



NEWS LETTER

Central Research Institute for Dryland Agriculture

January - June, 2009

From the Director's Desk

Coping with drought: Contingent Crop Planning

The current *kharif* season (2009) has proved to be yet another drought year for the country despite good rainfall forecast initially. Rainfall during June-July and upto 1st fortnight August has remained deficient in several meteorological divisions of the country. Even regions which received good rains during July are again facing dry spells since the 20th July. The distribution of rainfall is quite erratic over time and space in this season. Droughts of this magnitude, pose enormous challenges to scientists, administrators and policy makers in terms of formulating and implementing a contingent cropping strategy minimizes losses to crops and saves the livestock.

CRIDA through its net-work projects of All India Coordinated Research Project for Dryland Agriculture and All India Coordinated Research Project on Agrometeorology has evolved contingent crop strategies for major rainfed agro-ecologies of the country for delayed *kharif* plantings. Crops, varieties and moisture conservation practices have been suggested for delayed planting upto July and August and agronomic measures to save standing crops to some extent and ensure better growth after relief from the stress have been recommended. During the current season, CRIDA



scientists have been closely interacting with the State Agriculture Departments and helped in drawing up and implementing contingency plans in different states.

However, we realize that the contingent strategies can make impact when it can be implemented timely at the ground level across the country. This needs enormous efforts on effective communication, input supply, efficient institutional and logistic arrangements to mobilize the inputs like seeds of contingent crops and varieties at short notice. We also need long term planning on supportive programmes like rainwater harvesting and soil health management. Continuous renovation and up keep of rain water harvesting structures, promotion of seed banks and fodder banks and incentives for conjunctive use of surface and ground water are essential steps in this direction. We strongly believe that the National Rural Employment Guarantee Scheme (NREGS) offers the best platform for taking up drought proofing works, so that the impact of drought on agriculture and allied sectors can be minimized as much as possible. India also need to develop weather insurance products to help farmers to cope with recurrent droughts and crop failures.

B. VENKATESWARLU
Director, CRIDA

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has been coordinating with all the SAUs through the agrometeorology and dryland agriculture project net-works to issue weekly agro-advisories on contingent measures and issues related to organizing inputs including insti-tutional arrangements. The

NEW RESEARCH INITIATIVES

Candidate genes approach for enhanced drought tolerance

Abiotic stresses including drought, high temperature and salinity limit crop yields in over 85 m ha of the net cultivated area in India. The availability of various molecular tools has opened up new avenues in developing tolerance to abiotic stresses through identification, isolation of genes with potential role in tolerance and incorporating these to develop tolerant genotypes through molecular approaches such as transgenics and Marker Assisted Selection (MAS).

Efforts have been initiated to identify Candidate Genes (CG) related to drought tolerance and with a potential role in flowering, seed filling and signaling pathways related to plant development and productivity at the morpho-physiological, phenological biochemical genetic and phenotypic levels in important rainfed crops such as pearl millet and short duration pulses. The public database is being exhaustively searched for CG products and regulatory sequences important for enhanced drought tolerance and improved productivity. Isolation and cloning of genes for drought tolerance using PCR based cloning as well as subtractive hybridization in dryland crops such as sorghum and pearl millet is another target being actively pursued.

We are also conducting bioinformatic analyses to build a network of interacting genes that underlies drought adaptation and in the process identify candidate genes with information on temporal and spatial aspects. The approach will involve clustering analyses of genome-wide expression profile data, and cross-refer cluster results with Gene Ontology (GO) functional categorizations from various plant genome database literature relevant to drought.

M. Maheshwari

Principal Scientist (Plant Physiology)

Economic analysis of farm ponds

The importance of harvesting, conserving and use of rainwater cannot be over emphasized. farm ponds, an important component of rainwater harvesting, have the potential to impart risk mitigation and stability to crop yields and farm incomes. Further, opportunities are now emerging to provide support for large scale implementation of such intervention through NREGS. Establishing evidence on utility and economics of such technologies is

necessary for garnering support for its wide scale adoption. This project will examine the economic viability of farm ponds at the individual and community level. The externalities, especially in the context of more intense development of farm ponds will be examined on down stream flows. The factors that influence adoption and use of farm ponds will also be assessed.

C.A. Rama Rao

Principal Scientist, (Agri.Econ.)

