# INDIAN INSTITUTE OF SPICES RESEARCH

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# PROFESSOR M. S. SWAMINATHAN CALLS FOR DEEMED UNIVERSITY STATUS

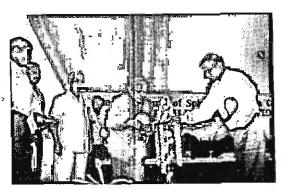




Dr. Ponjab Singh, Director General, ICAR

naugurating the Silver Jubilee celebrations of the Indian Institute of Spices Research (IISR), Kozhikode on 8 October 2001, eminent

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Prof. M.S. Swaminothan inaugurating the Silver Jubilee celebrations of Indian Institute of Spices Research, Kozhikode Dr. G. Kallao, DDG(H) and Dr. Y. R. Sarma, Directar, IISR, Kozhikade etc. are also seen.

# DR. PANJAB SINGH, NEW DIRECTOR GENERAL OF ICAR

Dr. Panjab Singh, a noted agricultural scientist and Director, IARI has taken over as Director General of the Indian Council of Agricultural Research and Secretary, DARE on 4th October 2001. He has been associated with Indian agricultural research and education system for over three decades. He served the Indian agricultural system in various capacities.

Dr. Singh served as ADG (NARP); Director, IGFRI, Jhansi; Vice Chancellor, JNKV, Jabalpur and Director, IARI, New Delhi, earlier. A renowned international expert in agriculture, Dr. Singh served as consultant for World Bank, FAÓ, IDRC and ADB.

He is also recipient of a number of owards like Krishak Bharati Barani Kheti Award, National Productivity Council Award, Rishab Shree Award,

Ram Nath Singh Award, World Food Day Award, Indian Science Congress Award etc. He served as President of Indian Society of Agronomy and organized first International Agronomy Congress.

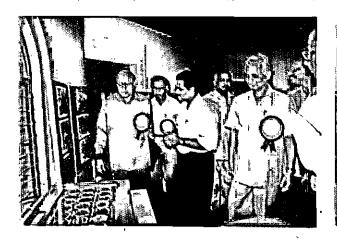
agricultural scientist Padmavibhushan Professor M.S. Swaminathan has urged that the Indian Institute of Spices Research, Kozhikode should be elevated to the status of a deemed university, in recognition of its service to spices sector. The deemed university should have the features of a 'Virtual University' attuned to new developments in information technology - he added. Dr. K.V.Peter, Vice Chancellor, Kerala Agricultural University while presiding over the Silver Jubilee functions, also felt that IISR should immediately be accorded a deemed university status.

Twenty five years are not a substantial period in the growth of an institute. But IISR has made a dint even within this period of 25 years. Prof. Swaminathan lauded the IISR and the scientists for 'winning 27 national awards in 25 years'. However, he reminded the scientists to keep the tempo and strive for improving productivity and quality of spices so as to make Indian spices globolly competitive. Prof. Swaminathan further stressed the need to have a 'Spices Technology Park' having

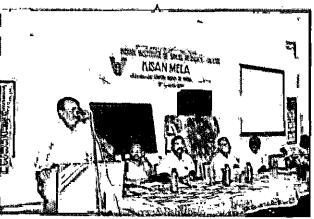
strong linkage with Spices Board and other development agencies.

The two day Silver Jubilee celebrations of the Institute was a venue to bring together many a dignitaries in the field of horticultural research, Commodity Boards, Department of Biotechnology and ICAR and was packed with a host of activities including inauguration of different buildings, release of eleven important publications, launching of IISR website besides dedication of the main institute building to the nation. The Silver Jubilee celebration was attended by about 300 invitees.

The Institute main building was dedicated to the nation by Prof. M.S. Swaminathan on 8th October 2001. Inauguration of the leased line and launching IISR website (www.iisr.org) was done by Dr. Madhan Mohan, Director, DBT, New Delhi. The Silver Jubilee Hall of the institute was inaugurated by Dr. G. Kalloo, DDG (Hort), ICAR, New Delhi. Inauguration of Exhibition of IISR technologies including live specimens of released and pre



Professor M.S. Swaminathon and Dr. G, Kalloo ot the Exhibition Hall



A view of the Kisan mela at Peruvannamuzhi farm

released spices varieties was done by Dr. A.N. Shukla, ADG (Extn), ICAR, New Delhi.

The new green house facility of the institute was inaugurated by Dr. R.N. Pal, ADG (PC), ICAR, New Delhi. The CD, 'Spice gene' was released by Dr. K.V. Peter, Vice Chancellor, Kerala Agricultural University.

The publications released during the Silver Jubilee celebrations include 'Spices Indica' - Silver Jubilee Souvenir and Handbook of herbs and spices' by Dr. G. Kalloo, 'Saga of Spices Research' by Prof. M.S. Swaminathan, 'Spices Varieties' by Dr. K.V. Peter, Blending Tradition and Technology' by Dr. R.N. Pal, 'Spices Bibliography' by Mr. C.J. Jose, IAS, Special issue of 'Indian Spices' by Dr. T. Madhan Mohan, Special issue of 'Kerala Karshakan' by Mr. C.J. Jose, 'IISR Pamphlets' by Dr. P. Rethinam, 'Spices News' by Dr. A.N. Shukla and 'CPCRI Technical Bulletin on Mixed Cropping System' by Dr. Y. R. Sarma, Director, IISR, Kozhikode. Silver Jubilee mementos were presented to the VIPs, Ex. Directors & Project Coordinators of IISR/ AICRP (S) as well as the existing staff members and ex-staff members of IISR, Kozhikode.

