



संवादपत्र NEWSLETTER

गोवा के लिए भा.कृ.अनु.प. का अनुसंधान परिसर
(भारतीय कृषि अनुसंधान परिषद)

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(Indian Council of Agricultural Research)

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हर कदम, हर उगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

AgriSearch with a human touch

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From Director's Desk...

Rice is the predominant staple food crop of Goa occupying more than 37 per cent (49,966 ha) of the net cultivated area. Rice is a part of the cultural heritage of the region by all the different religions of the society. Rice is cultivated under three distinct ecologies during *kharif* (34,278 ha) season. In *morod* lands (lateritic uplands covering about 16.4 % of area), midlands or *kher* lands totaling to 32 per cent of area and the *khazan* lands 32 per cent and the rest covered under *rabi* season (15,688 ha).



Although all out efforts are being made by the concerned to bring more area which lies fallow during each season, the pressure from other sectors of the State's developmental processes like booming tourism industry and mining has had a telling effect in this area. Data during the period from 1998-99 to 2008-09 has given a negative trend in terms of area coverage. Coupled with a reduction in area under rice due to various socio-economic factors, there has been a overall decrease of rice productivity (7.5 %) during the ten years period from 1998-99 to 2008-09.

Although rice productivity improved during *kharif* season (especially upto 2004-05) due to the decrease during *rabi* season there was an overall decline suggesting the need for better production technology adoption during the season.

The average productivity of rice in the state is fairly higher in relation to other states (3544 kg/ha). However, there is a scope to further improve the productivity as observed in the demonstration yields at the institute as well as at the farmer's field especially in high yielding varieties and hybrids. Adoption of medium duration high yielding varieties like Karjat-3 which is progressively increasing over the years has a yield potential of about 6.3 t/ha.

Similarly, about 18,000 ha of salt affected area where the local salt tolerant variety Korgut is cultivated gives an average yield of 1.5 to 2.0 t/ha. The research and demonstration trials conducted by the institute as well as by the KVK have amply proved that the yield levels can be increased up to 4 t/ha by adoption of high yielding salt tolerant rice varieties like CSR 27.


Research and developmental interventions specific to the ecology will aid in improving the production and productivity. Following an integrated nutrient management including profitable cropping systems will further accelerate the rice production in different ecologies.

The development of rice production technologies has been taken up by the ICAR Research Complex for Goa over a period of last three decades. The technology is further transferred to the progressive growers by the Krishi Vigyan Kendra attached to the Institute through its front line demonstrations and on-farm testing.

As per official statistics available from within the operational villages and overall socio-economic scenario prevalent in the State, rice farming is rapidly becoming a non viable and sustenance activity due various issues like land fragmentation, non availability of scientific support at the grass-root level, scarce and costly farm labour, land tenancy system, non availability of mechanical

equipment in place of labour and absentee landlords.

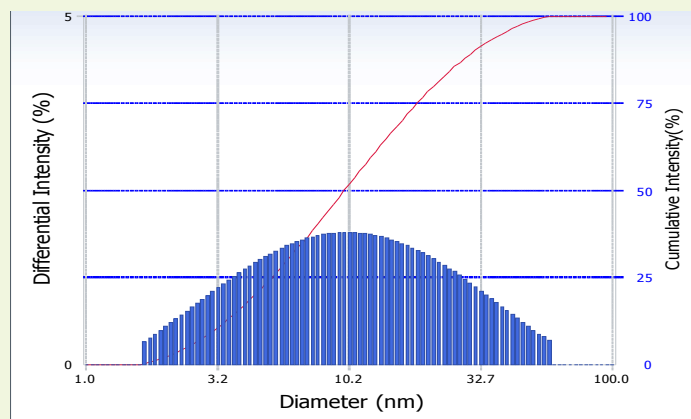
Keeping in view the potential of rice and practical options based on the research at the Institute, the future line of research has been suggested. The areas suggested include development of high yielding salt tolerant rice varieties, resistant to lodging through the crossing of local land races with high yielding varieties, development and popularization of red kernelled rice hybrids suitable to uplands and mid lands, conservation and cataloguing of local germplasm and its systematic use for breeding programme, studies on post harvest and value addition in rice, standardization of management practices for organic rice production and development of suitable rice hybrids with higher heterosis, grain quality and standardization of seed production practices.


