



IN THIS ISSUE

Vol. 7, No. 1&2
April 2017 to
March 2018

Institute activities	2
Meetings	4
Distinguished Visitors	4
Reaching out to farmers	4
Scientific seminars	7
Joining/relieving /promotions	7
Awards and recognition	8
jk tHkk"kk d{k dh xfrfof/k; k; 8	

Director's Desk...



India holds 190 million cattle population which is about 17% of the world cattle population. Advanced molecular and production technologies hold great promise to explore genetic progress which is essential for increasing the milk production required to meet the growing human population need. The approaches of Omics based strategies aimed primarily at universal detection of genes (Genomics), mRNA (transcriptomics), Proteins (proteomics) and metabolites (metabolomics)

can be effective means of selection to be used for successful improvement of our cattle germplasm. These genetic improvement programmes offer major support for conserving of indigenous genetic resources of the country.

The winter school entitled "Omic technologies and modern breeding approaches for conservation and productivity enhancement of Indigenous cattle resources" organized during November 1-21, 2017 provided suitable platform for the breeders of country to update their knowledge towards use of molecular tools and bioinformatics for livestock genome analysis. The training on advanced technologies and related methodologies can be used in the respective pockets of cattle wealth throughout the country for planning their improvement and also conservation.

Dr. Trilochan Mohapatra, Secretary DARE and Director General ICAR visited the institute on October 31, 2017. The achievement of CIRC for developing a crossbred breed "Frieswal", was lauded. He suggested to register this breed for its wider propagation. He expressed the institute should urgently find a suitable place for infrastructure development to undertake activities of cattle production improvement which is utmost need of the country.

ICAR-CIRC conducted various activities for development of human resource and participation in Kisan mela and exhibitions at various places for highlighting different technologies and methodologies for improvement of cattle productivity. The training programmes were conducted on processing of cattle semen and its use in the field conditions to promote artificial insemination and propagation of better germplasm. Whereas the programmes were organized for farmers included in house and out station activities to discuss various issues about dairy production, interactive meets to solve the problems of dairy farmers and holding of animal health camps. The institute scientists were also recognized for their excellence in scientific achievements.

I am happy that the newsletter being published for the period brings forth the events and activities undertaken by the institute which has catered the need of science, research and welfare of the stakeholders.

(N.V. Patil)

Institute Activities

Winter school organized

ICAR- Winter School “**Omic Technologies and Modern Breeding Approaches for Conservation and Productivity Enhancement of Indigenous Cattle Resources**” was organized during November 1-21, 2017 to create adequate human resources by providing hands-on training on advanced statistical, molecular and bioinformatics tools for productivity enhancement of indigenous animal genetic resources. Seventeen participants from all parts of the country participated. The curriculum covered the emerging areas viz., functional genomics, proteomics, bioinformatics and advanced breeding approaches employed for conservation and productivity enhancement of indigenous cattle genetic resources. Beside institutional scientists the experts from renowned institutions were invited to deliver lectures on advanced bioinformatics tools like DNA signature-based SNP and STR marker analysis, genome annotation, genome assembly, reference-based transcriptome analysis using CLC genomics workbench, metagenomics of rumen microbes etc. The hands-on training was also given to the participants on statistical analysis of data using SAS, R package and gensel software, miRNA databases etc. Further, the trainees were also enlightened with the national cattle genetic diversity, different methods of conservation of cattle breeds and global status of domestic animal biodiversity etc.

working with the computer along with ERP software of ICAR to carry out the routine official works.



Day and week celebrations

(a) World environment day

World Environment Day was celebrated on 5th June 2017 with the theme “**Connecting People to Nature**”. The celebration began with a massive plantation drive in the campus by staff of CIRC where more than 100 plantations were done covering fruit, shade and ornamental saplings. On this occasion, Prof. S.V.S. Rana, Former-Vice Chancellor, Bundelkhand University, Jhansi, Uttar Pradesh & Emeritus Professor, CSIR, Department of Zoology, CCS University, Meerut, chief guest of the function delivered a lecture on “**Connecting people to nature**” and enlightened on various environmental issues and emphasized that the country with rich ecology will automatically become rich. Dr. B. Prakash, Director CIRC, chaired the function.



