



# IAUA



# NEWS

QUARTERLY NEWSLETTER OF INDIAN AGRICULTURAL UNIVERSITIES ASSOCIATION

VOLUME 12 NO. 2

APRIL - JUNE 2012

## CONTENTS

### Spot News

Canadian University honors  
Prof. Madan

### ACHIEVEMENTS/EVENTS

Focus on universities

### Deemed-to-be-Universities

IARI, New Delhi  
IVRI, Izatnagar

### Universities

CCSHAU, Hissar  
DrYSPUHF, Nauni  
GADVASU, Ludhiana  
GBPUAT, Pantnagar  
IGKV, Raipur  
MAFSU, Nagpur  
MPKV, Rahuri  
SKRAU, Bikaner  
SVPUAT, Meerut  
SVVU, Tirupati  
WBUAFS, Kolkata

### Awards

MPKV, Rahuri  
UHS, Bagalkot

## ADVISORY BOARD

Dr C.S.Chakrabarti  
*President*

Dr D.P. Ray  
*Vice-President*

Dr V.K. Taneja  
*Secretary-Treasurer*

Dr K.R. Dhiman  
*Member*

Dr A.K.Srivastava  
*Member*

Dr M.L.Chaudhary  
*Member*

## EDITORIAL BOARD

Dr R. P. Singh  
*Secretary-General, IAUA*

Dr Kirti Singh  
*Ex-Chairman, ASRB*

Prof (Dr) M.P.Yadav  
*Ex-VC, SPVUAT, Meerut*

Dr Ramendra Singh  
*Ex-Chief Agronomist, FAI*

Mr R. S. Gupta  
*Ex-Editor (English), ICAR*

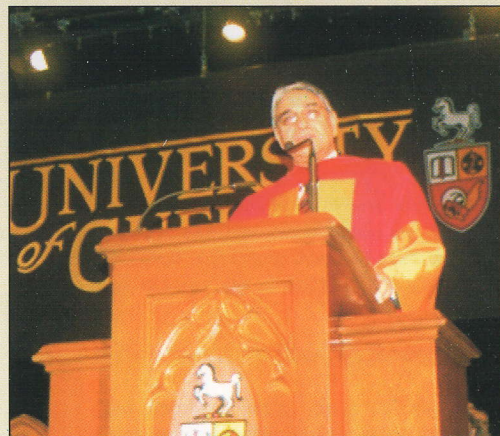
## SPOT NEWS

### Honours to Prof. Madan

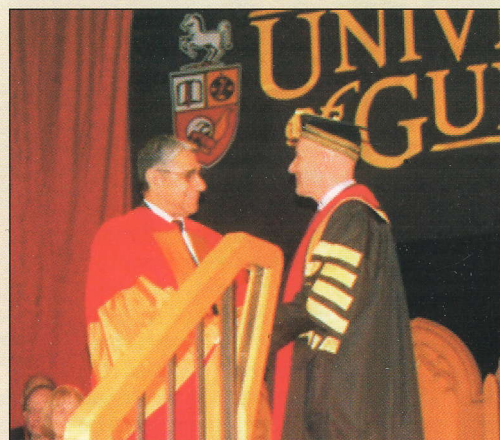
Prof. Moti Lal Madan, Chairman of the livestock subgroup of Haryana Government Farmers' Commission, received the degree of D.Sc. (honoria causa) from university of Guelph, Ontario Canada on 12 June 2012. Ontario Veterinary College, on completion of 150 years in 2012, selected Dr, Madan for this honour.

Prof. Madan was trained as a veterinarian at Panjab University and completed advanced studies in the USA. He was VC of university of Veterinary and Animal Sciences, Mathura (U.P.) and Dr Panjabrao Deshmukh Agricultural University, Akola (Maharashtra). Earlier he was joint Director (Research), NDRI, Karnal and Rajiv Gandhi Embryo Biotechnology Mission Project for Livestock Development. He was also DDG(Animal Sciences), ICAR, New Delhi and Chairman, Animal Biotechnology Task Force, Government of India. Where he provided leadership to animal sciences research in the country and initiated and supported several R&D programmes in biotechnology.

Dr Madan was international consultant for FAO, and was involved in buffalo- development work in Iran, Bulgaria and Brazil. He was Executive Member and Secretary, National Academy of Agricultural Sciences; Executive Member, Veterinary Council of India and Chairman of its Education Committee and Secretary of Association of Agricultural Universities of several national education and policy planning committees in National Agriculture Research System; ICAR, DST, DAHDA and Planning Commission, he was involved in the national livestock and agricultural research, education and development programmes of the country. He was also President, Society of Animal Physiologist of India; and Vice-President, Society for study of Reproduction and fertility.



Prof. Motilal Madan delivering the convocation address at the University of Guelph, Ontario Canada



President and Vice Chancellor of the University of Guelph, Dr Alastair J. S. Summerlee, conferring the degree of Doctor of Sciences (Honoris Causa) on Prof. M. L. Madan

\*\*\*\*\*

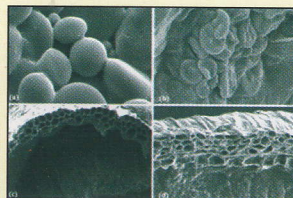


## Deemed-to-be-Universities

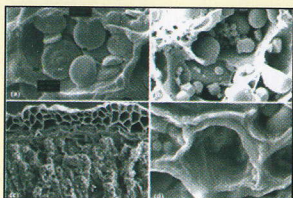
### INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI

#### Terminal heat tolerance in wheat:

Electron microscopic studies of thermo-tolerant ('C306') and susceptible ('PBW 343') wheat cultivars exposed to high temperature (42°C) showed bold and well defined granules with abundant number of endosperm cells in 'C306'; whereas small, non compact and non-spherical granules with fewer number of endosperm cells in the latter. The problem seems to be associated with the sink, where uneven distribution of starch granules was observed under terminal heat stress. Identification of the sources of heat tolerance for grain-starch content in wheat species is an important step towards breeding for heat-tolerant wheat, especially its deposition pattern in the endospermic cells. Biochemical and molecular studies on synthesis and deposition of starch granules in different genotypes of wheat may prove very useful in the adaptation to the terminal heat stress.



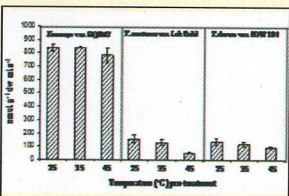
(a) Starch granule synthesized under normal temperature, (b) Starch granules synthesized in response to heat stress (42°C), (c) Structure of aleuronic membrane under normal temperature and (d) Aleuronic membrane under heat stress condition (42°C).



(a) Starch granule synthesized under normal temperature, (b) Starch granules synthesized in response to heat stress (42°C), (c) Structure of aleuronic membrane under normal temperature and (d) Aleuronic membrane under heat stress condition (42°C).

#### Soluble starch synthesis in maize and wheat grain

Decrease in grain growth under high temperature is associated with a decrease in the activity of soluble starch synthase (SSS), because this enzyme is extremely sensitive to high temperature. A comparative analysis of SSS activity in wheat (a crop sensitive to high temperature at grain filling) and maize, (a crop tolerant to high temperature of ~40°C) showed that the latter had a remarkably higher (3-4 times higher) SSS activity than the former. Further investigations revealed lower  $K_m$  and higher catalytic efficiency of maize SSS than of wheat. Exposure of excised developing grains at high temperature revealed no significant decrease in SSS activity in maize, but a significant decrease of 66.8% in wheat. This indicates that an efficient and relatively thermo-stable SSS in maize could possibly be utilized in improving thermo-tolerance for grain growth in wheat.