N. P. Singh

RESEARCH HIGHLIGHTS

Biosynthesis of nano particles

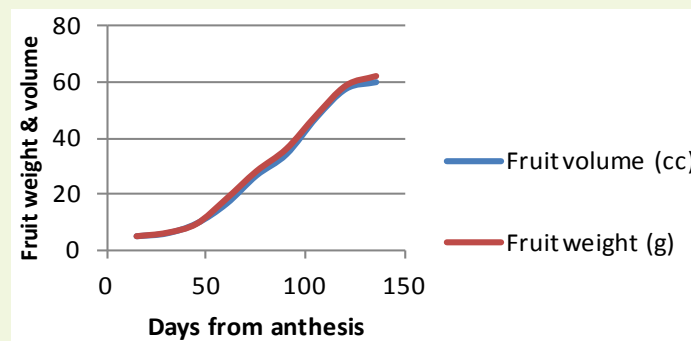
Physical and chemical methods for nano particle synthesis are costly, complicated and produce hazardous toxic waste, which are harmful to animals and environment. Therefore, investigation was undertaken to extracellularly synthesize N nano particle biologically using fungal enzymes. The method described is also called as green synthesis of nano particles. It was found that exposure of nitrogen containing salts to the extracellular fungal enzymes was found to produce the nano particle size bio-transformed product. Extracellular enzyme Fungus – 8, one of the fungus out of eight isolated from soils, could produce bio-transformed product in nano size from 1 mM of NH_4NO_3 after 24 hours (Fig.). The identification of the Fungus – 8, morphology and structure of bio-transformed product is under progress.



Intensity distribution of bio-transformed nitrogen nano-particles using fungus-8 in 1 mM of NH_4NO_3 salt solution after 24 hours of incubation.

Fruit development studies in Kokum

Fruit development studies in *kokum* were taken up from flowering to fruiting. The study was initiated with the onset of flowering in October 2012. The fruit weight and volume follow a sigmoid pattern of growth. There was a gradual increase from anthesis to 45 days after anthesis. Later on, there was a sharp increase by two fold, followed by a second phase of gradual increase. Similarly, fruit length, fruit diameter and rind weight showed a sigmoid pattern of growth, whereas, increase in seed weight showed a double sigmoid growth pattern. The rind thickness remained constant after reaching 0.5 cm 30 days after anthesis. Unlike in other fruits, both total solids



and total acids kept increasing during the development of fruit.

Evaluation of rice genotypes under coastal salinity situations

A total of 31 salinity tolerant rice genotypes including landraces, improved cultivars and advanced breeding lines were evaluated for yield and its contributing characters during wet season 2012 under coastal salinity situations in farmers' field at Chorao Island. Soil EC ranged from 2.08 to 7.14 dS/m and soil pH from 6.01 – 6.36 during the crop growth period.

The experiment was laid out in Randomized block design with three replications. Days to fifty per cent flowering (DFF) ranging from 83 days (Kochri White) to 134.50

days (Bhaluki), plant height (PHT) ranging from 115.30 cm (FL-496) to 192.70 cm (Shidde), panicles per hill (NPT) ranging from 5.60 (Korgut) to 10.20 (Kolyo) and grain yield ranging from 752.38 kg/ha (Kolyo) to 4310.71 kg/ha (Sumati).

Among the 31 entries evaluated, top three entries are Sumati, which recorded grain yield of 4.31 t/ha followed by CSR-23 (4.13 t/ha) and Patnai (3.93 t/ha). The local check variety Korgut recorded grain yield of 2.27 t/ha.

Evaluation of rice germplasm for Rainfed shallow lowland ecology

Rainfed shallow lowland ecosystem is the predominant rice-ecosystem in Goa which accounts for more than 50% (27,000 ha) of the total rice area. A set of 32 rice genotypes/varieties including landraces and improved cultivars were evaluated during wet season 2012 to identify an alternative variety to Jaya.

The experiment was laid out at experimental field of the Institute in Randomized Block Design (RBD) with three replications. Days to fifty per cent flowering (DFF) ranging from 79.33 days (Kochri Red) to 129.67 days (Budda), Plant height (PHT) ranging from 94.20 cm (Karjat-7) to 200.73 cm (Budda), panicles/m² ranging from 200.73 (Budda) to 363 (Naveen) and grain yield ranging from 1309.03 kg/ha (Kochri Red) to 6838.19 kg/ha (Karjat-3).