Inaugural function was followed by two separate interfaces; one with Scientists - Exporters chaired by Mr. C.J. Jose, IAS, Chairman, Spices Board, Cochin and another one involving Farmers - Scientists chaired by Dr. K.V. A. Bavappa. These two interfaces provided a forum for forward and backward flow of information/priorities needed to shape the spices research of tomorrow. The year

long Silver Jubilee celebrations came to end by a one day Kisan Mela organized at the Institute farm at Peruvannamuzhi on 9-11-2001, which was attended by about 150 farmers.

#### RESEARCH HIGHLIGHTS

### Germplasm collection

In collaboration with NBPGR, Station Trissur, IISR scientists Mr. K.V. Saji and Dr. Johnson K George along with Mr. S.Biju, SRF conducted germplasm exploration surveys at Attapadi tribal belt (Palaghat) Kerala besides Kudremukh National Park, Karnataka. About 50 accessions of different spices are collected from the places.

### Cinnamomum sp. from Nepal

Cinnamomum cecidodaphane Meissn (syn. Cinnamamum glaucescens (Near), an ornamental species of the genus endemic to Western Nepal, has been established in IISR Cinnamon Germplasm Conservatory. Twenty cuttings of this species collected from Nepal during 1999 (International Centre for Integrated Mountain Development (ICIMOD, Kathmandu, Nepal I (courtesy: Dr. B. Sasikumar & Mr. K.V. Saji) were given a hormonal dip in IBA 500 ppm and planted in rooting media (coir dust and sand, 1:1). Only one cutting rooted. This rooted cutting got established and is being multiplied by air layering now.

# Taxonomic identification of biocontrol isolates

Thirty isolates of *Trichoderma* are characterized upto species level. *T. harzianum, T. atroviride, T. koningii, T. pseudokaningii, T. citronoviride, T. longibrachiatum, T. parceramosum* are found more abundant in the population studied.

# Biocontrol agents and PGPRs from Silent Valley

Evaluation of biocontrol efficacy of *Trichoderma* Spp and Plant Growth Promoting Rhizobacteria

# New cardamom, ginger and nutmeg varieties proposed for release

Based on 18 years observation both in experimental station and different locations, three lines of cardamom viz. NKE-9, 12 and 19 are found to be resistant to 'Katte' besides being high yielding. These lines are now recommended for release.

Based on 5 years of multilocational trials and farmers plot trials and quality evaluation, two ginger lines Acc.117 and Acc. 35 are found to be very promising. Acc.117 has 23.2t ha<sup>-1</sup> fresh yield with 23% dry recovery, 1.72% oil, 4.5% oleoresin and 3.2% crude fibre. Acc.35 has 22.4t ha<sup>-1</sup> fresh yield with 19% dry recovery, 2.4% oil, 6.3% oleoresin and 4% crude fibre. Acc.117 is also resistant to nemotode. These new lines are proposed for release as 'IISR Mahima' and 'IISR Rejatha', respectively.

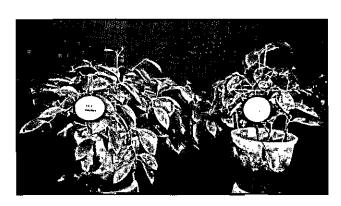
'IISR Viswashree', a clonal selection of nutmeg (A 9/4) has been proposed for release for cultivation in all nutmeg grawing areas of Kerala. Its average yield is 480 kg mace ha<sup>-1</sup> and 3122 kg dry nuts ha<sup>-1</sup> (at 8th year).

(PGPR) isolated from soil samples collected from Silent Valley National Park lead to short listing of six PGPRs and 12 *Trichoderma* isolates for further study.

# Organic compost and black pepper production

Application of organic composts viz., leaf and vermicompost @ 1.25 kg<sup>-1</sup> pot and 10 kg vine<sup>-1</sup> hove sustained the soil fertility, yield and quality of bush

pepper and black pepper in field conditions, respectively.



Effect of leaf compost on growth and yield af bush pepper

#### Molecular profiling of R. solanacearum

Molecular profiling of *Ralstonia solanacearum* using random and specific primers has revealed low level of variability in the isolates studied.

# Sensitivity of *Phytophthora capsici* isolates to potassium phosphonate

Sensitivity of 29 *Phytophthora capsici* isolates to potassium phosphonate was studied. The estimated ED<sub>50</sub> and ED<sub>60</sub> values showed that there was significant variation in the mycelial growth, sporulation, zoospore release and zoospore germination of the isolates at different concentrations of potassium phosphonate.

# Management of rhizome scale of ginger and turmeric

The rhizome scale (Aspidiella hartin) is the most serious pest of ginger and turmeric in storage. Evaluation of various insecticides, plant and organic products indicated that among the various treatments, dipping seed rhizomes in quinalphas (0.075%) was effective for obtaining a higher recovery of rhizomes, higher number of sprouts and lesser incidence of rhizome scale.

# Determination of pesticide residues in ginger

Spraying malothion (0.1%) or monocrotophos (0.075%) at monthly intervals during July to October (4 sprays) or during September to October (2 sprays) along with pruning of freshly infested shoots is recommended for the management of shoot borer (Conogethes punctiferalis), a major insect pest of ginger. Analysis of pesticide residues in dried rhizomes after harvest, showed non-detectable levels of both the insecticides. The study indicated that the present recommendations for the management of shoot borer are environmentally safe and would not affect the export of the produce.

# Biocontrol technology transfer

The institute has commercialized the technology for mass multiplication of *Trichoderma harzianum* P26 strain which is effective in controlling *Phytophthora capsici*, the causal organism of black pepper wilt. This year, four entrepreneurs who already bought the technology last year, renewed the agreement and the technology was sold to one new entrepreneur.

