan joined as Asst. Finance & Accounts Officer on 3 October 2008.

Transfer

Dr K Abirami, Scientist (Horticulture) was transferred to NRC for Medicinal and Aromatic Plants, Boriavi, Anand, Gujarat, w.e.f. 26-9-08.

Sri V Vijayan was transferred to CRC, Appangala, as Asst. Administrative Officer w.e.f 11 August 2008.

Promotion

Name	Promoted as	Date
Dr T E Sheeja	Sr. Scientist (Biotechnology)	27-01-2008
Sri P S Manoj	Technical Officer T-9	30-02-2006
Sri A Sudhakaran	Artist-cum-photographer T-5	06-03-2008
Smt N Prasannakumari	Hindi Translator T-5	29-06-2006
Sri E V Ravindran	Technical Assistant T-3	05-09-2007
Sri M Balakrishnan	Technical Assistant T-1-3	13-11-2006
Sri P Sadanandan	Technical Assistant T-1-3	23-12-2003
Sri Faisal K	Stenographer Grade- III	20-11-2007

Retirement

Name	Post	w.e.f.
Sri PA Sheriff	Technical Officer T(7-8)	31-7-2008
Sri PK Janardhanan	Assistant	31-12-2008

Sports

Smt H B Nagamma, Lab attender (SS Gr II), CRC Appangala has bagged First prize at Zonal level and Second prize in ICAR Inter-zone Tournament in Carroms (singles) organized by NAARM, Hyderabad, during 2008. Congratulations to the winner.

SPICES NEWS

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