Among the 32 test entries, top three entries with respect to grain yield are Karjat-3 with grain yield of 6.83 t/ha followed by Uma (6.62 t/ha) and TRC-2005-1 (6.49 t/ha). Check variety Jaya recorded grain yield of 6.04 t/ha.

Stress Tolerant Rice: Salinity Tolerant Breeding Network trial, kharif 2012

The experiment consisted of 31 rice genotypes/cultures was laid out in farmers' field at Chorao village of North Goa representing coastal salinity in Randomized Block Design (RBD) with three replications. The soil EC ranged from 2.08 to 7.14 dS/m and soil pH from 6.01 to 6.36.

Days to fifty per cent flowering ranging from 91.66 (CR 2815-4-26-1-S-3-1-1) days to 131.66 (CARI Dhan 4) with a mean days of 109.20, plant height ranging from 95.00 cm (PNL 9-1-2-7-4-6-1) to 178.86 cm (korgut, local check) with a mean height of 115.12 cm, productive tillers ranging from 5.66 (CR 2815-4-3-1-1-1-1) to 8.26 (NDRK 11-2) with a mean of 6.93, while, grain yield ranging from CR 2218-41-2-1-1-S-B-1 (1207.5 kgs/ha) to CSR - 2K-262 (3620.83 kgs/ha) with a mean of 2571.90 kgs/ha.

Top five entries with respect to grain yield are CSR - 2K-262 (3.62 t/ha), followed by NDRK 11-1 (3.47 t/ha), CSR - 2K-219 (3.42 t/ha), NDRK 11-2 (3.25 t/ha) and PNL

4-35-20-4-1-4 (3.20 t/ha). CSR-36 recorded highest grain yield of 2780 kgs among the four check varieties followed by CSR-27 (2728.33 kgs), CST-7-1 (2255.33 kgs) and korgut with 2087.50 kgs. Entry CSR-2K-262 and NDRK 11-1 recorded significantly higher yield compared to that of the better check variety CSR-36.



Front Line Demonstration on drought tolerant rice variety 'Sabhagi dhan'

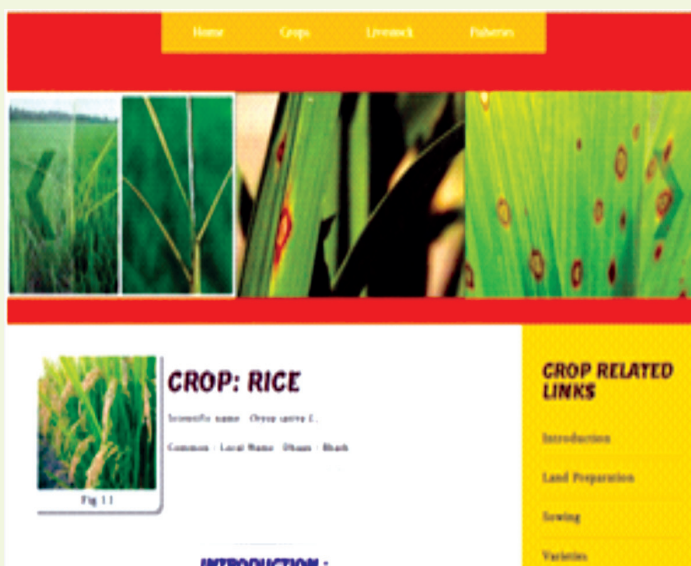
Front Line Demonstrations (FLDs) on high yielding upland variety Sabhagi dhan was taken up in farmers' field at Gaodongrim village, South Goa during *kharif* 2012. Farmers were briefed about the importance of the use of quality seeds, seed replacement, plant protection measures etc. A total of 24 farmers with different land holding size were selected for demonstration. Periodical field visits were made during the various stages of the crop and given regular technical advice as and when required. The performance of Sabhagi dhan was compared with Jyothi, a popular variety among the farmers in the village. The yield of Sabhagi dhan and local check Jyothi were assessed through crop cutting method. Sabhagi dhan recorded grain yield ranging from 4.5 t/ha to 5.0 t/ha while Jyothi recorded grain yield of 3.0 – 3.5 t/ha. A yield advantage of 40 – 50% was observed due to the introduction of this new variety. As the farmers in the



area prefer parboiled rice over the raw rice, the variety responded very well to local mills with head rice recovery of more than 70%. Further, Sabhagi dhan could meet the preference of the farmers with respect to taste and all the farmers have shown interest in taking up the in future as well.