# **Contract Research Project**

The Institute has undertaken a Contract Research Project on the "Evaluation of ATONIK for black pepper growth, yield and quality characteristics". The project is sponsored by M/s Mahamaya Consultants, New Delhi.

#### Radio Talks

#### Dr. John Zachariah

"Value added products of spices and their marketing, AIR, Kozhikode, 19th January 2001.

#### Dr. S.S. Veena

- 1. Diseases of ginger and turmeric, AIR, Kozhikode, 31<sup>st</sup> May 2001.
- 2. Viral disease of black pepper, AIR, Kozhikode, 8<sup>th</sup> August 2001.

# Dr. B. Sasikumar

 Tissue culture and genetic engineering. Will it come to the help of our farmers? Farm Radio School Programme on National Security and Agriculture, AIR, Thiruvananthapuram, 4-9-2001.

# TRANSFER OF TECHNOLOGY

# Consultancy

Sl.No	Name of the consultant	Consulting party	Area on which consultancy provided	
1	Dr.K.S. Krishnamoorthy Dr. V. Srinivasan Dr. B. Sasikumar	The Munar Estates Ltd, Nilgiris Tamil Nadu	Advisory visit on black pepper cultivation practices, nursery practices, disease control etc.	
2	Dr. B. Sasikumar Dr. V. Srinivasan	Badra Estates & Industries Ltd, Chickmagalur Karnataka	Advisory visit on nursery practices including rapid multiplication cultural practices, pest and diseases and varieties suitable for the area	
3	Dr. Y. R. Sarma	Indo Swiss Project, Sikkim	Consultancy services on ginger disease control	
4 .	Dr. Y. R. Sarma	Tata Coffee Ltd, Pollibetta Karnataka	Consultancy services on black pepper disease control.	

Spices varieties released from IISR and other agencies - AIR, Kozhikode, 15th August 2001.

Patenting procedure, AIR, Kozhikode, 15 December 2001

# Dr. S.J. Ankegowda

- 1. Nursery management and cultivation practices of cardamom, AIR, Madikeri, 14<sup>th</sup> July, 2001.
- 2. Cardamom harvesting, processing and cropping system, 28<sup>th</sup> June, 2001, AIR, Madikeri.
- 3. Processing of pepper, 19th July 2001, AIR, Madikeri.

#### Dr. Y.R. Sarma

Biological cantrol for foot rot management of Black Pepper, AIR, Kozhikode, 28<sup>th</sup>December 2001.

# **Extension Pamphlets**

The institute has brought out revised extension pamphlets on the mandate spice crops.

Black pepper, p.16.

Ginger, p.8.

Turmeric, p.8.

Nutmeg, p.8.

Clove, p.8.

Cinnamon, p.8.

Vanilla, p.8.

#### Kisan Mela

To mark the closing ceremony of the year long celebrations of Indian Institute of Spices Research, o Kisan mela was organized on 9-11-01 at IISR Experimental Farm, Peruvannamuzhi. The Kisan mela was organized in collaboration with Union Bank of India and about 150 farmers participated in the mela. The function was inaugurated by Mr. Koshy John, Director (Dev.), Spices Board, Kochi and presided over by Sri. James Edocheril, Vice-President, Chakkittapara Panchayat, Kozhikode. During the function, Dr Y R Sarma, Director, IISR gave brief account of the achievements of the Institute such as new varieties,

production proctices, crop protection measures, post harvest practices and biotechnology. Felicitations were offered by Sri. Augustin Ambattu, Member, Chakkittapara Panchayat; Sri. KG Thomas, Deputy Director, Directorate of Arecanut & Spices Development, Kozhikode, Sri Boban P Mani, Gramin Bank, Koorachundu and Sri. M. N. Babu, Principal Agricultural Officer, Kozhikode. Sri. P A Mathew, Scientist-in Charge, IISR farm welcomed the gathering and Sri Aboabacker Koya, Farm Supdt. proposed vote of thanks during the inaugural function.

Mr. Koshy John, Director (Dev.) Spices Board reiterated that the market for organic spices is growing @ about 20% per annum and advised the farmers to go for organic cultivation. He dispelled the notion that organic spices means absence of chemical fertilizers or pesticides but it envisages a set of practices to produce spices of the required quality and grade as required by the importing countries. Agricultural Development activities of Union Bank of India was outlined by Sri C M. Vijayan, Manager of UBI, Poozhithode branch. Mr. Santhosh Eapen, Scientist(sr. scale)(Nematology), IISR explained the diseases affecting pepper. Biocontrol of the diseases and pests was also discussed. Sri. Jobi Abraham, a vanilla grower and award winning the farmer of Spices Board, narrated his experiences in vanilla culture.

During the mela, Sri Francis Cheruvallil, Koorachundu, Kozhikode was honoured for his original innovation in pepper growing, by Dr. Y R Sarma, Director of the Institute.

# PARTICIPATION IN SYMPOSIA/ SEMINARS TRAINING/MEETING

# Anandaraj, M

Indian Phytopathological Society Southern Zone Meeting 10-12 December 2001, IISR, Kozhikode. Delivered a talk on Digitization on database in plant pathology.

National symposium on eco friendly approaches for plant diseases management centre for advance studies in Botany, University of Madras, Chennai, 22-24, January 2001.

#### Anke Gowda, S.J.

NATP-WG Exposure visit to Co-Pl's and SRFs, Central Soil and Water Conservation Research and Training Institute, RC, Udhaghamandalam, 23-24, March 2001.

Bangalore Bio.Com 2001. Bangalore, 15-17, April 2001.