Nano materials to minimize wear in critical parts of implements

Wearing is the biggest problem in farm machinery as many of the tools are prone for soil resistance particularly in coarse textured soils in drylands. To compensate these wear problems, manufacturing industries are increasing the weight and gauge of the tools resulting in 15 to 30 % excess material use. A new project is taken up to use proven wear resistance nano materials in manufacturing of critical parts of farm implements, shovels used for tillage, sowing and intercultivation, cutting blades of self propelled reapers and rotavator blades etc.

Nano structured ceramic coatings produced by plasma spray processes are being developed for a wide variety of applications that require resistance to wear, erosion, cracking and spallation. Ni/SiC composites in particular, have been commercialized for the protection of friction parts, combustion engines and casting moulds due to their high wear resistance. Some of these proven materials will be used to coat critical parts of the farm implements. These will be tested in different soil conditions for their wear resistance .

I. Srinivas,

Senior Scientist (FMP)

Developing on line pest monitoring and advisory system

The State Department of Agriculture, Government of Maharashtra launched an ambitious "Awareness-cum-Surveillance Programme for the management of major pests in soybean-cotton based cropping systems" for 2009-10 with an outlay of Rs. 12.79 crores in collaboration with NCIPM, New Delhi, CIPMC, Nagpur, CICR, Nagpur, DOSR, Indore, CRIDA, Hyderabad, PDKV, Akola,

MAU, Parbhani and MPKV, Rahuri. The programme is in response to the epidemic attack of *Spodoptera* on soybean causing severe yield losses during Kharif 2008. It will be implemented in 7 divisions covering 28 districts and 30 lakh hectares each of soyabean and cotton. An online pest monitoring system is planned for pest based

advisories. CRIDA will document past and present weather information for developing crop-pest-weather relationships, simple pest prediction models and decision support tools.

Y.G. Prasad
Principal Scientist (Entomology)

RESEARCH HIGHLIGHTS

New Horsegram Variety Released

In view of its high drought tolerance and usefulness as contingent crop, CRIDA has been working on horsegram improvement for some time. The central seed committee notified CRIDA-18R, a high yielding variety on 11th February 2009 for cultivation in south zone. It matures in 90-95 days, with a mean seed yield of 842 kg/ha, which is 21% more than the best check PHG-9. It has high pod number and is more synchronized with brisk podding behaviour. It is a brown seeded variety tolerant to pod shattering, Yellow Mosaic Virus, Powdery Mildew and Mites.

P.R. Reddy
Principal Scientist, (Plant Breeding)

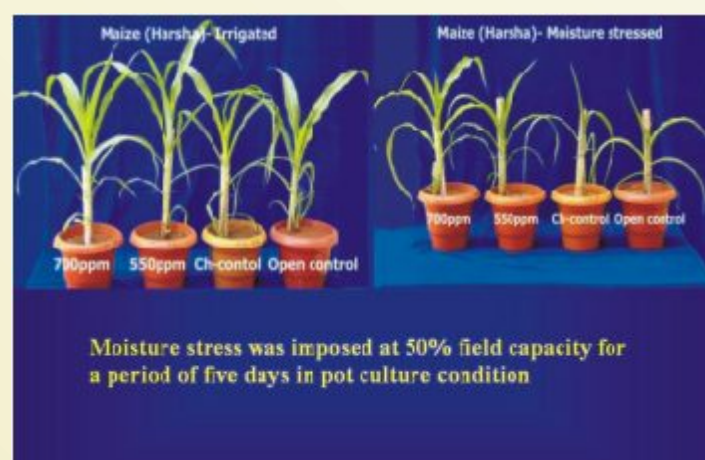
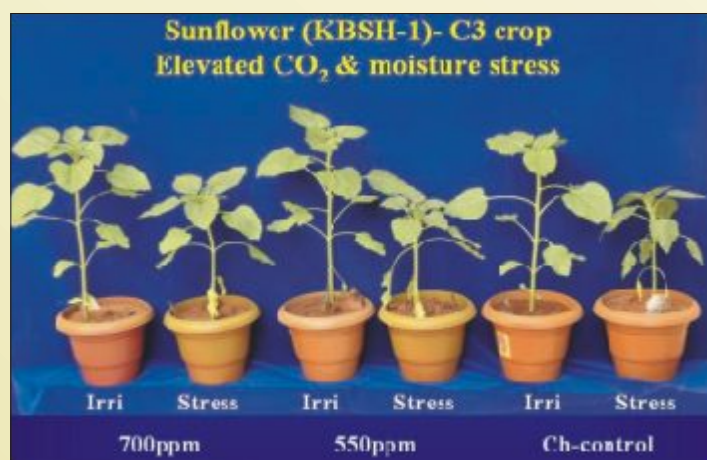