NEW INITIATIVE

Decision Support System launched



Web Address : <http://www.icargoa.res.in/dss/AKMU>

ICAR Research Complex for Goa brings out developments in the information and communication technologies (ICT) to the benefit of farming community. Decision support system (DSS) is the first step in this endeavour to empower the farmers to know the cultivation details from their desk. In this initiative, we provide complete information regarding cultivation of major and important crops of Goa region and practices of dairy, rabbit farming etc. DSS helps farmers to take correct decision or get complete information about the crops or animal husbandry and will serve as a single window system for agricultural information to the farmers of Goa. The information provided at this site would be useful to the growers and we are committed to update additional and relevant information regularly. This portal was launched by Shri. Manohar Parrikar, Hon'ble Chief Minister, Govt. of Goa on 6-03-2013.

MAJOR EVENTS

Seminar on Opportunities in Agriculture

An interactive session on "Human Resource Development and opportunities in Agriculture and allied sectors " was organized on 23rd October, 2012 to enlighten the youth about entrepreneurship development in agriculture and allied sectors. Shri. V.P. Rao, Secretary, Agriculture, Govt. of Goa inaugurated the session. He highlighted the role of agriculture in providing livelihood security to the masses and narrated various activities of agriculture sector. He stressed the need for wider agriculture extension network



for the benefit of the farmer. Dr. S.B. Barbuddhe, Pr. Scientist and HRD cell Coordinator welcomed the dignitaries and the delegates and gave an overview of the programme.

Dr. Narendra Pratap Singh, Director of the Institute delivered key note address. He narrated about the history of agriculture research in India and role of ICAR. He

gave an account of different opportunities in the field of agriculture and allied sectors. He appealed the youth to come forward and make their career in agriculture.

Later in technical session talks on different aspects of entrepreneurship by various scientists were presented. Over 60 participants from different colleges from Goa participated in the program.

Awareness programme on clean milk production and foodborne Infections



An awareness programme on “Clean milk production and foodborne infections” was organized under the aegis of a project sponsored by Department of Biotechnology, Government of India under societal development

programme at the Institute in collaboration with Goa State Cooperative Milk Producers’ Union Ltd., Curti on 26th October, 2012. The awareness programme focussed on quality assurance of animal-based products to meet consumer expectations; knowledge of the causes, of food borne zoonotic and emerging diseases. Over 180 farmers from all over the state of Goa participated in the programme. Dr. Narendra Pratap Singh, Director, Dr. N.C. Sawant, Managing Director, Goa Dairy, Dr. E.B. Chakurkar, Principal Scientist, Dr. S.B. Barbuddhe, Principal Scientist and PI of the project, Dr. R.B. Dhuri, Manager, Animal Health, Goa Dairy and Dr. Z.B. Dubal, Scientist participated in the deliberations. Presentations on clean milk production, foodborne infections, infertility in dairy animals were delivered.

A biennial Workshop of AICRP on Integrated Farming Systems

A biennial workshop of AICRP on Integrated Farming Systems was held at the Institute during 16 - 19 November, 2012. The workshop was inaugurated by Shri. Shripad Yesso Naik, Hon’ble MP, North Goa. Thirty one Co-ordinated Centres including State Agricultural Universities and ICAR Institutes participated in the workshop.

Dr. N. P. Singh, Director, ICAR Research Complex for Goa welcomed the delegates for the biennial workshop and highlighted the importance of integrated farming systems in the predominant small and marginal holdings of the region.

In his introductory remarks, Dr B. Gangwar, Project Director, Project Directorate for Farming Systems Research, Modipuram highlighted the major concern for livelihood security and sustainability of millions of small



and marginal farm households, who are struggling with ever declining operational holding size coupled with rampant escalation of production costs.

Hon’ble MP, North Goa. Shri. Shripad Yesso Naik called for the fruitful transfer of technology from laboratory to the farmers. He also emphasized the need for integrated farming systems in the present agricultural scenario.