Soluble starch synthase (SSS) activity in the excised grains (20 DAA) following exposure to different temperature in maize and wheat varieties. Bar represents mean  $\pm$  SE.

#### Decontamination of Pesticides in Water

A study on removal of organochlorine pesticides lindane, aldrin, endosulfan ( $\alpha$ -,  $\beta$  and sulfate) and DDT ( $p,p$ -DDT and  $p,p$ -DDE) from water was undertaken. It revealed that the normal process of treating drinking water, which involves chlorination followed by flocculation with alum treatment, sedimentation and filtration, removes pesticides upto ~28% only. To improve the pesticide-removal efficiency, an inclusion of different adsorbent clay minerals in water-treatment process was followed. The normal clays like kaolinite and bentonite improved the removal upto ~78%. Further, the use of nano-clays improved the removal efficiency upto ~88%, and surface-modified nano-clays upto ~95%. This treatment has the potential to be followed in decontamination of water.



Sh. Harish Rawat and Dr. Charan Das Mahant visiting innovative farmers stall

#### Pusa Krishi Vigyan Mela - 2012

The annual Krishi Vigyan Mela of IARI on the theme "Prosperity through innovative farm technologies" was organized during 1-3 March 2012 at New Delhi. Dr. Charan Das Mahant, Union Minister of State for Agriculture and Food Processing Industries, Government of India

inaugurated it; and Shri Harish Rawat, Union Minister of State for Agriculture, Food Processing Industries and Parliamentary Affairs, presided over the function. Dr. Swapan K. Datta, DDG (Crop Sciences), Dr. H.P. Singh, DDG (Horticulture), and Dr. K.P. Gore, VC, Marathwada Krishi Vidyapeeth, Parbhani, were the guests of honour. Two important publications were released on this occasion and seven farmers or farm experts from different parts of the country were awarded "IARI Fellow" in recognition of their outstanding contributions in technology development and dissemination in partnership with the IARI.

The farm technologies developed by the IARI to improve the productivity and income were displayed in the thematic pandal as well as in its individual pandals of the divisions, centres or units. There were 240 stalls, including 35 of the ICAR institutes, 6 of KVKs, 46 of private companies, 2 of Newspapers, 29 of NGOs and 12 of public sector undertakings, along with the farmers' stalls, which demonstrated or displayed their technologies or products. Services like soil testing, advisory on mushroom cultivation etc were provided to the farmers.



Dr. H.S. Gupta welcoming dignitaries, farmers and farm women

More than one lakh visitors from different parts of the country including the farmers (from 22 states), farm women, extension workers, entrepreneurs, students and others visited the mela. Farmers from 22 States visited the Mela. Seeds of high-yielding varieties of different crops were sold through the institute counter.

There were 3 technical sessions on (i) Crop-based technologies for enhanced productivity and income, (ii) Women empowerment; and (iii) Horticultural technologies for higher income and employment. These helped provide the farmer-scientist-industry interface on different themes.

In the farmers' meet' held on 3 March 2012 several progressive farm-men and farm-women from different states participated and shared their experiences about their innovations in agricultural production during this event. Shri Sompal Shastri, former Minister of State for Agriculture, was the chief guest at the valedictory function. Dr. J.S. Samra, CEO, Rainfed Authority of India, was the chairman of the session; and Dr. R.B. Singh, President, National Academy of Agricultural Sciences; Dr. M.C. Sharma, Director, IVRI, Izatnagar; and Dr. B.S. Hansra, Professor, IGNOU, were the guests of honour. Thirty two progressive farm-men and farm-women from different states were recognized for their innovations in the field of agriculture.

### INDIAN VETERINARY RESEARCH INSTITUTE, IZATNAGAR

#### Technology transfer to commercial houses

The ICAR organized a "National Technology Day" on 11<sup>th</sup> May at Krishi Bhawan, New Delhi. On this occasion, Dr. S. Ayyappan, Director General, ICAR and Secretary, DARE, New Delhi, transferred six technologies of the IVRI, Izatnagar, to three commercial houses. Three memoranda of understanding (MoUs) were signed between Dr. M.C. Sharma, Director, IVRI, and the representatives of the concerned commercial houses viz, Dr. K. Balasubramanyam, Managing Director of Indian Immunologicals Ltd., Hyderabad, (Andhra Pradesh); Dr. Renuka Prasad, Director, Institute of Animal Health and Veterinary Biologicals, Bangalore (Karnataka); and Dr. Manohar Rao, Managing Director, Vivimed Labs, Hyderabad.



Dr. Ayyappan offering the technology to commercial houses

The technologies were the vaccines and diagnostics, viz., Goat pox and Swine fever vaccines transferred to M/S IIL, Hyderabad; PPR, Goat pox and Sheep pox vaccines to M/s IAHVB, Bangalore; and *Brucella abortus* and Blue-tongue-detection kits to M/S Vivimed Lab, Hyderabad. These technologies will be used in National Disease Control Programmes being initiated by Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India. The total license fee for these technologies was worked out as Rs. 127 lakhs with royalty on production basis for 10-15 years.



### MoU for IVRI projects

A meeting of Institute Technology Management Committee of the IVRI was held on 18 May 2012 under the chairmanship of Prof. M.C. Sharma, Director-cum-VC, to discuss collaborative or sponsored projects of the institute proposed under PPP model for commercialization.

On this occasion, a MoU was signed by Dr M.C. Sharma on behalf of the IVRI and the representative from M/s Pfizer Pharmaceutical India Private Ltd, Mumbai, for commercialization of a collaborative project "Investigation on prevalence of bovine viral diarrhea virus".

### MoU Signed between IVRI and PHFI, New Delhi

Another MoU was signed between the institute (by Dr M.C.Sharma) and Public Health Foundation of India, New Delhi by Dr Manish Kakkar, Senior Public Health Specialist on 21 May 2012 for providing consultancy services under a 3 year project entitled "Identifying sources, pathways and risk drivers in ecosystems of Japanese encephalitis in an epidemic-prone north Indian district". The project involves data collection by household surveys, GPS and remote sensing as well as sample collection from vectors, humans and swine. The study aims to improve the health and livelihoods of rural population of India residing in areas susceptible to this disease.

### In silico Approach for Genome Analysis

A national workshop-cum-training programme. was organized on "In silico approach for genome analysis" by Bio-informatics Centre of IVRI, Izatnagar during 22-24 March 2012. It was sponsored by Department of Biotechnology, Ministry of Science & Technology, Government of India. There were 25 participants from different parts of the country.

Prof. M.C. Sharma, the chief guest, presided over the function. He emphasized the importance of bio-informatics in integration of mathematical, statistical and computational methods to analyse the biological, biochemical and biophysical data. He stated that bioinformatics has proved invaluable support to researchers veterinary in collection, computation, storage, retrieval and analysis of biological data through the application of computational algorithms, leading to newer innovations. Dr Peyush Goyal, Scientist, DBT, New Delhi, as guest of honour, briefed about the DBT initiatives taken for setting up Bioinformatics Centres at different institutes or universities. Dr Ashok K. Tiwari, Course Director and Co-ordinator, Bio-informatics Centre, briefed about the objectives and achievements of this hands-on-training in different genomics tools.