CRIDA-18R , Single Plants (Left) and Field View (Right)

Impact of elevated CO₂ on rainfed crops

Elevation of CO₂ levels is one of the many effects of climate change. In order to understand impact of elevated CO₂ in combination with drought, sunflower and maize having two different photosynthetic systems i.e. C₃ and C₄ were studied. Plants were raised in open top chambers (OTCs) with two elevated levels of CO₂ i.e., 550 and 700ppm along with ambient (365ppm) control. After subjecting plants to drought stress (50% FC) for a period of five days, measurements were made on growth, photosynthesis, and

water potential. Response of both C₃ and C₄ plants was positive to increased levels of CO₂. Under moisture stress, plants exposed to elevated CO₂ maintained better water relations and growth as compared to stressed plants at ambient CO₂ level. The result so far indicated that reduction in biomass due to moisture stress was ameliorated to some extent by elevated CO₂ in both sunflower and maize.



M. Vanaja
Principal Scientist (Plant Physiology)

Impact of NREGS on Rainfed Agriculture: Some Insights from AP

A study was conducted in Anantapur district of A.P. to assess the impact of NREGS on livelihoods and natural resources development. The study covered 54 work sites, 60 jobs cardholders and 72 farmers spread across six villages in three mandals, viz., Uravakonda, Kundurpi and Gandlapenta. Upto 76% households got employment under the scheme in most villages. Farm ponds, earthen and stone bunds were the common NRM works carried out on farmlands. CPR works included restoration of tanks and clearing

of scrub jungles. Preliminary results indicate that the scheme benefited the labour more than the farmers. The scheme significantly reduced the migration. The earnings are used mainly for household food needs, family health, debt repayment followed by purchase of household assets. NRM interventions like farm ponds have contributed to increased crop yields through supplemental irrigation. Detailed report on the study will be available soon from CRIDA.

K. Kareemulla

Principal Scientist (Agril.Econ.)

SCIENTIFIC ACTIVITIES

SAC meeting of KVK

The Scientific Advisory Committee of KVK met on April, 06 2009. It was chaired by Director, CRIDA and attended by Shri S. Balalinganna, JDA, Dr. Narayana Swamy Principal scientist & Incharge, DATT Centre, representatives of line departments of Rangareddy district, NGOs and farmers. The farmers of adopted villages expressed satisfaction over the performance of FLDs on Cotton, Maize and Chickpea, in particular on soil test based balanced nutrition trials. The progress achieved during Rabi 2008-09 was reviewed and action plan proposed for kharif 2009 was finalised.

Review workshop on tank silt amendment project

A one-day review workshop was held at CRIDA on 21st February, 2009 for taking stock of the progress of the project entitled "Tank silt as an Organic Amendment for Improving Soil and Water Productivity" which is sponsored by Ministry of water resources. Under the project, 51 on farm trials were carried out in six districts of the country during kharif 2008. The benefits in terms of crop yields and income varied between 1.62Q/ha to 5.25Q/ha due to application of tank silt on a scientific basis considering the soil type, crop, rainfall and pH of the silt. A simple DSS software was developed for application of tank silt on scientific basis.

National Level Brain Storming on Farm Ponds

The National Workshop-cum-Brain Storming on "Rainwater Harvesting & Reuse through Farm Ponds: Experiences, Issues and Strategies" was held during April 21-22, 2009 at CRIDA. It was attended by 80 participants representing ICAR, NGOs, Govt. Departments, etc. Thirty papers were presented. The current state

of knowledge in water harvesting through small ponds in Vertisol, Alfisol regions in low to medium rainfall conditions and high rainfall hill and mountain regions was reviewed. Technologies and models which can be immediately adopted and gaps needing further research are identified. Recommendations made in three broad areas: i) design aspects of ponds, lining materials, storage and harvestable runoff, etc., ii) lifting, conveyance, efficient use, water productivity and choice of crops, etc. iii) policy, institutional and support systems for upscaling can be seen at [www.crida.ernet.in / NAIP/NW-Sessions/nw.html](http://www.crida.ernet.in/NAIP/NW-Sessions/nw.html).