Director General, ICAR visited the Institute

Honourable Secretary, DARE and DG, ICAR, Dr. S. Ayyappan visited the Institute on 8 November, 2012. Director and Scientists of the Institute apprised him about the research activities carried out in the Institute. He visited all the experimental units including livestock units and laboratories. While complementing the research activities, he emphasized the need for having basic research in core areas and farmers outreach programmes.



22nd Meeting of ICAR Regional Committee - VII held

Twenty second meeting of Regional Committee VII hosted by ICAR Research Complex for Goa, Old Goa was inaugurated at International Centre, Goa on 9th November, 2012 by Hon'ble Governor of Goa, Shri Bharat Vir Wanchoo. The function was graced by Dr. Ramkrishna Kusmaria, Honourable Minister of Farmer Welfare and Agriculture Development, Government of Madhya Pradesh, Dr. S. Ayyappan, Secretary, DARE and DG, ICAR, Dr. Bhargava, Member, GB, ICAR, Secretaries to Government of India and State Governments, Deputy Director Generals of ICAR, Vice Chancellors of Agricultural Universities, Officials from State Governments, Directors of ICAR Institutes and Scientists from ICAR.

Hon'ble Governor urged the scientists to come forward to promote agricultural production and productivity. He mentioned about the food and nutritional security of the country. He called for identifying the problems faced by the communities and solutions for them. He narrated the role of agriculture and allied sectors in bringing out the stability in life and livelihood security. He called for the revolutionized green revolution for self sufficiency and self reliance. He stressed the need for strengthening the agriculture research and extension services, and evolving strategies to empower farmers. He mentioned about the problems faced by agriculture due to global warming, competitions, reduced soil health, land holding fragmentation and called for the solutions.



Dr. Ramkrishna Kusmaria stressed the need for maintaining the soil health for sustained production. He advocated organic farming, conservation of indigenous livestock breeds. He suggested the idea of starting an University on Organic Farming. He expressed the concern about weak extension linkages and called for its intensification.

Dr. S. Ayyappan, Secretary, DARE and DG, ICAR gave an overall account of agriculture scenario in India vis-à-vis the state under Region VII. He stressed the need for Conservation of Agricultural Resources, their processing, value addition and food safety. He called for registration of more GIs for the crops and commodities in the region. He mentioned about the initiatives taken by ICAR for farmers.

Dr. M. M. Pandey, DDG (Ag. Engg. and NRM), ICAR, New Delhi gave overview of the region and role of the regional committee. Dr. N. P. Singh, Director, ICAR Research Complex for Goa welcomed the dignitaries and the participants. Dr. K. R. Kranthi, Director, CICR, Nagpur and Member Secretary proposed the Vote of Thanks.

Awareness programme on "Clean milk production"



An awareness programme on "Clean milk production" was organized by the Institute in collaboration with Goa Dairy on 13th January, 2013 at Sanquelim. Shri. Anant Shet, Hon. Deputy Speaker, Goa Legislative Assembly was the "Chief Guest" for the function. Dr. Pramod Sawant, MLA,

Sanquelim Constituency, Shri Shrikant Naik, Chairman, Goa Dairy, Dr. N. P. Singh, Director, Dr. V.L. Bhaje, Dy. Director, AH and Veterinary Services, Dr. N.C. Sawant, MD, Goa Dairy were also present on the occasion. Dr. N.P. Singh, Director welcomed the dignitaries and the farmers. He spoke about various programmes of ICAR for benefit of the farming community. Shri. Anant Shet spoke about the importance of hygiene and cleanliness in milk production. Dr. Pramod Sawant urged the dairy farmers to come forward and take advantage of government schemes. Over 350 farmers from Bicholim and Stattari talukas participated in the programme. Kits for mastitis detection were demonstrated and supplied free of cost to the farmers.