### Training course on ultrasonography

A 10 day training course on Ultrasonography was held from 19 to 28 April 2012 at Division of Surgery, wherein 12 Veterinary Officers from Department of Animal Husbandry, Government of Uttar Pradesh participated. Prof. M.C. Sharma, said that it is necessary to use the imaging technique for precise diagnosis and effective treatment of animal diseases, and suggested that greater emphasis should be laid on hands-on training in ultrasonography and other related diagnostic modalities. Dr M.M.S. Zama, Head, Division of Surgery, briefed about the training programme, encompassing the inputs from Animal Reproduction, Veterinary Medicine and other related subjects.

### Memorial pillar on rinderpest eradication.

A memorial pillar on 2 June 2012 at Mukteswar campus was unveiled to celebrate the eradication of rinderpest from the world. A workshop entitled "Emerging infectious and trans-boundary animal diseases challenges for 21<sup>st</sup> century" was also organized on this day. The participants were eminent scientists and contributors in the field of rinderpest eradication programme. Others who graced the occasion were Dr R.M. Acharya, former DDG(Animal Science), ICAR; Prof. M.C. Sharma, Director and VC, IVRI; Dr Gaya Prasad, ADG(Animal Health), ICAR; Dr B.B. Mallick, former Director, IVRI and VC,



MOU between IVRI and PPIPL, Mumbai



MOU between IVRI and PHFI, New Delhi



Dr Piyush Goel and other members



Dr M.C.Sharma with participants



Dignitaries at the celebration

Animal and Fisheries University, Kolkata; Dr S.C. Suneja, former Director, NPRI; Prof. P.K. Uppal, former Director, NRC on Equines; Prof. M.P. Yadav, Former Director, IVRI and VC, SVPUAT, Meerut; Dr A.B. Pandey, Station-in-Charge, Mukteswar campus; and Dr J.M. Kataria, Joint Director (Research).

## Universities

### CCS HARYANA AGRICULTURAL UNIVERSITY, HISAR

#### Ex-trainee Sammelan

An ex-trainee Sammelan of the trainees who had earlier taken training for vocational courses was organized on 29 June, 2012 at KVK, Rohtak campus. During the sammelan, the problems and future prospects of various agricultural and allied activities as an enterprises were discussed at length. Dr Nishi Sethi, AD(FAS), CCSHAU, Hisar acted the chief guest. Fifty farm women and farmers attended the programme. Ex-trainees shared their experiences.



Training participants

#### Agricultural officers workshop

Agricultural Officers' Workshop for Kharif Crops was organized during 6-7 April, 2011 to finalize the package of practices based on the experiences of field staff and research findings. The pooled data of 2 years revealed that in the evaluation and screening of, Bt cotton, 6 Bt varieties. (Pancham BG II, Ankur 3028, BG I I, JKCH 1050, MRC7017 and MRC7361) were found better among the 85 Bt varieties screened. The technology of direct seeding of Basmati rice was recommended for inclusion in the package of practices. The recommendations of the workshop are as given below.



Kharif workshop in session

- To control foot-rot and bakane disease, apply carbendazim @1g/m<sup>2</sup> in rice after mixing with sand, 7 days before uprooting the nursery plants.
- To control mixed weeds in the transplanted rice, spray Tarak10% (Bispyribac-Na) 100 ml/acre in 120 litres water, 15-20 days after transplanting.
- Use biomix (Azactobacter + Azospirillum+ Phosphate) as seed inoculants @100ml/acre along with recommended doses of fertilizers.

#### Guar mela at KVK, Sirsa

Krishi Vigyan Kendra, Sirsa organized a Kisan mela on 19 June 2012 on guar crop production. In this mela, 28 stalls were put up relating to agricultural implements, by self help groups, livestock, and pharmaceuticals and fertilizers. More than 1500 progressive farmers attended it. The university scientists delivered specialized lectures. Dr J. S. Dhankhar, Director of Extension Education was the chief guest. The Buzz session was organized and the winning farmers were felicitated.



Dr J. S. Dhankhar addressing the farmers of Guar Mela organized

### DR Y.S. PARMAR UNIVERSITY OF HORTICULTURE AND FORESTRY, NAUNI, SOLAN

#### Monitoring and evaluation of crop based projects

The Department of Social Sciences organized a Technical training-cum-workshop on Monitoring and evaluation of crop-based projects during 21-23 March 2012 for the project staff of H.P. Mid-Himalayan Watershed Development Project. Total 25 delegates attended this programme. It was divided into six sessions. Dr K. R. Dhiman, VC, during the inaugural address highlighted the importance of monitoring and evaluation of agricultural development projects or programmes in the present context. Basic concepts of various costs and budgets as applied in the process of monitoring and evaluation of the crop projects, were explained. Session II was devoted to the issues on identification, selection, formulation and related aspects of project preparation. The Technical Session III focused mainly on the methodological issues involved in the financial, economic and investment analysis of agricultural projects, within the broader ambit of watershed development projects. In session IV the field visit to Mahog village near Chail was organized to familiarize the participants with the activities undertaken by the



Participants of the training



watershed of that village.

Sessions V mainly focused on the financing, human resource management, sampling methods and risks involved in crop-project issues. The Technical Session VI ended with the feedback from the participants, valedictory address and distribution of certificates. Dr R.C. Sharma, Director of Research, UHF, Nauni was the chairman of this session. He appreciated the endeavour to organize the training programme successfully. Shri Arvind Alipuria, CCF cum Executive Director was Guest of Honour.

#### The following recommendations emerged from the workshop:

- In future training programmes of long duration, (1 week or more) should be organized.
- The managers of Mid Himalayan Watershed Project should be given trainings on project prioritization and implementation.
- Various case studies of investment and financial analysis of horticultural and afforestation projects should be deliberated in the future training programmes.
- Greater emphasis should be laid on practical exercises related to project monitoring and evaluation.

#### Precision Farming for Mitigating Effects of Climate Change

A brain-storming session on precision farming technologies for mitigating the effects of climate change was organized by Precision Farming Development Centre, Department of Soil Science and Water Management, UHF, Nauni during 24-25 February, 2012 at Barog, Solan. Focus was laid on different precision-farming technologies for sustainable natural resource management, and the needed technological interventions in the changing climate scenario. It was attended by 70 delegates from different institutions or SAUs. The resource persons included eminent scientists, national professors from SAUs, and the ICAR institutes, and officials from the departments of agriculture, horticulture and forestry. Dr K. R. Dhiman, VC, in his presidential address laid emphasis on the importance of precision farming technologies for improving the input-use efficiencies, resulting in higher crop productivity under the changing climate. Dr R C Sharma, Director of Research, underlined the importance of precision-farming technologies at micro level for improving the financial conditions of the farmers. Dr J. N. Raina, Head, Department of Soil Science and Water Management, gave an overview of the activities of the department being undertaken to meet the challenges of the changing climate. Shri. R S Spehia, PI, PFDC highlighted the rationale of the brain-storming session. Total 16 lectures were delivered, covering the theme areas, focused on: Climate change: impact and mitigation strategies for sustainable agricultural development; climate change driven natural resource management; crop productivity in the changing climate and its socio-economic impact; and technological options to combat climate-change impacts.