Sensitization workshop of NATP-Coastal Agroecosystem cum Scientific Advisory Panel Meeting, July 30th - August 1st 2001.

Annual Review Workshop (NATP) Development and Evaluation of Soil and Water Conservation Measures an Land Use Systems for Sustainable Crop Production in Western Ghats of Coastal Region, 6-7, September 2001, CPCRI, Kasargod.

Workshop on Alternate Crops, Mythadi Village, Virajpet, Kodagu, Karnataka, 13, September 2001.

Silver Jubilee Celebration, IISR, Kozhikode,, 8-9, October 2001.

'Kisan 2001', Bangalore, 18-21, October 2001.

National symposium on Plant Physiology and Biochemistry in Transgenic Era and Beyond - Bose Institute, Kolkata, 1-3, December 2001.

# Devasahayam, S

National Symposium on 'Pest Management Strategies-Current Trends and Future Prospects' Chennai, 1-2, February 2001.

Seminar on Molecular Modalities in the Manipulation of Insect Natural Enemies. Chennai, 14 July 2001.

XII Annual Research Council Meeting, Indian Cardamom Research Institute, Myladumpara, 29-30, May 2001 (Chairman-Entomology Session).

Interface-Spice Exporters and Scientists, IISR, Kozhikode, 9 October 2001.

National Group Meeting of Research Workers of AICRPS on Spices, Thrissur, 1-3, November 2001 (Co-Choirman, Plant Protection Session).

Meeting on Spice Exports and Pesticide Residues, Kochi, 22 November 2001.

Indian Phytopathological Society, Southern Zone Meeting, Kozhikode, 10-12, December 2001.

#### Hamza, S

Training on 'Water quality monitoring technique', CWRDM, Kozhikode, 11-14, December 2001.

# Krishnamoorthy, B

Brainstorming session on Intellectual Property Rights with particular reference to plantation crops, CPCRI, Kasargod, 9 January 2001.

Workshop on "Filling up of Inspection Questionnaire of Honorable Parliamentary Committee on Official Language regarding use of Hindi as Ministries/Departments/Attached and Subordinate offices/Undertokings/Institutes etc. of the Central Government at Taj Residency Hotel, Bangalore, 19-28, May 2001.

State level seminar on Spices organized by Commissioner of Horticulture & Plantation Crops, Govt. of Tamil Nadu (Delivered a talk on Tree Spices), Nagarcoil, 23 November 2001.

Policy maters' workshop on Farmers Rights: From legislation to Action & Kerala's Bioresources conservation of Community Agro Biodiversity Centre, M.S.S. Research Foundation, Kalpetta, 24 November 2001.

# Mathew, P.A

First National Seminar on Kokam, Regional Fruit Research Station, Vengurla, Maharashtra, 12-13, May, 2001. Presented a paper entitled "Collection and conservation of *Garcinia* germplasm at Indian Institute of Spices Research, Kozhikode".

National Symposium on Post Harvest Technologies for Agricultural Production and Prospects for the Food Processing industry in the Konkan Region. International Centre, Goa, 23-24, November 2001.

#### Prasath, D

Brainstorming Workshop on 'Promotion of Integrated Sustainable Farming Systems'-Approach in Coorg, Coffee Board, Madikeri, 4th February 2001.

Symposium on 'Plant Genetic Resources Managements: Advances and Challenges', Indian

Society of Plont Genetic Resources, NBPGR, New Delhi, 1-4, August, 2001.

Short term training course on 'Micro propagation of Horticultural and Forestry species' (ICAR-NATP) RPRC, Bhubaneswar, Orrissa, India, 3-23, September 2001.

# Sarma, Y. R

Silver Jubilee Celebrations of IISR and interface with Exporters/Scientists, Farmers 8-9, Oct. 2001, IISR, Kozhikode.

Spices Board Award giving ceremony, Cochin on 17-19, November 2001.

National Group Meeting of Research workers of AICRP (Spices) Kerala Agricultural University, Vellanikkara, 1-2, November 2001

Farmers seminar on the occasion of inauguration on Coconut Development Board building at Eluru, A.P. 1 December 2001.

Policy Makers Workshop on Farmer's Rights From Legislation to Action and Kerala Bio Resource Conservation, CABC M.S. Swaminathan Research Foundation, Kalpetta, Waynad, Kerala, 25-26, November 2001.

Indian Phytopathological Society South Zone Meeting, IISR, Kozhikode. Dec 10-12, 2001.

NAARM training for the executives of ICAR, NAARM, Hyderabad. Dec 21-24, 2001.

#### Sasikumar, B

Brainstorming Session an 'IPR with particular reference to Plantation Crops, CPCRI, Kasargod, 9<sup>th</sup> January 2001.

Agri Intex 2001. TNAU, Coimbatore, 4 July 2001.

Pepper Seminar, Farmer's Day, Orkattery, Malappuram, 17, August 2001

National Seminar on WTO and its impact on Indian Agriculture, Acharya N.G. Ranga Agricultural University, Rajendra Nagar, Hyderabad, 11-12, October 2001. Diamond Jubilee Symposium Hundred years of Post Mendelian Genetics and Plant Breeding - Retrospect and Prospect. Indian Soc. of Genetics and Plant Breeding, NPL, New Delhi, 6-9, November 2001.

Silver Jubilee Celebration and Interface with Spice Exporters/Farmers & Scientists. Indian Institute of Spices Research, Kozhikode, 8-9, October 2001, IISR, Kozhikode.