National symposium on biotechnological approaches for Plant Protection

The 10th National Symposium on Biotechnological approaches for Plant Protection: Constraints and Opportunities was held at the institute on 27-29th January 2013 in collaboration with Society of Plant Protection

Sciences, New Delhi. Honourable Governor of Goa, Shri. Bharat Vir Wanchoo inaugurated the symposium. He emphasised that the challenges in agriculture are major and scientific methods are important to solve

these issues so that higher growth rate in agriculture can be achieved in future. Further he said that the pest problems complicate the production scenario and the stakeholders should join hands to achieve the target that was committed. He emphasised use of good agricultural practices to mitigate the pest and disease issues. Dr. Narendra Pratap Singh, Director of the institute welcomed the chief guest, dignitaries and the delegates. Dr. Singh described the problems faced by the farmers of the region especially pest and diseases in high value crops. He emphasised the demand of the farmers for new, innovative and eco-friendly technologies including biotechnology to solve these issues. National organising secretary of the symposium, Dr. D. Prasad, introduced the theme of the symposium. He elaborated about the society of plant protection sciences, its objectives and the scientific publication. Shri. V.P. Rao, Secretary,



Agriculture, Govt. of Goa in his address invited the scientists to work hard to help the farming community by developing sustainable technologies. More than 120 scientists from all over India actively participated in the symposium.

Awareness programme on animal health and hygienic production of milk



An awareness programme on “Animal Health and hygienic production of milk” was organized by the Institute under

Tribal Sub Plan or programme in collaboration with Goa Dairy on 18th February, 2013 at Ambalim village, Quepem. Shri Rajan Naik, MLA graced the occasion as the “Chief Guest”. Dr. Narendra Pratap Singh, Director, ICAR Research Complex for Goa, Dr. Bale from Goa Dairy and a team of scientists were also present on the occasion. Shri. Rajan Naik spoke about the importance of hygiene and cleanliness in milk production. He called upon the farmers to take advantage of government schemes. Dr. Narendra Pratap Singh spoke about different programmes and agricultural techniques available with the ICAR. Over 50 farmers from Ambalim and nearby villages participated in the programme. Medicines and mastitis detection kit were distributed to all the farmers.

Honourable Chief Minister of Goa visited the Institute

Shri. Manohar Parrikar, Hon. Chief Minister of Goa visited the Institute on 6th March 2013. He inaugurated the pig farrowing and poultry hatchery units established through Rashtriya Krishi Vikas Yojana (RKVY), Government of India. Dr. Pramod Sawant, Vice-Chairman, Goa Infrastructural Development Corporation, Shri Pandurang Madkaikar, MLA, Cumbharjua Constituency; Shri. S. S. P. Tendulkar, Director, Department of Agriculture, Govt. of Goa and Nodal Officer, RKVY and Dr. Narendra Pratap Singh, Director were also present. Hon. Chief Minister visited the Animal Science Units of the Institute. He also visited to rice and other experimental crop fields and appreciated the work done by the scientists and for giving valuable output to the farmers of Goa. He encouraged the use of latest technology to increase the productivity. After



the inauguration, Hon'ble Chief Minister interacted with the staff of the Institute.

SENSITIZATION PROGRAMME ON IPR



Institute Technology Management Committee meeting (ITMC) and sensitization programme on “Intellectual Property Rights (IPR): Issues & Perspectives” was held

on 1st October, 2012 to discuss matters pertaining to filing of patent application and other IPR issues and to refresh the current knowledge on latest IPR issues and policies in ICAR system. Dr. R.P. Nachane, Principal scientist & Head, Div. of QEI and Member secretary, Zonal Technology Management Centre, West Zone, CIRCOT, Mumbai, Dr. Sanjeev Saxena, Principal Scientist, Intellectual Property and Technology Management Unit, ICAR New Delhi, attended the meeting.

Mr. Rohit Deshpande, Director, Inventillect Consultancy Services Private Limited, Pune, was invited as a special invitee for to enlightening all aspects on technical details about filing procedure, fees etc. for different forms of IPs with the special reference to Patents.