#### The recommendations of the session are given below

For every rise of 1°C in temperature, yields of most of the agricultural crops decline by 3-7%, and their water requirement increase significantly. Therefore it is necessary to improve the water-use efficiency and save water by intervention of soil, water and site-specific nutrient-management technologies like drip or sprinkler irrigation, fertigation, in-situ moisture conservation, rain-water harvesting and its recycling.

In Himalayas the climate change is leading to melting of glacier, rise in temperature, and shift in rainfall pattern, which can be tackled by the application of basic precision farming technologies to increase the farm produce and quality under limited available land and water resources.

As the land holdings are small in India, especially in the Himalayan region, the application of advanced precision-farming technologies (GIS, GPS, remote sensing, laser land-levellers etc.) may not be economical for individual farmers. Therefore, intervention of central governmental is needed in the form of incentives to the state governments, so that these technologies can be taken to the grass-root level (block or district level).

Research is needed on the use of autotrophic bacteria in carbon sequestration from the atmosphere on the analogy of the bacteria that is being used to remove oil spill from the oceans.

The Himalayan states have the potential to become carbon-neutral states (Himachal Pradesh government is striving hard towards this objective) owing to huge renewable energy sources, but more sinks (in agriculture or forestry sectors) for carbon sequestration need to be developed to mitigate the effects of global warming.



Dr K R Dhiman, addressing delegates



Delegates in the Brainstorming Session

## GURU ANGAD DEV VETERINARY AND ANIMAL SCIENCES UNIVERSITY, LUDHIANA

#### Scientist to Handle Cancer Research

Dr. B.V. Sunil Kumar, Assistant Biochemist from the School of Animal Biotechnology, GADVASU, has been sanctioned a project titled "Development and evaluation of sero-diagnostic assay for timely diagnosis and prognosis of mammary tumors" by the Department of Biotechnology (DBT), Government of India, under its Rapid Grant for Young Investigators (RGYI) 2011-12 scheme. The project envisages easier ways and means to diagnose these tumours at an early stage with dog as a model animal. Canine mammary tumour is comparable with human breast tumor. The project envisages developing recombinant tumour associated antigens' based sandwich ELISA for timely detection of mammary tumours. It also highlights the need to identify serological markers to diagnose the disease.

#### Students of College of Dairy Science and Technology bring laurels

Two students of the College of Dairy Science and Technology got cleared in ICAR- JRF examination, 2012. Both the students secured high ranks in prestigious All India Entrance Examination for Admission to Post Graduate Programme. Ms. Alka Parmar secured 13<sup>th</sup> rank in Dairy Science discipline while Mr. Gursham Singh secured 15<sup>th</sup> rank in Dairy Technology discipline in Dairy Science.



Dr V.K. Taneja, VC, with the students

#### In-House training on Liquid chromatography techniques

The department of Veterinary Pharmacology & Toxicology in collaboration with Waters (India) Pvt Ltd. organized a one day In-House training on Liquid chromatography techniques and Effective Method Development. Liquid chromatography techniques are beneficial for studying the pharmacokinetics of various drugs and thereby devising strategies for their effective and judicious use. This helps in making the treatment more cost effective. In addition, the liquid chromatography techniques can also be employed for estimating and analyzing the effects of various pesticides. The training was attended by more than 40 scientists as well as students.

#### "Awarded Fellow" of IAAVR

Dr Charan Kamal Singh, Professor has been conferred with the award of Fellowship of Indian Association for the Advancement of Veterinary Research (IAAVR). Dr Singh, who is a noted expert in the field of rabies, has earlier been Fellow also of the Academy of Sciences for Animal Welfare.

## G.B. PANT UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, PANTNAGAR

#### 42<sup>nd</sup> Annual sorghum group meetings

The 42<sup>nd</sup> Annual Group Meeting of All-India Coordinated Sorghum Improvement Project (ICAR) was held at Pantnagar. Shri Mantri Prasad, State Agricultural Minister, Uttarakhand was the chief guest, in his inaugural address stated that Nurseries of the new varieties developed by Pantnagar scientists must be established in the villages to prevent seedling losses during transportation. Research should



Shri Mantri Prasad Naithani giving inaugural address

be conducted on traditional hill crop varieties like mandua, jhangora, kandali, etc., which are found in abundance but are not fully harnessed.

Shri Harish Chandra Durgapal, Minister Small Scale Industries, Labour and Employment; and Dr B.S. Bisht, VC; Dr J.V. Patil, Director (DSR) and Project Co-ordinator (AICSIP); Dr S.K. Dutta, DDG (Crops), ICAR; Dr J.P. Pandey, Director, Experiment Station; and Dr J. Kumar, Dean (Agriculture) were also present.

Shri Harish Durgapal, guest of honour, raised concern that the industries producing different products of sorghum are getting huge benefits, but the farmer who is actually producing the crop does not get the appropriate return.

Dr S.K. Dutta said that sorghum should be considered as a value-added crop in the main agenda of XII five year plan. Dr B.S. Bisht said right varieties in right amount should be made available to the right people at right time. Though sorghum production has doubled since independence, its productivity needs improvement. Dr J.V. Patil, presented the annual project report 2011-12, and informed that India ranks first in sorghum production in the world. Its 53 varieties have been developed at national level, besides 60 by different states. In the inaugural session, 16 books were released (14 electronically, and two printed periodicals e.g. Kisan Diary, Kisan Bharti).



At the end, Dr J. Kumar thanked the State Agricultural Minister and other dignitaries, and all the participants.

### Fine paddy prices are expected to rise up to Rs 2,000/q

Agri-economists at Pantnagar have forecasted farm prices of fine paddy varieties up to Rs 2,000/q. The forecast was made under a World Bank-sponsored project, 'National Agriculture Innovation Project'. Its subproject, 'Establishing and networking of market intelligence centres in India', under operation at Pantnagar university, also aims to forecast the prices of selected agricultural commodities during sowing and harvesting. Dr Anil Kumar, CCPI, of the project, along with Dr Kanchann Kandpal and Dr Ajay Kumar Singh, working on the project, conducted market survey of Rudrapur regulated market, a major market for fine paddy in Uttarakhand, and analysed the market-price data of the last 17 year. They forecast that the market prices of fine paddy (Pusa 1121, Panjab-1, Sarbati etc.) in Rudrapur market would be Rs 1,700-1,800/q in October and November 2012, and Rs 1,800-2,000/q in December 2012. However, the prices of traditional basmati paddy like Tarawadi, Dehradun Basmati and Pakistani Basmati etc. would be higher. The scientists have advised the fine paddy farmers to keep in mind the forecast price of fine paddy and other conditions prevailing in their area, before deciding to raise the crop.

India has the largest area under paddy in the world and ranks second in production after China. India ranks among the first top five exporters of rice with 7-8 lakh tones, mostly to Saudi Arabia and other Middle East countries, Europe, and the USA. India produces 20.24 per cent of the global rice production. West Bengal, Uttar Pradesh, Andhra Pradesh, Punjab, Tamil Nadu, Bihar, Odisha, Assam, Karnataka and Haryana are the major paddy-producing states in India. In Uttarakhand, the area under paddy crop was 0.3 million ha and production 0.58 million tonnes during 2009-10. The major paddy-producing districts in Uttarakhand are Udham Singh Nagar, Dehradun and Haridwar.