Sustainable Agriculture and its relevance in the present context-Sustainability for Safety. Farm Radio School Programme organized by Community Agro Biodiversity Centre, M.S. Swaminathan Res. Foundation, Kalpetta and A.I.R Kozhikode, 27 September 2001, Kalpetta. (Delivered the key note address of the programme).

Policy Makers Workshop on Farmer's Rights From Legislation to Action and Kerala Bio Resource Conservation, CABC, M.S. Swaminathan Research Foundation, Kalpetta, Waynad, Kerala, 24, November 2001.

IPR and WTO Awareness Training. Organized by ICAR at DRR, Hyderabad 10-12, July 2001.

State WTO Commission Task force on Spices. Kerala Agricultural University, Vellanikkara, 2 November 2001.

Awareness Seminar on Implementation of New Germplasm Indication/Registration and Protection Act 1999, Spices Board, Kochi, 10 December 2001.

National Group Meeting of Research Workers of AICRP on Spices, Kerala Agricultural University, Vellanikkara, 1-2, November 2001.

Indian Phytopathology South Zone Meeting, IISR, Calicut, 11, December 2002.

# Veena, S.S

National Symposium on Ecofriendly approaches for plant diseases management, CAS in Botany, Chennai, 22-24, January 2001.

Training course on Statistical Software for Data Analysis, 20-31, March 2001, NAARM, Rajendra Nagar, Hyderabad. Indian Phytopathological Society, South Zone Meeting 10-12, Dec. 2001, IISR, Kozhikode.

# Shiva, K N

XVIII meeting of ICAR Regional Committee No. VIII held at CTCRI, Trivandrum, 14-15, December 2001,

### Sriniyasan, V

National conference on 'Zinc in Health & Agriculture' New Delhi, 20-21, February 2001.

International Symposium on 'Importance of Potassium in Nutrient Management for Sustainable Crop Production in India', New Delhi, 3-5, December 2001.

Indian Phytopathological Society, South Zone Meeting 10-12, Dec. 2001, IISR, Kozhikode.

#### Thankamani, C K

National Symposium on 'Pest-Management Strategies-Current Trends and Future Prospects' Chennai, 1-2, February 2001.

Training on 'Isotope 'techniques for water management' at CWRDM, Kozhikode, 12-16, February 2001.

Training course on 'MS Office' from 1-23, June 2001, IASRI, New Delhi.

Interface-Spice Exporters and Scientists, IISR, Kozhikode, 9 October 2001.

#### **GUEST LECTURES DELIVERED / PAPERS PRESENTED**

# Anandaraj, M

Lead lecture on 'IPM in black pepper' at KAU, Vellanikkara, 11, April 2001.

Molecular approach for host pathogen interaction at Centre for Advanced Studies in Botany, University of Madras, Chennai, 21 March 2001.

# Anke Gowda, S J

Cardamom Cultivation Practices. 'Cardamom growers' mela, Badamangala, Coorg, 18 June 2001

Spices cultivation, Urban Cooperative society Ltd, Gokak, Karnataka, 29, October 2001.

Spices cultivation, Pali, Raigad Dist., Maharastra, 24, November, 2001.

#### Devasahayam, S

Pests of black pepper and their management, MSc., (Plantation Development) University of Calicut, April 2001.

Pests of ginger, turmeric and tree spices and their management, MSc (Plantation Development), University of Calicut, April 2001.

#### Hamzà, S

'Black pepper cultivation and processing'. One day Karshaka Seminar organized by Department of Agriculture, Krishi Bhavan, Malappuram, 22, December 2001.

#### John Zachariah, T

Processing of spices, Kisan mela, RARS, Pilicode, (KAU) 31, October 2001.

Processing and value addition of spices. M. Sc. (Plantation Development), University of Calicut.

Processing and value addition of Spices, MSc. (Food Technology), University of Calicut.

Processing and Value addition of spices, Trainees fram Andra Pradesh on 7, September 2001.

'Initiatives in development of food processing industries in Kerala' at KINFRA Meeting, Hotel Taj Residency, Kozhikode 18, August 2001.

Modern technologies / trends in food processing with special reference to spices', Department of Agriculture, Govt. of Kerala, Calicut Tower, Kozhikode. 24, May 2001.

Processing and value addition of Spices, Horticultural Officers from Maharashtra, CPCRI, Kasargod, 4, May 2001.

'Biochemistry of black pepper'- M. Sc (Plantation Development), University of Colicut.

Post Harvest Processing of Spices, Farmers seminar at KVK, Peruvannamuzhi, 3, March 2001.

# Mathew, P A

"Propagation of tree spices" - M. Sc (Plantation Dev.) University of Calicut, 26, March 2001.

#### Sarma, Y R

"Black pepper plant protection strategies", UPASI, Valparai, 8, Jan 2002.

Prospects of Black pepper in oil palm plantation, Farmer's Seminar, Nellore (A.P), 8, June 2002.

Presidential address - Indian Phytopathological South Zone Meeting, IISR, Kozhikode. 10, December 2001.

Black pepper disease management, Plander's Seminar from 'Lab to Land' Hotel Haritagiri, Kalpetta. 27, June 2002.

#### Sasikumar, B

Black pepper Varieties Planters Seminar on 'From Lab to Land', Hotel Haritagiri, Kolpetta organized by Bacto Agro culture Care Pvt. Ltd, Nilgiri, 27, June 2001.

Black pepper and vanilla-varieties and cultivation. Pepper seminar organized by Orkatteri Krishi Bhavan, Malappuram, 17, July 2001.

Botany, variety and varietal improvement of black pepper. Spices production technology Trainees from Andra Pradesh, 3-7, September 2001, 10-17, September 2001, 19-26, November 2001 and 10-12 December 2001.