Director, CRIDA addressing the participants of workshop

RAC meeting

The Seventeenth Research Advisory Committee (RAC) Meeting of the Institute was held on 5th May 2009 under the Chairmanship of Dr. R. Dwarakinath. The members, Drs. S.M. Virmani, R.K. Aggarwal, K. Palanisamy, A.T. Rao, D.C. Upreti and Shri Vijay Borade gave several suggestions on research agenda and technology transfer. The Chairman emphasized that the knowledge pool available with the institute can make a vast difference to the dryland farming community in the country. The main actionable points that emerged from the discussions include:

renewed emphasis on soil and water conservation, updating manual on watershed management, developing a DSSAT for a typical watershed project, focus on basic research on climate change, carbon sequestration and drought monitoring coupled with farmer-centric approach for developing simple and easily adoptable technologies.

Institute Research Council (IRC) Meeting

The IRC meeting was held from 13-16 May, 2009. A total of 98 projects (30 externally funded) were reviewed in the meeting. Eleven projects have been concluded and two projects were given extension. Fifteen new projects have been approved in priority areas. The new technical programme of the Institute can be seen at www.crida.ernet.in.



RAC meeting in progress

NEWS FROM AICRPs

National Group Meetings of AICRPDA

Six National Group meetings were organized at network centers of AICRPDA under different rainfed production systems, viz., 6-9 Jan 2009 at Rajkot (Groundnut and Finger millet based production systems), 16-19 Jan 2009 at Arjia (Maize), 28-31 Jan 2009 at Bijapur (Sorghum), 24-27 Feb 2009 at Madurai (Cotton), 16-19 March 2009 at Indore (Soybean), and 21-24 March 2009 at Hisar (Pearl millet). On going projects of 2008-09 were reviewed and technical programme for 2009-10 was finalised based on the emerging researchable issues at each center's target domain. Dr. B. Venkateswarlu, Director, CRIDA; Dr. P.K. Mishra, Project Coordinator; Dr. G.R. Maruthi Sankar, Principal Scientist and Dr. G. Ravindra Chary, Senior Scientist and scientists from 19 centers and 7 ORPs, dignitaries from SAUs, ICAR Institutes, AICRPs have participated.



National Group Meeting at AICRPDA Centre, Rajkot, JAU on 6 - 9, January, 2009

NATIONAL AGRICULTURAL INNOVATION PROJECT

Visit to Project Site by National Director, NAIP and DDG (NRM)

Dr. Mruthyunjaya, National Director, and Dr. A.K. Singh, Deputy Director General, ICAR visited B. Yerragudi cluster in Kadapa district on 17th January, 2009 and reviewed the progress of the project. Dr. Mruthyunjaya declared open the Village Resource Center (VRC) and the ICT kiosk at B.Yerragudi village. Dr. A.K.

Singh inaugurated the poly house for community nursery at Konampet. They also visited vermicompost unit and custom hiring center at Konampet. The visiting dignitaries accompanied by Director, CRIDA spent the day visiting farmers fields NRM experimental sets, discussing with the members of self help groups and rural youth. The National Director appreciated the efforts and advised the project staff to document the outcomes.



VRC building inaugurated at B. Yerragudi village



The CPI explaining custom hiring approach of sprinkler irrigation

Sixth CIC meeting

The Sixth Consortium Implementation Committee (CIC) meeting was held at CRIDA on February 11, 2009 under the chairmanship of Consortium Leader. The meeting was held to discuss the process of data collection, collation and interpretation, status of expenditure, plan of work for summer 2009 with special focus on NRM works, possibility of convergence with NREGS and over view for kharif 2009 planning.

Training on "Post Harvest Value Addition to Groundnut"

NAIP, CRIDA organized two training programs on "post harvest value addition to groundnut" in collaboration with KVK, CRIDA, during 6-12, February, 2009. The trainings were conducted in two locations, for five clusters which predominantly grow groundnut crop.