## INDIRA GANDHI KRISHI VISHWA VIDYALAYA, RAIPUR

### Governor's visit to RMD CARS at Ambikapur

HE Shri Shekhar Dutt, the Governor and Dr S. K. Patil, VC, visited RMD CARS, Ambikapur on 9 June, 2012. He inaugurated the newly constructed boys' hostel; visited the farm, mango, litchi orchard and honey-bee experimental colony; and shared his views regarding the improvements desired in the research and teaching.

### Zonal workshop of KVKs

Shri Baiduram Kashyap, MLA, Chitrakot, and Co-chairman, Bastar Vikas Pradhikaran, Chhattisgarh Government inaugurated the 19<sup>th</sup> Zonal Workshop for Krishi Vigyan Kendras. In his inaugural address, Shri Kashyap laid emphasis on the livelihood models for marginal and landless tribals to enable them to remain engaged in farming. The KVKs should make pro-farmer efforts. Dr S.K. Patil, VC, said that the KVKs should identify the mechanism to disseminate technical information faster by making a paradigm shift from "input-based agriculture" to "knowledge-based agriculture".

Shri Lachhuram Kashyap, Chairman, Zila Panchayat, said that agriculture and forest produce are the major sources of livelihood of the tribal people. He urged scientists of KVKs to work on the availability of organic manure and its use by the farmers rather than depending on the chemical fertiliser.

Dr K.D. Kokate, DDG (Extension), ICAR, the chief guest of plenary session appreciated the field work done by the KVKs. During the field visit, he inaugurated two farmers' houses constructed with the help of additional income generated through profitable farming.

He appealed the KVK scientists to focus on increasing the coverage to more villages through use of ICT tools, better communication strategy and functional convergence. He applauded the custom hiring model established under NICRA villages in Zone VII, at Jabalpur.

### Felicitation to scientists

The research group meeting of All India Co-ordinated Research Project on Rice, held at Directorate of Rice Research, Hyderabad during 6-9 April 2012, felicitated Dr Sanjay Sharma, Senior Scientist (Entomology). It also presented the best unit award to AICRP on Rice, Raipur centre.



Governor inaugurating the Boys Hostel



Dr K.D. Kokate inaugurating the farmers house



It conferred the *Jal Star Award -2012* to Dr Bhag Chandra Jain, Associate Professor and Publicity Officer, Department of Agricultural Economics, College of Agriculture, Raipur, in recognition of his significant contribution in the area of water utilization in Command Area Development Authority Bangoli, Raipur.

## MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR

### 5<sup>th</sup> convocation

The fifth convocation of the university was organized on 28 February 2012 for the academic year 2009-10 and 2010-11 at Deshpande Hall, Nagpur. Shri Madhukarrao Chavan, Minister, Animal Husbandry, who acts as Pro-Chancellor of MAFSU, Dr S. Ayyapan, Director General, ICAR, the chief guest and Dr C.S. Prasad, VC graced the occasion. A total of 867 degrees were awarded, out of which 748 for Veterinary faculty, 60 for Dairy Technology faculty and 59 for Fishery Science faculty. Twenty four students received gold medals and 8 students got silver medals.

### Farmers' hostel inaugurated

Dr. K.M.L. Pathak, Deputy Director General (Animal Science), ICAR, inaugurated the farmers hostel (funded by ICAR, New Delhi) on 24 February 2012. Dr C. D. Mayee, former Chairman, ASRB and Dr. C.S. Prasad, VC, were present on this occasion. The hostel will have the facility of training as well as residence, with all modern amenities. Dr C. D. Mayee expressed the need of Pashu Vigyan Kendra like Krishi Vigyan Kendra working under agricultural universities.

### Workshop on risk assessment and insurance in agriculture

A workshop on "Policy dissemination and advocacy on risk assessment and insurance products for agriculture" was organized on 13 January 2012 at Nagpur headquarter sponsored by National Centre for Agriculture Economic and Policy Research. Officials from different departments like KVK, Animal Husbandry, banks, extension specialists, policy makers, insurance companies, farmers and other stakeholders participated in this workshop. Dr S.S.Raju, Principal Scientist and Consortium Principal Investigator of NAIP Project, NCAP, New Delhi; Dr M.K.Potdar, DGM, Agriculture Insurance Co. of India Ltd., and Dr Anil Rai, Head, Department of Agriculture Bio - Informatics, IASRI, were the main speakers.

## MAHATMA PHULE KRISHI VIDYAPEETH, RAHURI

### 28<sup>th</sup> convocation

The 28<sup>th</sup> Convocation of MPKV, Rahuri was organized at central campus, Rahuri on 7 April 2012. Shri Radhakrishna Vikhe Patil, Minister of Agriculture and Marketing, Maharashtra and Pro-Chancellor of the university presided over the function. Dr S.Ayyappan, DG, ICAR & Secretary, DARE, Government of India, New Delhi, delivered the convocation address. Shri Vijayrao Kolte, Vice-Chairman, Maharashtra Council of Agricultural Education and Research, Pune; Dr T.A. More, VC; Dr H.G. More, Dean, Faculty of Agriculture, and Shri Bhanudas Palwe, Registrar, were present on the dias. Dr Ayyappan, in his convocation address, complimented the efforts of farmers and scientists in achieving food security of the nation. He appreciated the achievements of MPKV, Rahuri for the development of agriculture in diversified conditions. Attention should be paid to stress agriculture, specialty agriculture, secondary agriculture and conservation agriculture. Climate change is a serious issue and we should be ready to face this challenge. The new agricultural graduates should go back to the villages to share their knowledge, information and technology with the farmers. He emphasized the concepts of 'Farmer first' and 'Student ready' in agriculture. A successful farmer needs skill development and focus on three 'I's integration, innovation and incubation. Women have a major role in agriculture, and efforts for attracting youth in agriculture are needed. Dr T.A. More, VC, presented the achievements of the university in agricultural education, research and extension education. The university has released 193 improved varieties and 1056 crop-production technologies for the benefit of farmers. Seed production of 13,000 q and the grafts 8 lakhs saplings and 512q bio-fertilizers and bio-pesticides have been produced during last the 3 years. Degrees were awarded to 24 Ph.D. candidates,



Dignitaries of Fifth Convocation



Dr K.M.L. Pathak with Dr C.D. Mayee at an inauguration site



Smt. Radha Krishna V. Patil on the convocation dias with dignitaries



271 PG holders and 1,861 degree holder candidates. Medals were awarded at the hands of Pro-Chancellor to outstanding candidates.

The eco-friendly Plant Disease Management and Beneficial Microbes Research Laboratory and Post-Harvest Technology Centre were inaugurated on this occasion.