Prof. S.V.S. Rana, Former-Vice Chancellor, Bundelkhand University, Jhansi addressing during World Environment Day Celebration-2017



ERP Training for skilled support staff

A training/workshop programme on “**Basic computer operation and soft skills for skilled support staff**” was organized on 28th March 2018 for basic handling and



Plantation drive during the World Environment day

(b) Independence day

On 71st Independence day celebration of the country, Dr. B. Prakash, Director hoisted the tricolor and addressed the staff. He urged all to acquire high ideals from freedom fighters, technocrats and scientists who have contributed a lot to the country.



(c) Foundation Day

CIRC celebrated its 31st Foundation Day on 3rd November 2017 with much gaiety and fanfare. Dr. B. Prakash, Director while inaugurating the function, appealed the staff to work with discipline and dedication to execute various scientific activities of the Institute. On this occasion, the staff participated in various sports events like hammer throw, discus throw, javelin throw and tug of war etc. In the cultural evening, different cultural events were performed by the children and noted poets from the Meerut recited poems and songs etc.

(d) Vigilance Awareness Week

Institute celebrated vigilance awareness week from 30th October 2017 to 4th November 2017. During this week, Dr. Rajendra Prasad, Vigilance Officer of the Institute made a presentation about vigilance in office procedure.



(e) Republic Day

CIRC celebrated the 69th Republic Day of the country. Dr. Rajendra Prasad, Director hoisted the national flag. During his address, he congratulated the staff members and their families on the occasion and appealed every staff member to render selfless service to the nation.



(f) Earth Hour

In order to emphasize the importance of saving energy for future, Earth Hour was celebrated on 24th March 2018. On this occasion, the necessity of observing earth hour, efficient utilization of energy sources and different ways to save energy as well as electricity through the application of recent technologies was discussed with staff of CIRC.



Swachh Bharat Mission

In Swachha Bharat Mission, two special drives were initiated in nearby places. On 25th and 28th September 2017 cleanliness campaigns were organized at

Kasampur village and another at nearby religious place "village –Gagol, Meerut, respectively to imbibe importance of cleanliness towards better and healthy life.



Meetings

Annual IRC Meeting

The annual IRC meeting of the Institute for 2017-18 held on 15th May 2017 under the chairmanship of Dr. B. Prakash, Director. Keeping in view of the lack of Institute facility of animal farm, scientists were advised to take up projects under field conditions as per RAC recommendations and he appealed to scientists to submit projects to external funding agencies. I/C PME briefed the members about the status of projects and intimated that project information of 21 ongoing and 10 completed projects is complete at PIMS portal. The progress reports of 30 projects (3 AICRP, 18 Institutional, 4 externally funded, 1 inter-institutional, 2 pilot and 2 service) were presented by the respective PIs and 11 new project proposals were also discussed and approved.

Visit of distinguished Guest

Director General, ICAR

Dr. Trilochan Mohapatra, Secretary DARE and Director General ICAR visited the institute on October 31, 2017 and was apprised about the research activities of CIRC. While expressing satisfaction over the long term achievement of developing a crossbred breed "Frieswal", he lauded the efforts of the scientists for a continuing collaboration with the Military Dairy farm (MDF) authorities through activities spread all over India in more than 37 locations in MDFs. He suggested to

make efforts to register "Frieswal" breed of CIRC for its propagation. The efforts of Field Progeny Testing at different SAUs and also the Indigenous herds supported by CIRC at different locations were also discussed. He expressed that the institute should urgently find a suitable place with infrastructure to undertake activities of cattle production and improvement programme which is utmost need of the country. He also visited different laboratories of the Institute and interacted with all the staff and was also informed about various extension activities of the institute.



Reaching out to farmers/ Extension activities

Participation in Kisan Mela

Kisan Kalyan Mela-2017

CIRC participated in Kisan Kalyan Mela-2017 organized jointly by Ministry of Agriculture and Farmers Welfare, Government of India and Department of Agriculture, Government of Bihar in Champaran district (Motihari), Bihar from 15th to 19th April 2017 and demonstrated cattle production related technologies which was visited by large number of farmers. A talk on commercialization of dairy farming for enhancement of farmer's income was delivered by Dr. Ravinder Kumar, Senior Scientist of the institute.



Agricultural Exhibition-2017

Institute participated in Agricultural Exhibition organized by ICAR from 22nd to 25th September 2017 at Pandit Deendayal Upadhyay Dham, Mathura to display the technologies related to cattle production. Number of farmers and stakeholders visited the institute stall.