Training women on value addition in groundnut

Fourth CAC (Consortium Advisory Committee) meeting

The fourth CAC meeting was held under the chairmanship of Padmasree Dr. I. V. Subba Rao. The annual progress of the project for 2008-09 was reviewed and action plan for 2009 was approved. The Model ICT Kiosk at the lead centre was inaugurated on the occasion.

First Consortium level planning workshop

The First Annual Experience Sharing and Planning Workshop of NAIP component-3 was held at CRIDA on 19 & 20 May, 2009 under the Chairmanship of Dr. B. Venkateswarlu, Consortium Leader. All the Cluster Anchors, Technical Support Partners, CCMTs and TSG Members participated in the workshop. During the first day, the partners shared their experiences on implementing the interventions in their respective clusters. On the second day, the plan of work for kharif 2009 was discussed. Director, CRIDA

complimented the partners for the good work done during the last season and asked them to continue the tempo while documenting the progress.

Third CIC meeting of the sub-project on “Development of Decision Support Systems for pest management”

The Third CIC meeting was chaired by Director, CRIDA, and reviewed the project progress and sorted out administrative, financial and implementation issues. The meeting on 6 June 2009, was attended by the consortium partners: CICR, Nagpur, DRR, Hyderabad and SAC, Ahmedabad.



CAC meeting in progress

Mahbubnagar ICT Kiosk and Rural Godown Inauguration

An ICT Kiosk and rural godown were inaugurated at Jamisthapur village, Mahbubnagar cluster of NAIP on June 18, 2009. Sri Rajeswar Reddy, MLA of Mahbubnagar was the chief guest and the district collector, Mrs. Damayanthi, IAS also graced the occasion. Director, CRIDA explained about the project and different interventions being made for enhancing livelihoods of the people. The district collector requested the villagers to make Jamisthapur a seed village and commended the efforts of CRIDA-NAIP project.



Director, CRIDA explaining project activities to MLA and district collector in a meeting with villagers

IMPORTANT EVENTS

National Science Day Celebrations

The National Science Day was celebrated on 28th February 2009. An elocution competition was organized on the theme “How to use water efficiently in agriculture” and “Climate change and its consequences in day to day life” for the school children. Certificates

and prizes were given away by Director, CRIDA to the winners. Around 120 students attended the Science day from 11 schools. They were shown different laboratories and exposed to the research on dryland agriculture.



Technology transfer to the Industry (MoUs)

CRIDA signed an MoU on 18th November, 2008 with M/s, Kale Industries Latur, Maharashtra for manufacturing of CRIDA implements (3-row planter and manual weeder) based on CRIDA designs.

An MoU was signed between CRIDA and M/s in Vitro International, Bangalore on 30th March, 2009 for transfer of micro propagation technology of teak on a non-exclusive basis.

Patents:

A patent application has been filed by CRIDA for the process of pretreatment of *Jatropha/ Pongamia* seed prior to oil extraction to

reduce free fatty acids and increase oil yield for higher Biodiesel recovery with the southern regional patent office in Chennai on 11-05-09, (No.1084/CHE/2009).

Visit of Parliamentary Committee on Official Language

Members of second Sub-Committee of parliament Committee on Official Language led by Dr. Laxmi Narayan Pandey, reviewed the progress of implementation of Hindi at CRIDA in its various activities. The committee expressed satisfaction on the efforts made by the institute and advised that all publications meant for farmers may be printed in Hindi and a special section on Hindi to be maintained in the institute web site.

PARTICIPATION IN MEETINGS/SEMINARS/SYMPOSIA

1. Dr. Suseelendra Desai, Principal Scientist (Plant Pathology), CRIDA has organized the "First Asian PG PR congress for Sustainable Agriculture" as organizing Secretary at Acharya N.G. Ranga Agriculture University, Rajendranagar, Hyderabad during 21-24 June, 2009.
2. Dr. B. Venkateswarlu, Director, CRIDA participated and made a presentation on "Conservation agriculture in Rainfed farming" in 4th World Congress on Conservation Agriculture at New Delhi on 4th February, 2009.
3. Director, CRIDA has participated in the brain storming session on "Drought management" at Directorate of Maize Research, New Delhi on 24th March, 2009.
4. Director CRIDA has participated as a panelist in the CDM workshop organized at ICRISAT on 3rd April, 2009.
5. Director, CRIDA participated in the working group of the Mission on Sustainable Agriculture (MSA) to draw the National Action Plan on Climate Change at Ministry of Agriculture, New Delhi on 8th April, 2009.
6. Director, CRIDA participated in the 5th Executive Committee Meeting of the National Rainfed Area Authority (NRAA) at New Delhi on 19th June, 2009