#### Visit of President of India

Smt. Pratibha Patil, the President of India paid a visit to MPKV, Rahuri on centenary building of College of Agriculture, Pune on 10 June 2012. She stressed the need of greater investment in agricultural research for development of new technologies to increase the profitability in farming. She also urged the farmers to increased use of modern technologies in agriculture, which can be possible when the educated persons take up farming. There is urgent need to strengthen extension mechanism to expedite transfer of innovations from laboratories to fields. It is also important to improve rainfed agriculture to bring about second green revolution. Shri K. Sankaranarayanan, the Governor of Maharashtra, in his presidential address congratulated the university for building the state-of-the-art structure for the college so that more students of agriculture can benefit from it. Shri Ajit Pawar, Deputy Chief Minister, assured to increase the budget allocation for rainfed farming. Shri Radhakrishna Vikhe Patil, Minister for Agriculture and Marketing, Maharashtra, gave the introductory remarks. Dr T.A. More, VC, proposed vote of thanks. Shri Dilip Valse Patil, Speaker, Maharashtra Legislative Assembly, Shri Harshawardhan Patil, Minister for Co-operation, Maharashtra, Shri. Gulabrao Deokar, Minister of State for Agriculture, Maharashtra, Shri Vijayrao Kolte, Hon. Vice-Chairman, MCAER; Pune, Directors Dr S.S. Mehetre, Dr H.G. More, Registrar; Shri B.H. Palve and Associate Dean Dr B.R. Ulmek were present along with other dignitaries on this occasion.



HE Smt. Pratibha Patil inaugurating the Centenary Building

#### Release of new varieties

At the 40<sup>th</sup> meeting of Joint Agricultural Research and Development Committee of four SAUs of Maharashtra held at Akola during 29-31 May 2012, eight new field crop varieties, four farm implements and several recommendations of MPKV, Rahuri were released.

#### The list is given below:

##### Released varieties

#### Rabi sorghum : Phule Suchitra (RSV1098 SPV 2048)

Rabi sorghum variety *Phule Suchitra* (RSV 1098/SPV 2048) gives 21.2 q/ha grain yield, which is 21.6 % more than of *Phule Chitra* (17.4 q/ha), 61.8 % over *Phule Maulee* (13.1 q/ha) and 22.9 % over M35-1 (17.2 q/ha) under rainfed condition on medium type of soil. It produces 67.1 q/ha fodder, which is 15.9 % higher than of *Phule Chitra* (57.9 q/ha), 36.4 % over *Phule Maulee* (49.2 q/ha) and 19.3 % over M35-1 (56.2 q/ha). It belongs to medium maturity group (120-125 days) and respond well to fertilizers under rainfed situation. It has medium bold grains with pearly white colour, better *roti* and fodder quality. It is tolerant to drought, shoot fly and charcoal rot disease. It shows better tolerance to foliar diseases like leaf rust and leaf blight. The variety was released under the name *Phule Suchitra* for cultivation during winter (Rabi) season under rainfed condition on medium type of soil of western Maharashtra. The variety is proposed to replace the existing rabi sorghum variety *Phule Chitra*.



#### Pearl millet: ICTP 8203-FE10 2) (Dhanshakti)

The pearl millet variety ICTP 8203 Fe 10-2 (*Dhanshakti*) gives 11.4% more grain yield (21.99 q/ha). Its iron content is 9.4% more (81ppm) than of the check variety ICTP 8203 (74 ppm). It is early maturing (78 to 83 days) and resistant to downy mildew and blast diseases. It has globular bold grains with grey colour. Hence it is recommended and was released for drought-prone areas of Maharashtra.



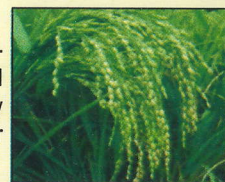
#### Sugarcane : VSI 434

An early maturing (10 months) sugarcane variety VSI 434 gives 17.86 % higher cane yield (128.39 t/ha) and 23.77 % higher sugar (CCS) yield (20.93 t/ha) than the check variety CoC 671 (cane yield: 108.94 t/ha and sugar yield 16.91 t/ha). It has good ratooning ability with tolerance to drought. It is less susceptible to internode borer, and moderately resistant to smut, grassy shoot, pokkah boeng and red rot (plug method) diseases. It is suitable for early period of the crushing season and is recommended and released for commercial cultivation in pre-season and suru seasons for Maharashtra state.



#### Paddy: Phule RDN-6

Paddy variety *Phule RDN-6*, a high yielding (44q/ha), mid-late maturing (125-130 days), has long slender grain, and is resistant to bacterial leaf blight and moderately resistant to leaf blast. It is recommended and released for cultivation in western Maharashtra.



#### Pigeonpea: Phule Rajeshwari (Tur-12)

Pigeonpea(tur) genotype *Phule Rajeshwari Tur 12* records 24.94 % and 55.77 % higher yield (2254 kg/ha), than the checks *Vipula* (1804 kg/ha) and *ICPL87* (1447 kg/ha) respectively under rainfed conditions. It matures in 133 days and its seeds are bold (11.3 g/100 seed weight) with red colour. It has higher protein content (20.42 %) than *Vipula* (20.11 %). It is moderately resistant to *Fusarium* wilt, sterility mosaic, pod borer, pod-fly and nematode. The variety has been released for cultivation during Kharif season in Maharashtra.



#### Meeting of AICRN project on underutilized crops

The XXIII group meet of All India Co-ordinated Research Network on Underutilized Crops organized jointly by MPKV, Rahuri and ICAR, New Delhi was held at central campus, Rahuri during 2-3 May 2012. Dr Swapan Kumar Dutta, DDG (Crop Science), ICAR, New Delhi, was the chief guest. He underlined the nutritional importance of underutilized crops and hoped for advanced research on various aspects. Dr T.A. More, VC, in his presidential address called for more research as well as efforts in transfer of technology of underutilized crops to farmers at grass-root level. Dr D. C. Bhandari, Network Co-ordinator, AICRN on Underutilized Crops, NBPGR, New Delhi, gave introductory remarks. Dr R. W. Bharud, Head, Department of Agricultural Botany, presented welcome address. Dr H. G. More, Dean, Faculty of Agriculture, Dr S. M. Pokharkar, Director of Extension Education; and Dr R. S. Patil, Associate Dean (PGI), were present during the inaugural function. More than 150 scientists from 20 states participated in this group meet.



#### Quality standards for bio-fertilizers

Dr T. A. More, VC, inaugurated the brain-storming session on quality standards for bio-fertilizers to manufacturers and liquid bio-fertilizer manufacturing plants held at Rahuri, on 4 June 2012, under Rashtriya Krishi Vikas Yojana. In his address he appealed the farmers to take advantage of the facility of liquid bio-fertiliser manufacturing plants. He said that efforts are required to overcome the constraints in development and adoption of this technology. Dr S. G. Borkar, Head, Department of Plant Pathology and Agricultural Microbiology, gave the introductory remarks. Dr K.S. Raghuvanshi anchored the programme. In this session Dr C.D. Deokar informed about the quality standards for different bio-fertilisers, Shri Ramdas Patil, President MBMA and Dr Dnyaneshwar Waghchaure, Director, Ashawmedh Agri-tech discussed on problems faced by bio-fertiliser manufacturers, and Dr S. B. Shinde, Head, Department of Extension Education informed about the communication strategies for increasing the awareness among farmers about the use of bio-fertilisers. Shri Narendra Gadre, Director, Napro Scientific, Pune, gave presentation on installation and maintenance of liquid bio-fertiliser manufacturing plant. Total 28 bio-fertiliser manufacturers attended the session.

#### MoU to strengthen educational activities

A memorandum of understanding (MoU) on research was signed between MPKV, Rahuri and Green Gold Pvt. Ltd, 4 April 2012. Another MoU was signed with MITSOM, Pune to strengthen the educational activities. On this occasion Dr T. A. More, VC, hoped for mutual co-operation in different areas of interest between two institutes.