WORKSHOP/SEMINAR/SYMPOSIA/TRAININGS ATTENDED

Date	Name	Programme	Venue
October 6-8, 2012	Dr. V. Arunachalam	National symposium “Noni a tool for wellness	Chennai Trade Center Chennai
October 11- 12, 2012	Dr. N. P. Singh Dr. B. L. Manjunath Dr. E. B. Chakurkar Dr. B. K. Swain Dr. A. R. Desai Dr. R. Ramesh Dr. M. Thangam Dr. S. Priya Devi Dr. P. K. Naik Dr. M. Karunakaran Dr. Maruthadurai R Dr. G. R. Mahajan	International conference on cashew – Sustainable cashew production-challenges and opportunities	Panaji, Goa
November 6-9, 2012	Dr. M. Thangam	5 th Indian Horticulture Congress	PAU, Ludhiana
November 16-19, 2012	Dr. B. L. Manjunath Dr. B. K. Swain	Biennial workshop on integrated Farming system Research	ICAR RC, Goa
November 19, 2012	Dr. M. Thangam	RFD meeting of SMD (NRM)	IASRI, New Delhi
November 20-22, 2012	Dr. A. R. Desai	National Group Meeting of Scientists of AICRP (Cashew)	Navasari Agril. University, Navsari
November 26–30, 2012	Dr. N. P. Singh Dr. B. L. Manjunath	Third International Agronomy Congress	New Delhi
November 28-30, 2012	Dr. B. K. Swain Dr. P. K. Naik	8 th Biennial Animal Nutrition Association Conference on ‘Animal Nutrition Research Strategies for Food Security’	RAJUVAS, Bikaner, Rajasthan
December 3 – 23, 2012	Dr. Z. B. Dubal	Winter school on advance molecular techniques in Gene regulation and functional genomics	NDRI, Karnal
December 3-4, 2012	Mr. Raghuram Kukkude	International conference on content management in networked environment	Tumkur University

December 4-6, 2012	Dr. R. Ramesh	National symposium on blending conventional and modern plant pathology for sustainable agriculture	IIHR, Bangalore
December 5-7, 2012	Dr. B. K. Swain	XXIX annual Conference and National Symposium of Indian Poultry Science Association (IPSACON 2012) on Commercial and rural poultry production: Novel concepts and strategies to meet growing demand and changing consumer needs	Sri Venkateswara Veterinary University, Rajendranagar, Hyderabad
December 8, 2012	Dr. B. K. Swain	Sensitization meeting of Scientist in-charges for all PME cells of ICAR	NDRI, Karnal, Haryana
December 12-15, 2012	Dr. V. Arunachalam Dr. Maruthadurai R. Dr. M.J. Gupta	PLACROSYM XX	Coimbatore
December 14, 2012 – February 14, 2013	Dr. G. R Mahajan	Biosynthesis of nanoparticles	CAZRI, Jodhpur
December 17-21, 2012	Dr. N. P. Singh	Executive Development Programme on Leadership Development	NAARM Hyderabad
January 2-3, 2013	Dr. N. P. Singh	QRT meeting of the Directorate of Cashew Research Puttur	Regional Fruit Research Station, Vengurle.
January 3- 7, 2013	Dr. S. K. Das	100 th Indian Science Congress	Kolkota
January 11, 2013	Dr. V. Arunachalam	RFD meeting of Institutes under Engg. and NRM	IASRI, New Delhi
January 18, 2013	Dr. S. Priya Devi	National papaya Consultation Meet	IIHR, Bengluru
January 28-30, 2013	Dr. M. J. Gupta	International Symposium on Bio-Energy: Challenges and Opportunities,	Hyderabad
February 2-3, 2013	Dr. N. P. Singh Dr. A. R. Desai	National Seminar on production, productivity and quality of spices	Ajmer
February 21, 2013	Dr. M. Thangam	Value chain meeting on oil palm	DOR, Hyderabad
February 26 – March 1, 2013	Dr. R. Ramesh	International workshop on data analytics and applications, 2013	BITS Pilani, Goa
February 27, 2013	Dr. E. B. Chalurkar	Seminar on post mortem techniques and interpretation;	Panaji Goa
March 1- 2, 2013	Dr. G. R. Mahajan	National workshop on future and foresight pathway of agricultural research through youth in India	NASC Complex, New Delhi.
March 2-5, 2013	Dr. N. P. Singh Dr. Manohara K. K.	International Symposium on Sustainable Rice Production and Livelihood Security: Challenges and Opportunities	CRRI, Cuttack
March 8-9, 2013	Dr. N. P. Singh	National Seminar on Enhancing Water Productivity in Agriculture	Institute of Agricultural Sciences, BHU, Varanasi
March 11-12, 2013	Dr. R. Ramesh Mr. R. Kukkude	Capacity building workshop on agropedia and open access Institutional repository	ICRISAT, Hyderabad
March 19, 2013	Dr. S. B. Barbuddhe Dr. Z. B. Dubal.	Workshop on diseases of livestock in Konkan region with reference to Botulism, Leptospirosis & plant toxicities	RFRC, Vengurla
March 21, 2013	Dr. M. J. Gupta	National Seminar on Advances in Protected Cultivation	New Delhi