All India Farmers Fair and Agri-Industrial Exhibition-2017

CIRC participated in All India Farmers' Fair and Agri-Industrial Exhibition-2017 at Sardar Vallabhbhai Patel University of Agriculture and Technology, Modipuram, Meerut from 07th to 09th October 2017. The dairy farmers were enlightened on various aspects of scientific cattle production, reproduction (Anestrous, Repeat Breeding, Metritis and Utero-vaginal prolapse), feeding, health care and management practices to overcome the problems faced by them.



India International Trade Fair-2017

ICAR-CIRC participated in India International Trade Fair-2017 held at Pragati Maidan, New Delhi from 14th to 27th November 2017. About 2500 farmers and stakeholders visited the exhibition stall and gained knowledge on scientific dairy farming.



Kisan Mela -2018

Institute participated in Kisan Mela-2018 at ICAR-CSSRI, Karnal held on 10th March 2018. The farmers and stakeholders showed their interests in various activities of the institute.



Participation in Animal Health Camps

A team of CIRC scientists participated in Pandit Deen Dayal Upadhyay Pashu Aarogya Shivir Mela organized by U.P State Animal Husbandry Department and participated in the activities at Village Gagole, Partapur, Village Kastala, Mansa Devi, Villages-Alipur Aalampur, Machhraand Village Atrada, Kharkhanda in the month of March 2018

Training programmes

Certified livestock advisor programme

A training programme entitled "The Certified Livestock Advisor Programme on Scientific Cattle Management

for profitable and sustainable Dairying venture” funded by National Institute of Agricultural Extension Management (MANAGE) was organized from 14th to 28th February, 2018. Eleven participants from different parts of India attended the training programme.

Training on semen handling

A training programme entitled सफल गर्भाधन हेतु हिमीकृतवीर्य का वैज्ञानिक रखरखाव एवं प्रयोग” तथा डेरी पशुओं में बांझपन नियंत्रण” पर प्रशिक्षण कार्यक्रम was organized on 27th October 2017. About 50 inseminators participated in the training programme. Information and training was provided on handling of frozen cattle semen, infertility in dairy animals and least-cost ration for dairy animals.



Interactive meeting of farmers

An Interactive meet of scientists with dairy farmers to enhance cattle productivity was conducted on 15 December 2017 at the institute campus.



Workshop on Unnat Pashupalan

One-day workshop on “Unnat Pashupalan” in collaboration with the dairy company Kwality Ltd., New Delhi on 7th July 2017 was organized and about 200

progressive farmers participated. During the workshop, various aspects of dairy cattle production like total mixed ration (TMR) and role of micro-nutrients in milk production, reproduction management in high yielding cows, calf management practices for superior heifer production, housing management for high yielding cows, clean milk production, animal welfare issues, animal health monitoring issues under field conditions were discussed. Besides this, farmers were introduced with the salient features of Kisan Kalyan Pashudhan Yojana of Govt. for utilizing its benefits.



माननीय प्रधानमंत्री जी के ‘किसान वैज्ञानिक संवाद’ का सीधा वेब प्रसारण

दिनांक 17 मार्च, 2018 को भारतीय कृषि अनुसंधान परिषद् के केंद्रीय गोवंश अनुसंधान संस्थान, मेरठ छावनी के तत्वावधान में “किसान-वैज्ञानिक संवाद तथा माननीय प्रधानमंत्री जी के भाषण का सीधा वेब प्रसारण” कार्यक्रम का आयोजन किया गया. इसमें कृषि उन्नति मेला का उद्घाटन व पंडित दीनदयाल उपाध्याय कृषि विज्ञान केन्द्रों (के.वी.के.) पर सीधा प्रसारण के माध्यम से मेरठ जिले से लगभग 310 प्रगतिशील किसानों, वैज्ञानिकों व विद्यार्थियों ने बढ़-चढ़कर भाग लिया. इस कार्यक्रम में माननीय श्री सत्यप्रकाश अग्रवाल जी विधायक मेरठ कैंट, श्री सत्यवीर त्यागी जी विधायक किठोर, श्री जितेंद्र सतवई जी विधायक सिवालखास, 13 ग्राम प्रधान व अन्य गणमान्य व्यक्ति भी उपस्थित रहे। इस दौरान किसान-वैज्ञानिक संवाद कार्यक्रम का भी आयोजन किया गया।



Field visits of scientist's

The team of CIRC scientist including Dr. Suresh Kumar, Dr. SK Verma and Dr. Naimi Chand visited progressive dairy farmer's farm on 18th January 2018. The scientists resolved the queries and gave few tips for profitable milk production and also discussed feeding and reproduction management strategies to be adopted for profitability .