IMPORTANT VISITORS

International:

Two US experts on drought monitoring Drs. Chris Funk and Robert Web visited CRIDA on January 21, 2009 under the USAID follow-up exchange visit programme sponsored by Ministry of Agriculture. The experts interacted with CRIDA scientists, on various drought monitoring tools used in USA and India and on possible areas of collaboration.



U.S. experts interact with CRIDA Scientists

Six Chinese scientists from Chinese Academy of Agricultural Sciences visited on March 20, 2009 to know the research on bio-diesel plantations in India.

Fifty Students and 3 faculty members from Cornell University, USA visited on 13th January, 2009 to know about India's research on rainfed agriculture.



VISITS ABROAD

Dr. V. Maruthi, Sr. Scientist (Agronomy) spent one year at Rothamsted research, station U.K. from June 10, 2008 - May 29, 2009 on a Common Wealth Fellowship. She carried out research on "Monitoring traits of root growth and architecture for different crops and genotypes to optimize resource capture in dryland agriculture".

Dr. Kaushalya Ramachandran, National Fellow attended the 7th International Science Conference on Human Dimensions of Global Environmental Change from 26-30 April 2009 at Bonn,

Germany.

Dr. G. Pratibha, Sr. Scientist (Agronomy) visited Wageningen University, Netherlands from 4-15 May, 2009 for training on "Agriculture in transition; Analysis, design and management of sustainable farming systems"

Dr. M. Prabhakar, Senior Scientist (Entomology) visited Oklahoma State University, USA from 15th February to 14th May, 2009 for advanced training in the area of hyperspectral radiometry.

HRD PROGRAMMES



ICAR winter schools at CRIDA

Training on "Web design and content management system"

A training programme on "Web design and content management system" was organized under Agro-web project of NAIP-Comp.1 from February 16 - March 4, 2009. The programme was organized as part of capacity building of staff associated with ARISNET. The participants included staff of CRIDA, one

representative each from DOR, DRR, NRCS and PDP. The course comprised teaching cum practical sessions on html, php, mysql and introduction to Joomla and Moodle.

Training cum workshop on "Statistical tools for data analysis"

A Training-cum-Workshop on Statistical Tools for Data-base analysis was organized in CRIDA from 02.03.2009 to 07.03.2009

under NAIP Comp.4 which was attended by 30 members from organizations Viz., DRR, CICR, Nagpur, NCIPM, IASRI, New Delhi, NAARM, TKRCE etc. The training covered topics such as linear, non-linear regression techniques and diagnostics, non-parametric tests, mixed models, data mining and its applications in agriculture and pest prediction systems, GPS and GIS for decision support and remote sensing applications in agriculture.

Training course on livestock production

A training course on “Technological advances in livestock production for higher productivity and efficient utilization of resources” was organized under the water productivity Scheme from 3-16 March, 2009 to familiarize the participants with advances in livestock production for quality produce and higher profitability, and efficient utilization of available resources. The programme was attended by 17 participants from 10 districts of Andhra Pradesh.



Trainees at workshop

Capacity Building on Watershed Common Guidelines 2008

A Capacity Building training programme on “Common Guidelines 2008 for Watershed Development Projects” (Sponsored by Ministry of Rural Development, Govt. of India) was organized from June 23-29, 2009. The training programme was a mix of information sharing on Common Guidelines 2008 for Watershed Development Projects, lessons learnt from past experiences, discussion session on issues and field visits. Around 22 participants from 3 states attended the programme.

Training Course on Agricultural Mechanization

A training course on “Agricultural Mechanization for Enhancing Water Productivity in Dryland Crops” sponsored by ICAR, under the Water Productivity Scheme was held at CRIDA during June 3-16, 2009. 31 lectures and 4 field visits were organized in which 23 participants from state department of agriculture, animal husbandry and NGOs have attended.