Propagation and improvement of ginger and turmeric. M.Sc (Plant Dev.) Calicut University.

# Shiva, K N

Role of AICRP on Spices in Research and Development. Spices Production Technology Trainees, IISR, Kozhikode, 26, November 2001.

### Thankamani, C K

Nursery management of black pepper, KVK, Peruvannamuzhi, 3, March 2001.

"Recent trends in establishment and management of black pepper plantation". Spices Production Technology Trainees, IISR, Kozhikode.

Agronomy of Black pepper, ginger and turmeric"-31, March 2001.

#### Veena, S S

Diseases of tree spices and vanilla, Spices Production Technology' training, IISR, Kozhikode, 22, November 2001.

Disease of black pepper and their management, Pepper Seminar, Orkatteri, Krishi Bhavan, Malappuram, 17, August 2001.

#### **PUBLICATIONS**

### Books

- Sarma, Y.R, Sasikumar, B and Chempakam, B, (Eds), 2001. Spices Indica. Silver J u b i l e e Souvenir, Indian Institute of Spices Research, Kozhikode, p.180.
- Sarma, Y.R, Ramana, K.V, Devasahayam, S and Rema J. (Eds.) 2001. The Saga of Spices Research, IISR, Kozhikode, p.184.
- 3. Nirmal Babu, K., Saji, K.V, Krishnamoorty, B and Sarma, Y.R.2001-Varieties of Spices. Indian Institute of Spices Research, Kozhikode, Kerala, p:33.

#### Chapters in Monographs/Books

Devasahayam. S. 2001. Spices Pest Management. In: Handbook of Horticulture (Ed.) Chadha, K.L. ICAR, New Delhi, pp. 883-889.

Krishnamoorthy, B and Rema, J. 2001. Clove. In: Handbook of Harticulture (Ed) Chadha, K. L., ICAR, New Delhi, pp. 708-709.

Krishnamoorthy, B and Rema, J. 2001. Cinnamon, In: Handbook of Horticulture (Ed) Chadha, K. L., ICAR, New Delhi, pp: 705-707.

Krishnomoorthy, B and Remo, J. 2001. Nutmeg. In: Handbook of Horticulture (Ed) Chadha, K. L., ICAR, New Delhi. pp: 722-723.

Krishnamoorthy, B and Rema, J.2001. Nutmeg and mace. In: Handbook of herbs and spices (Ed) Peter, K.V. Wood head publishing Ltd, UK and CRC, New York. p.,: 238-248.

Ravindran, P.N. and Johny A. Kallupurackal. 2001. Black pepper. In: Handbook of herbs and spices (Ed) Peter, K.V. Wood head Publishing Ltd., UK and CRC, New York.pp 62-110.

Sadanandan A K and Hamza S 2001. Studies on heavy metal residues due to continuous application of rock phosphate for sustainable black pepper production. In Proc. National Symposium on combating pollution accumulation in ecosystem for sustainable Agriculture. 27-28, Oct 1998, (Ed.) Gupto, A.K. Allohabad Agricultural Institute, Allahabad, pp. 59-65.

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- The Saga of Spices Research A voyage through history of spices research at Indian Institute of Spices Research (Eds) Y. R. Sarma, K. V. Ramana, S. Devasahayam & J. Rema, pp.180
- Varieties of Spices developed at IISR, Calicut (Eds) K: Nirmal Babu, K.V. Saji, B. Krishnamoorthy & Y. R. Sarma, p.33.
- 4. Spices Bibliography A compilation (Ed.) P A. Sheriff, pp.74.
- IISR Extension Pamphlets Black Pepper, Ginger, Turmeric and Vanilla (Eds) J. Rema & M.S. Madan.
- Blending Tradition and Technology (Eds), Santhosh J. Eapen, S. Devasahayam, M. Anandarai, K.Nirmal Babu, pp. 22.
- Indian Spices (Special issue), Spices Board, Cochin, pp.32.

8. Kerolo Karshakan (Special issue) Farm Information Bureau, Govt. of Kerala, pp.32.

 C.D on Spice Gene, K. V. Saji, Santhosh J. Eapen & Arun Anirudhan

#### **Technical Publications**

- 1) IISR Annual Report 2000 (Ed.) John Zachariah, IISR, Kozhikode
- 2) IISR Research Highlights 2000-2001
- 3) AICRP on Spices Annual Report 2000-2001(Eds.) Ravindran, P.N, Johny A. Kallupurackal and Shiva, K.N, IISR, Kozhikode.
- 4) AICRPS Profile (Eds.) Johny A. Kallupurackal and Ravindran, P.N., IISR, Kozhikode.

# XVI WORKSHOP OF AICRP'ON SPICES

The XVI Workshop (National Meet of Research Workers) of All India Coordinated Research Project on Spices was held at KAU, Vellanikkara, Thrissur from 1-3, November 2001. The three days Workshop was inaugurated by Prof. (Dr.) K.V. Peter, Vice Chancellor, Kerala Agricultural University at the Centrol Auditorium of KAU, Thrissur at 9.30 am on 1st November 2001. Dr. G. Kalloo, DDG (Horticulture), Indian Council of Agricultural Research, New Delhi presided over the function. Dr. P. N. Ravindran, Project Coordinator (Spices), presented the biennial report of AICRP on Spices. 'AICRPS Annual Report 2000-2001', 'AICRP(S)- Profile of Project Coordinators cell' and Three Decades of Spices Research of KAU were released during the occasion.