Visit to Patanjali, Haridwar

The Patanjali goushala at Haridwar was visited by Dr. Ravinder Kumar on 12th February, 2018. Discussion on various aspects of indigenous cattle breeding and it's improvement, cattle feeding and housing management, farm waste management and other advance technologies like vermi-composting and commercialization of "**Panch Gavaya**" etc. was done.



Panch Gavaya Plant at Patanjali

Seminars

The following scientific topics were delivered by scientist of the institute during monthly seminars

Name of the speaker and Date	Topics
Dr. AS Sirohi 29.04.2017	Antimicrobial resistance in animal production system
Dr. Ravinder Kumar 27.05.2017	Livestock production and environmental issues
Dr. TV Raja 29.06.2017	Genetic evaluation of breeding bulls: International and Indian context
Dr. Rajib Deb 22.07.2017	Genome editing: Challenges and opportunities in livestock species
Dr. Ravinder Kumar 26.08. 2017	Baseline survey on cattle to multiply superior germplasm in field conditions for enhanced milk production
Dr. Naimi Chand 27.09.2017	Blood transfusion: A vital part of critical care medicine
Dr. S Saha 31.01.2018	Leptin: A metabolic gate for the onset of puberty in farm animals

Joining & Transfers

S. No.	Name of Employee	Date
Joining		
1	Dr. Vinor Kumar, Principal Scientist (Animal Nutrition)	01-04-2017
2.	Dr. Sanjeev Kumar Verma, Senior Scientist (Animal Nutrition)	01-04-2017
Transfer		
1	Sh. Rishi Ram, Administrative Officer	10-04-2017
2.	Dr. Neeraj S rivastava, Senior Scientist (Animal Reproduction &Gynaecology)	31-05-2017

Awards and foreign deputation

Dr. Rajib Deb, Scientist (Animal Biotechnology) received fellowship from The World Academy of Science (TWAS), Italy and was deputed for his Post-Doctoral studies at Programa de Pos-graduacao em Biotechnologia e Biodiversidade, Universidad Federal de Goias, Goiania, Brazil for a period of five months from 1st February 2018 to 30th June 2018. The area of research covered during his studies was on whole chromosome painting and development of multi-coloured fluorescent probes against bovine chromosomes to detect certain important genetic disorders and spermatozoa sex ratio in cattle.

Dr. Umesh Singh received 5th Academic Achievement Award for Excellence in Research given by EET ERS, Education Expo, Research and Branding Company, NOIDA on September 10, 2017 at Mumbai.

EDITORIAL BOARD

Editor :

Dr. Ravinder Kumar (Principal Scientist)

Members :

Dr. T.V. Raja (Principal Scientist)

Dr. Naresh Prasad (Scientist SS)

Dr. Rajib Deb (Scientist SS)

Photography: S.K Sharma

राजभाषा गतिविधियाँ

हिन्दी कार्यशाला

संस्थान में राजभाषा हिन्दी के उचित प्रयोग एवं हिन्दी में कार्य करने एवं बोलने की झिझक को दूर करके बढ़ावा देने हेतु सभी अधिकारियों एवं कर्मचारियों के लाभ के लिए दिनांक १७.०६.२०१७ को हिन्दी कार्यशाला का आयोजन किया गया। उक्त कार्यशालाओं में भा.कृ.अ.प., नई दिल्ली के ०२ स्थानीय कार्यालयों एवं निदेशक, सैन्य फार्म एवं फ्रीजवाल परियोजना, मेरठ कैम्प के राजभाषा अनुभाग के कर्मचारियों सहित संस्थान के सभी अधिकारियों एवं कर्मचारियों ने भाग लिया।



To,



Published by
DIRECTOR

ICAR - Central Institute for Research on Cattle

(Indian Council of Agricultural Research)

Grass Farm Road, Post Box No. 17, Meerut Cantt.- 250 001 (U.P.), India

Phone .0121-2657136, 0121- 2645598, 2656021 (EPABX)

Fax .0121-2657134

Email .dirpdc@yaho.com and pdcattle@yaho.com