This PPP mode will benefit the faculty, students and the farmers. Dr S.S. Mehetre, Director of Research, and Dr H.G. More, Dean, Faculty of Agriculture, presented the university activities. Mr D.S. Mukadam, Vice-President, Green Gold Pvt. Ltd., Dr V.B. Choudhary, Executive M.D. and Dr Ravikumar Chitnis, Principal, MITSOM, Pune; presented the activities of the institute, and signed the MoU.



## SWAMI KESHWANAND RAJASTHAN AGRICULTURAL UNIVERSITY, BIKANER

### Seven additional VKVs allotted to SKRAU:

The ICAR, New Delhi allotted seven more VKVs to SKRAU, Bikaner, increasing their number to 21. A MoU to this effect was signed between SK RAU, Bikaner and the ICAR on 31 March 2012 at New Delhi. Prof. A.K. Dahama, VC and Dr K.D. Kokate, DDG (Agric. Extn), ICAR, signed the MoU on behalf of the SKRAU and ICAR, respectively. Dr S. Ayyappan, Secretary, DARE & DG, ICAR; Dr Swapan K. Datta, DDG (Crop Sciences); and Dr K.M.L. Pathak, DDG (Animal Sciences) were present along with other dignitaries from the ICAR and SAUs (ANGRAU, Hyderabad, MPUAT, Udaipur, OUAT, Bhubaneswar). These VKVs are sanctioned for Kotputali (Jaipur), Molasar (Nagaur), Phalodi (Jodhpur), Chandi Gothi (Churu), Gudha Malani (Barmer), Pokaran (Jaisalmer) and Loonkaransar (Bikaner).

### Training for tribal farmers

A training programme under Sprinkler irrigation project was organized for the tribal farmers at KVK, Dausa. Shri Murari Lal Meena, Minister of State for Technical Education (Agriculture), was the chief guest and Dr A.K. Dahama, VC, presided at the function. On the occasion, Shri Meena called upon the farmers to adopt improved agricultural techniques. He distributed minikits of improved varieties of clusterbean and sprinkler systems to the farmers. Dr A.K. Dahama, emphasized the importance of increasing the water productivity in agriculture through improved irrigation technologies. Prof. P.N. Kalla, Director, Extension Education, emphasized the need to adopt latest agricultural technologies for profitable agriculture.

### Recently notified varieties

Groundnut variety HNG 123 released from ARSS, Hanumangarh and RG 510 from Agricultural Research Station, Durgapura were notified at central level. A new high yielding semi-spreading (Virginia bunch) genotype was identified for release at national level for zone I, comprising Rajasthan, Punjab and Uttar Pradesh. It is a cross between Chandra X RSB 87, developed through pedigree method. It has salmon-coloured kernels, marker for certification with high shelling turnover. It gives a mean pod yield of 2648 kg/ha and is superior to the all national checks, i.e. 24.7% higher than M-335 (2,124 kg/ha), 42.2% higher than Kaushal (1,862 kg/ha), 22.2% higher than CSMG 84-1 (2,167 kg/ha) and 18.6% higher than HNG-10 (2,233 kg/ha).

### Groundnut Raj Mungfali 1 (RG 510)

A virginia runner variety, is identified by Central Variety Release Committee, developed from the centre in 2011 for Rajasthan, Haryana and Punjab (notified by Government of India vide notification no. S.O. 456 (E)/16.03.2012). It has multiple-disease resistance against collar rot, stem rot, early leaf-spot, rust and peanut-stem necrosis. This variety gives 20.6% more pod yield (2,558 kg/ha) than the zonal check CSMG 84-1 (2,121 kg/ha), 11.3% more zonal check Gimar 2 (2,299 kg/ha), 34.2% more than the zonal check GG 21 (1,907 kg/ha) and 24.5% more than the zonal check HNG 10 (2,055 kg/ha). Similarly, its kernel yield (1,750 kg/ha) is 25.8% more than of CSMG 84-1 (1,391 kg/ha), 11.9% more than of Gimar 2 (1,564 kg/ha), 34.0% more than of GG 21 (1,907 kg/ha) and 23.7% more than of HNG 10 (1,415 kg/ha).

## SARDAR VALLABH BHAI PATEL UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, MEERUT

### Course on International Agriculture and Rural Development

As a part of the agriculture innovation partnership project with commitment to improve the agricultural education in the SAUs, seven students from SVPUAT, Meerut and 32 from Cornell University, New



Dr S. Ayyappan, and other dignitaries at the MoU signing ceremony



Training for tribal farmers at KVK, Dausa



Groundnut HNG 123



Groundnut Raj Mungfali 1 (RG 510)



Participants of the A.I.P. Project

York, the USA, participated in Cornell's IARD 4020 and 6020 courses, with focus on agriculture in the developing nations. The course was conducted by Cornell University, in collaboration with faculty from SVPUAT, Meerut, which featured advanced e-learning platforms and an experiential field visit to India in January 2012. These courses aimed to



VC with winners of cornell university Photo Contest

provide an interactive learning environment, and a short duration of experiential industrial exposure in a host of thematic areas, to the students of both Indian agricultural universities and Cornell university. In IARD 4020 the students were exposed to a series of lectures and discussions, in both global and regional contexts, for sustainable agricultural development and focus on specific developmental challenges in India. IARD 6020 was a 2-week field-study trip to south India, which provided an opportunity for students to observe agricultural development in India and among faculty, staff, students and their counterparts to have interdisciplinary exchange. The students were divided into three thematic groups based on their areas of interest, so as to participate in several activities that addressed the specific themes. The Agricultural Systems and Rural Infrastructure group headed stayed at Ootakmund from 7 to 10 January, whereas Value-Addition group visit agri-processing industries in Cochin such as Olam Agri Ltd, Suguna Poultry Farm Ltd, Mangala Marine Exim Pvt. Ltd etc from 7 to 10 January. During 11-15 January all the teams arrived at Hyderabad and covered various organizations such as Rural Technology Park, Monsanto Breeding Station, Shilparamam Craft village, Pochampally Handloom Park, ICRISAT etc. The rest of the semester was dedicated to group discussions, written projects and oral presentations dealing with the problems in food, agriculture and livestock production in the context of social and economic conditions of India. Three students viz., Ms Neha Gogia, Ms Astha Singh and Ms Preety Sirohi of SVPUAT won the I, II and III prizes respectively in the photo contest organized by Cornell University.

### Capacity building in Agricultural education

Union minister for Human Resource Development, Shri Kapil Sibal, and Mrs Hillary Clinton, Secretary of State, representing India and the USA, respectively, announced eight jointly-sponsored institutional partnership projects in research and educational activities on 13 June 2012, covering various disciplines to improve bilateral co-operation in science and technology. They jointly announced the awards in Washington. Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, and Cornell University's College of Agriculture and Life Sciences agreed to co-operate again in 2012. The Obama-Singh 21st Century Knowledge Initiative award of US\$ 250,000 (approx.) to be used over a 3 year grant period was awarded for the proposed initiative drafted by Cornell University – SVPUAT, Meerut for implementing reformed curriculum in emerging areas of agriculture and food security in two state agricultural universities of India. SVPUAT is already partnering in Agriculture Innovation Partnership Project with Cornell University's College of Agriculture and Life Sciences.