The workshop recommended seven varieties of different spice crops (cardamom-PV-2, turmeric-TCP-2, coriander-Hisar Sugandh and UD, fenugreek-Hisar Suvarna, Hisar Madhavi, Hisar Muktal, for state/central release. Four more recommendations of different spice crops were also made available to extension agency for general adoption during the warkshop. Over 150 delegates representing 15 States

Agricultural Universities, Agricultural inputs agencies, developmental departments, farming community, traders and exporters participated in the three day deliberations.



Dr. G. Kalloo, DDG(H) inaugurating the workshop. Dr. Y. R. Sarma, Dr. K. V. Peter, Dr. P. N. Ravindran etc. are also seen

### AWARDS/ HONOURS\_

- **Dr. Y. R. Sarma** was invited to deliver **Dr. B.B.Munkur memorial Award** lecture during 54th Annual General Body Meeting of Indian Phytopathological Society held at CPCRI, Kasargod on 10-12, December 2001.
- Mr. S. Devasahayam, Principal Scientist (Entomology) IISR, Kozhikode is awarded Ph. D in Entamology by University of Calicut.
- Mr. M. Hamza Srambickal, Technical Officer, IISR, Kozhikode is awarded Ph. D in Chemistry by University of Calicut.

#### IISR- A CENTRE OF HIGHER EDUCATION

IISR, Kozhikode is centre of advanced research on all aspects of spices. The scientists of the Institute olso serve as Guest Faculty of Calicut University. Many students from different Universities are doing M.Sc./Ph.D work at the institute. Some of the students who completed their studies during the year is given below.

Name of student	Degree	University	Name of the supervisor
K. A. Manoj	M.Sc (Plant. Dev)	Calicut University	B. Sasikumar
A.K. Lincy	"	"	"
P.V. Krishna	M.Sc (Microbiol)	"	"
K. Vasudeva Rao	"	Nagoraja University, A.P	n
Sharmishta, K	·	Bangalore University	M. Anandaraj
Bimi, G.B	"	Bharathiar University, Coimbatore	"
Lisha. K.P	M.Sc (Plant. Dev)	n 4	"
Kishore Kumar	M.Sc (Microbiol)	Mongalore University	Johnson K. George

# **PERSONNEL**

Name	- Designation	Pasted at	Dote of joining
Promotions		7	
Shri. A.P. Sankaran	Asst. Administrative Officer	IISR, Kozhikode	23-11-2001
Shri. K, Vosudevan	Asst. Administrative Officer	CRRI, Cuttack	29-10-2001
Shri. P.K. Janardhanan	Assistant	IISR, Kozhikode	23-11-2001
Shrì. P. Sundaran	UDC	IISR, Kozhikode	23-11-2001
Shir.P. Azgar Sheriff	Technical Officer (T6)	IISR, Kazhikade	03-02-2000
Shri. Hamza Srambikkal	Technical Officer (T6)	IISR, Kozhikode	03-02-2000
Shri. M. Vijayaraghavan	Technical Officer (T4)	lISR, Kozhikode	01-01-2000
Shri, K Balan Nair	Technical Officer (T4)	IISR, Kozhikode	01-01-2000
Shri. N. Chandrahasan	Technical Officer (T4)	IISR, Kozhikode	01-01-2000
Shri. V. Sivaraman	Technical Officer (T4)	IISR, Kozhikode	01-02-2000

SPICES NEWS			JANUARY-DECEMBER 2001
Shri. K. T. Muhammad	Technical Officer (T4)	IISR, Kozhikode	01-02-2000
Shri. K. Kumaran	Technical Officer (T4)	IISR, Kozhikode	01-02-2000
Shri. K. B. Prasannakumar	Technical Assistant (T2)	IISR, Kozhikode	03-09-1998
Shri. L. Balakrishna	Technical Assistant (T2)	IISR, Kozhikode	05-03-1998
Dr. V. S. Korikanthimath	Head, Crop Production & PH	T IISR, Kozhikode	27-07-1998
Dr. K. V. Ramana	Head, Crop Protection	IISR, Kozhikode	08-05-2001
Dr. M. Anandaraj	Principal Scientist	IISR, Kozhikode	27-07-1998
Shri. Jose Abraham	Principal Scientist	IISR, Kozhikode	27-07-1998
Dr. M. N. Venugopal	Principal Scientist	IISR, CRC, Appangalo	27-07-1998
Dr. B. Chempakam	Principal Scientist	IISR, Kozhikode	27-07-1998
Shri. P. A. Mathew	Principál Scientist	IISR, Kozhikode	27-07-1998
Dr. S. Devasahayam	Principal Scientist	IISR, Kozhikode	27-07-1998
Appointments			
Name	Designation	Posted at	Date of joining
Dr. V. Shanmugham	Research Associate	IISR, Kozhikade	05-01-2001
Basavaraj. C. Rajur	Research Associate	IISR, CRC, Appangala	30-01-2001
Nagendra, J	Research Associate	IISR, Kazhikode	15-10-2001
Remi Chandran	Research Associate	IISR, Kozhikode	18-10-2001
Geetha S. Pillai	Research Associate	IISR, Kozhikode	25-09-2001
P.P. Rajan	Research Associate	IISR, Kozhikode	04-07-2001
Neema Antony	Research Associate	IISR, Kozhikode	07-02-2001