EDP programme for Women Entrepreneurship

The EDP training program was organized by Confederation of Women Entrepreneurs a non-profit NGO from June 22, 2009 at Krishi Vigyan Kendra (CRIDA) Hayatnagar, and sponsored by Entrepreneurship Development Institute, Ahmedabad. This 6 weeks long training programme provided hands on exposure to entrepreneurs in dairy and food processing sector. The objective is to train the entrepreneurs and help them set up food processing businesses in Rangareddy district.

FORTH COMING EVENTS

Trainees at Workshop	Duration	Last date for receiving Application / for Nomination
Capacity building training programme on “Common guidelines 2008 for watershed development projects”	November 24- 30, 2009	November 4, 2009
Capacity building training programme on “Common guidelines 2008 for watershed development projects”	December 1-7, 2009	November 10, 2009
Training Course on “Organic Farming for Sustainable Rainfed Agriculture”	October 1-14, 2009	September 10, 2009
DST training programme on “Advances in plant - atmospheric interactions”	October 22- 11, November 2009	August 31, 2009
Training Course on “Sustainable rural livelihoods through improved livestock farming in rainfed areas”	November 3- 16, 2009	October 13, 2009

For details please visit www.crida.ernet.in

AWARDS AND RECOGNITION



Dr. G. Ravindra Chary, Senior Scientist (Agronomy), is awarded Fellow of Indian Society of Pulses Research and Development, IIPR, Kanpur.

Dr. Shalander Kumar, Principal Scientist (Agricultural Economics) has been awarded Swamy Sahajanand Saraswati Extension Scientist Award for the year 2008.



Dr. Suseelendra Desai, Principal Scientist (Plant Pathology) has been selected by the Food Safety and Standards Authority (FSSA), Government of India as member of "Scientific Panel on Biological Hazards" for a period of 3 years.

Dr. K.A. Gopinath, Senior Scientist (Agronomy) has been selected for Lal Bahadur Shastri Young Scientist Award 2007-08 by ICAR for his work on organic farming.



Dr. P.K. Mishra, Project Coordinator AICRPDA has been awarded Dr.KG. Tejwani Award for 2006-07 for his R&D contributions in Natural Resource Management.

Dr. Arun Kumar Shankar, Senior Scientist (Plant Physiology) has been selected to serve in the editorial board of Journal "Environmental and Experimental Botany" and also as Reader Panel Member by the "The Nature".

PERSONNEL INFORMATION

New Entrants

Dr. Shalander Kumar, joined as Principal Scientist (Agril. Economics) on 12.05.2009.
CRIDA welcomes and wish him success his endeavors.

Retirements

Name	Designation	Date of Superannuation
V. Govardhan	AAO	31.03.09
D. Renuka	T-6	31.04.09
Shri M. Srinivas	T-5	31.01.09

Promotions

Name	Promoted as	Effective date
Dr. K. Ravi Shankar	Senior Scientist (Agri.Extn.)	10.11.2008
Dr. Sreedevi Shankar	Senior Scientist (Food & Nutrition)	26.11.2008
Dr. I. Srinivas	Senior Scientist (FMP)	05.11.2008

CULTURAL AND WELFARE ACTIVITIES

Sports Meet

CRIDA sent 40 member Sports Team to the ICAR South Zone Tournament held at Sugarcane Breeding Institute, Coimbatore during January 20-24, 2009. Dr. C.R. Thyagaraj, Principal Scientist was Chief-De-Mission and also won First Prize (Gold Medal) in Table Tennis with Dr. Y.G. Prasad (Captain), Mr. K. Surender Rao (Vice Captain), Dr. N.N. Reddy and Mr. Ahmed Pasha Shri. S. Mukund won First Prize (Gold Medal) in 500m Cycle Race.

Republic Day

CRIDA celebrated 59th Republic Day with enthusiasm and gaiety on January 26, 2009. Dr. B. Venkateswarlu, Director hoisted the National flag and addressed the gathering. He asked the staff to work with commitment and propel institute on progressive path. On this occasion, sixteen members of CRIDA staff, who completed 25 years of service were honoured with certificates by the Director.

Yoga Course for Staff

A Yoga course on Inner Engineering "Anand Ala" a programme of ISHA Foundation was conducted from 3-9 June, 2009 at CRIDA campus. Fifteen participants attended the programme and were enlightened on aspects of stress relief, enhanced productivity, heightened concentration, memory and decision making abilities, relief from chronic diseases etc.,.

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