This project aims to facilitate the establishment of an e-learning centre and establish Centre of Excellence of Teaching to upgrade the knowledge and teaching skills of the faculty for generating competent human resources in the field of agriculture and allied sciences, to improve productivity and food security and to strengthen the extension education programme for transfer of technology to the farmers and rural masses. In addition, the implementation of proposal will open avenues for capacity building through joint venture and help develop young and dynamic entrepreneurs.

The faculty exchange includes participation of junior faculty, particularly women faculty members, and a strong monitoring and evaluation component with base line studies. The results will benefit the targeted farming communities that lie in different agro-climatic regions of India, to improve their agricultural production and food sustainability. Sustainability in the long term is ensured, because this programme will become a part of the regular courses offered at SVPUAT.

## SRI VENKATESWARA VETERINARY UNIVERSITY, TIRUPATI

### Training on diagnosis and prognosis of cancer in livestock

Department of Surgery and Radiology, College of Veterinary Science, SVVU, Tirupati, organized a 14-day, short-term training course on "Diagnostic and prognostic use of clinical, imaging, immunohisto-chemical methods and biomarkers for cancer in animals" during 15-28 May 2012. The event was sponsored by Department of



Dr B. Vengamma with training participants



Biotechnology, Ministry of Science and Technology, Government of India, New Delhi. It was attended by 14 participants from different institutes of the country with specialization in Veterinary surgery, Animal reproduction and gynecology, Veterinary physiology, Biotechnology, Virology, Zoology, Bio-materials, Pharmaceutical technology and Pharmaceutical chemistry. Dr B.Vengamma, VC, Sri Venkateswara Institute of Medical Sciences, Tirupati inaugurated it on 15 May 2012. The training course covered multi-disciplinary approach pertaining to basic as well as clinical and applied aspects of cancer diagnosis, prognosis and treatment. Specialists from Veterinary and Medical field imparted training to the participants. Certificates were awarded to the participants in the valedictory function. Dr V. Prabhakar Rao, VC, attended it. Dr R.V.Suresh Kumar, Associate Professor and Head, Department of Surgery and Radiology, College of Veterinary Science, was the co-ordinator.



Participants exposed to working

## WEST BENGAL UNIVERSITY OF ANIMAL AND FISHERY SCIENCES, KOLKATA

### Ghoongroo pig

Ghoongroo, an indigenous breed of pig was unknown till 2000. The scientists of WBUAFS, first identified and reported about this breed. It is highly prolific, and shows faster growth, consumer preference and adaptability to low management input. The unique germplasm is under constant threat due to indiscriminate breeding with scrap variety. Most significantly, the breed has the potential to replace the exotic breed from temperate zone used for improved pig-production programme in India. Ghoongroo pig is most prevalent in Dooar's valley of eastern sub-Himalayan region of West Bengal at 88° to 90° E longitude and 26.3° to 27.3° N latitude. The area belongs to the civil districts of Darjeeling, Jalpaiguri and northern part of Coochbehar. The breed is also available in the eastern part of Nepal adjoining Darjeeling district.



Ghoongroo

The animal is black, with compact body, thick coarse and long hair-coat, and long tail reaching below hock. The face is broad and flattered with upwardly curved snout, which is unsuitable for rooting. But it is a good grazer. The ears are large and heart shaped resembling those of elephant. Hindquarters are heavier and rumps are drooping in males.



Scrotum loosely hangs from the body. The breed is highly docile and amenable to any form of management. Its docility is evident from adaptation to tethered grazing. Sows show strong mothering ability. Stampede death of piglets during nursing is negligible because the sows always lie down very carefully with loud grunting. Intra-space and inter-sex agonistic interactions are the least. This makes group management much easier. The production performance of Ghoongroo pig is of special importance. Average litter size at birth is  $11.92 \pm 0.06$ , and litter up to 18 is very common. Body weights at birth, 5 months and 1 year of age are  $1.08 \pm 0.22$ ,  $58.91 \pm 1.49$  and  $116.3 \pm 0.31$  kg, respectively, irrespective of the sex. The breed attains puberty at 6 months of age. Gestation length, farrowing interval and service period are  $109.1 \pm 0.04$ ,  $175.73 \pm 1.12$  and  $68.4 \pm 0.31$  days, respectively.

The breed has adapted very well to south Bengal climate. It has become very popular among the pig farmers of south Bengal because of its high growth rate at the farmers' house, very low health problem, excellent prolificacy, low mortality at pre-weaning stage, high quality pork and consequently high consumer demand. The breed is under constant genetic improvement at the university since 2000, supported by Ministry of Agriculture, Government of India.



The ICAR has undertaken special research and extension programmes on this breed at National Research Centre on Pig, Rani, Guwahati. Its breed is performing

satisfactorily in different North-Eastern States and Jharkhand. It is the first indigenous pig breed registered by the ICAR, with accession no. INDIA\_PIG\_2100\_GHOONGROO-09001 (Jpshi.2012).

## Awards

### MAHATMA PHULE KRISHI VIDYAPEETH, RAHURI

#### Dr T.A. More felicitated with Dr B.R. Ambedkar Samajbhushan award

Dr T.A. More, VC, was honoured with Dr Babasaheb Ambedkar Samajbhushan award by the Government of Maharashtra on 15 April 2012. Shri Priithviraj Chavan, CM and Shri Ajit Pawar, Deputy CM, felicitated him and Mrs. Rekha T. More on the occasion of Bharat Ratna Dr B.R. Ambedkar anniversary at Aurangabad.



CM and Deputy C.M. felicitating VC, Dr T.A. More

#### Dr T.A. More was made Hon. Colonel of NCC

Dr T.A. More received the decoration of Hon. Colonel of NCC by Maj. Gen. Yashwant Singh, Additional Director- General (NCC), at central campus Rahuri. Brig. Shirish Dhobale, Group Commander Aurangabad welcomed Maj. Gen. Yashwant Singh and 50 NCC cadets of College of Agricultural Engineering gave the guard of Honour.



Dr T.A. More, being awarded as Hon. Colonel of NCC

#### Award to Dr A.N. Deshpande

Dr A.N. Deshpande, Head, Department of Soil Science and Agricultural Chemistry, received "Krishiratna Dr Annasaheb Shinde Excellent Research Worker Award 2012" on 22 March 2012 at College of Agriculture, Pune. It was sponsored by the Maharashtra Council of Agricultural Education and Research, Pune.



Mrs. Angha Deshpande, and others receiving the award

## UNIVERSITY OF HORTICULTURAL SCIENCES, BAGALKOT

### Honours to Dr S. B. Dandin and Dr Balaji S. Kulkarni



Dr S.B. Dandin being honoured by Dr H.P.Singh



Dr Balaji S. Kulkarni

The confederation of Horticulture Association of India honoured two personalities of the university by making them its Honorary Fellow. Dr S. B. Dandin, VC; and Dr Balaji S. Kulkarni, Professor received the honour at Confederation of Horticulture Associations for food, nutrition and livelihood options, held at Bhubaneswar on 28-30 May 2012.

\*\*\*\*\*

Printed Matter  
Book - Post

STAMP

To,

---



---



---



---

From:

Indian Agricultural Universities Association  
# 1G-2, CGIAR Block, NASC Complex, D.P.S. Marg Pusa Campus, New Delhi- 110 012