PERSONALIA

Awards/recognitions

- Dr. Narendra Pratap Singh, Director was conferred with Fellow of Indian Society of Agronomy for the year 2009 at 3rd International Congress held at Indian Agricultural Research Institute, New Delhi during 26-30 November, 2012. 
- Dr. G. R. Mahajan, Scientist (Soil Science) was conferred with Dr. S. P. Raychaudhari Gold Medal of Delhi Chapter of Indian Society of Soil Science, New Delhi for best Ph.D. research work carried out at Indian Agricultural Research Institute, New Delhi. 
- Safeena S.A., Scientist (Floriculture and Landscaping) was awarded Ph.D. in Horticulture by University of Agricultural Sciences, Bangalore, Karnataka with an overall grade point average of 9.14 on 29th March, 2013. The title of the thesis was “Comprehensive studies on evaluation of ornamental filler plants, for production of cut foliage and vase life”. 

Foreign Deputation

- Dr. Narendra Pratap Singh, Director participated in the International conference on : Global food and Nutritional Security: the Role of Science & Technology at Wilton Park, Sussex, U.K. during 17 to 20 October, 2012.
- Dr. Narendra Pratap Singh, Director participated in Leadership Decision making: Optimizing organizational Performance “training programme conducted by the Harvard Kennedy School, Executive Education, Cambridge, MA, USA held during 29 October to 2 November, 2012.
- Dr. Manohara K.K., Scientist attended the short course on Molecular Breeding held at International Rice Research Institute, Philippines between 12th – 23rd November, 2012.
- Dr. S. B. Barbuddhe, Principal Scientist (Veterinary Public Health) visited the Institute of Medical Microbiology and Virology, Justus-Liebig University, Giessen, Germany during 4th- 16th February, 2013.
- Dr. Adavi Rao Desai, Sr. Scientist (Horticulture) participated in the meeting of the Fund Council Reference Group on Harmonization Annual Report held in Paris, France between 14th -15th February, 2013.

Promotions

- Dr. S.K. Das, Principal Scientist w.e.f 1-1-2009
- Dr. B.L. Manjunath, Principal Scientist w.e.f 1-1-2009
- Dr. E.B. Chakurkar, Principal Scientist w.e.f 1-1-2010
- Shri V.D. Kulkarni, T-(7-8) w.e.f 1-1-2010
- Dr. S. B. Barbuddhe, Principal Scientist w.e.f 5-7-2011
- Dr. B.K. Swain, Principal Scientist w.e.f 10-3-2012
- Smt. Lizette Noronha, Private Secretary w.e.f 2-4-2012
- Smt. Montia Rita D’Silva, AAO w.e.f 18-6-2012.
- Shri Agostinho Fernandes, AAO w.e.f 2-7-2012
- Shri Yeswant Gawas, T-4 w.e.f 1-9-2012.
- Smt. Madina Sollapuri, T-6 w.e.f 20-11-2012
- Shri Vinod D Pagi, UDC w.e.f 15-12-2012
- Shri P Rajendran , AO w.e.f 24-12-2012.
- Shri Prakash Parwar, T-1 w.e.f 12-1-2013
- Shri Gokuldas Gawas, T-1 w.e.f 12-1-2013
- Datta A Velip, T-1 w.e.f 14-1-2013
- Prakash V Jannaik, Retd. Technical Officer T-5 w.e.f 3-2-2013

Retirement

- Shri Keshav A Chodnekar, T-5 (Technical Officer) Voluntarily retired on 1-12-2012.
- Shri Prakash V Jannaik, T-4 Superannuated on 31-3-2013

Resignation

- Shri Yeswant K Gawas, T-3 resigned w.e.f 15-10-2012

Transfer

- Dr. Avinash V Nirmale, T-9 (SMS) KVK transferred to NIASM, Baramati. W.e.f 15-12-2012.