Name	Designation	Posted at	Date of joining
Dr. A.K. Gaddi	Research Associate	IISR, CRC, Appangala	03-01-2001
Shri. B. C. Raju	Research Assistant	IISR, CRC, Appangala	30-01-2001
Shri. M. Murugan	Senior Research Fellow	IISR, CRC, Appangala	21-06-2001
Shri. C. V. Chethan	Senior Research Fellow	IISR, CRC, Appangala	31-10-2001
Dr. S. Asha	Senior Research Fellow	IISR, Kozhikode	12-03-2001
Ms. K. Praseetha	Senior Research Fellow	<sup>-</sup> IISR, Kozhikode	03-10-2001
Ms. A. Nisha	Senior Research Fellow	IISR, Kozhikode	10-10-2001
Tajo Abraham	Senior Research Fellow	IISR, Kozhikode	06-10-2001
Shri. Shinoj Subramaniam	Senior Research Fellow	IISR, Peruvannamuzhi	04-08-2001
Shri. Ramnath. P	Senior Research Fellow	IISR, Kozhikode	11-10-2001
Ms. Ganga. G	Senior Research Fellow	IISR, Kozhikode	× 08-10-2001
Shri. Sandeep Varma, R	Senior Research Fellow	IISR, Kozhikode	08-10-2001
Ms. Yamuna George/	Senior Research Fellow	IISR, Kozhikode	03-10-2001
Ms. Rani, V. Jose	Senior Research Fellow	IISR, Kozhikode	27-10-2001
Shri. Bosco Lawrence	Senior Research Fellow	IISR, Kozhikode	04-01-2001
Shri. Shyamkumar, S	Senior Research Fellow	IISR, Kozhikode	28-11-2001
Shri, P. Gopinath	Project Fellow	IISR, Kozhikode	13-09-2001
Mrs. M. R. Rubina	Project Fellow	IISR, Kozhikode	01-05-2001
Shri. K. V. Thusar	Junior Research Fellow	IISR, Kozhikode	11-06-2001
Shri. P. Hareesh	Junior Research Fellow	IISR, Kozhikode	29-01-2001
Mrs. Ansely Jose, M	Technical Assistant	IISR, Kozhikode	20-07-2001

Name	Designation	From	To	Date
Dr. Fameena Hassan	Technical Officer (T6)	IISR, Kozhikode	CMFRI, Kochi	21-11-2001
Ms. K. Usha	Administrative Officer	IISR,Kozhikode	CIFT, Kochi	18-06-2001
Mrs. K. Padminikutty	LDC	IISR, Kozhikode	NRCC, Puttur	07-11-2001
Shri. K. Narayana Kurup	Principal Scientist	CMFRI, Kochi	IISR, Kozhikode	27-08-2001
Dr. K. N. Shiva	Scientist (Hort)	CARI, Port Blair	IISR, Kozhikode	06-09-2001
Shri. K. Vasudevan	AAO	IISR, Kozhikode	CRRI, Cuttack	07-11-2001

#### Retirements

Jose Abraham, Principal Scientist retired on 31-03-2001

V. Balakrishnan Technical Officer retired on 31-05-2001

T. Gopinathan, Asst. Fin. & Accts. Officer retired on 30-9-2001

P.K. Manikka, SS Gr.III, retired on 30-11-2001

Smt. B.R. Janaki, SS Gr.III voluntary retirement on 01-12-2001

# Resignations

Shri. Benny Daniel, Research Associate, Kozhikode resigned on 22-12-2001.

Shri. Basavaraj C. Rajur, Research Associate, Appangala resigned on 21-7-2001.

Shri, M.M. Murugan, Research Fellow, Appangala resigned on 31-7-2001.

Ms. Nisha. A, Research Fellow, Kozhikode resigned on 31-12-2001.

Tejo Abraham, Research Fellow, Kozhikode resigned on 19-11-2001.

Anu Augustine, Research Fellow, Kozhikode resigned on 31-12-2001.

Bosco Lawrence, Research Fellow, Kozhikode resigned on 12-11-2001.

Ms. Rubina, Project Fellow, Kozhikode resigned on 01-09-2001.

Shri, Satheesh, P.V., Technical Assistant, Peruvannamuzhi resigned on 31-01-2001.

Shri. P.V. Romesan, Technical Assistant, Peruvannamuzhi resigned on 06-07-2001.

Shri. Sumesh K.P, Technical Assistant, Peruvannamuzhi resigned on 29-01-2001.

# Death

Sri Madashetty, SS Gr.III expired on 26-9-2001

# **Our New Deputy Director General**



Dr. G. Kalloo, Deputy Director General (H)

Dr. Gautam Kalloo, a renowned vegetable breeder joined as new Deputy Director General (Horticulture) on 28-09-2001. He did his Ph.D in Genetics and Plant Breeding from Banaras Hindu University and Post doctorate from Institute of Vegetable Crops, University of Hannover, Germany. He taught vegetable breeding at Haryana Agricultural University, Hisar for about 22 years and then served as Director, Indian Institute of Vegetable Research, Varanasi prior to the present posting. Dr. G. Kalloo is a recipient of number of awards including ICAR Award for outstanding multidisciplinary Team Research, Best Vegetable Scientist Award etc. A fellow of National Academy of Agricultural Sciences, Indian Society of Genetics and Plant Breeding and Indian Society for Vegetable Sciences, he developed 42 vegetable varieties. He is the author of number of books like Vegetable Breeding (Vol. I-III), Genetic Improvement of Tomato, Improvement of Vegetable Crops etc published by International publishers.

Editor: Dr.B. Sasikumar, Members Dr. Johny A. Kallupurackal, Mr. P.A. Sherif, IISR, Kozhikode.

Published by **Dr.Y.R. Sarma**, Director, IISR, Kozhikode, Telephones: 730294, 731410, 730906 Telex: 0804-250 NRCS IN, Gram: Research, Kozhikode; Fax: 0091-495-730294.

Email: iisrclt@md3.vsnl.net.in.

Website: www.iisr.org

Printed at: Modern Graphics, Cochin-17.Tel/Fax: 347266, 342158. Email: moderngrophics@vsnl.com