



ICAR-DPR NEWS



ISO 9001:2008 Certified Institute

SARDAR PATEL OUTSTANDING ICAR INSTITUTION

Volume 15 No. 2

July - December 2015

DIRECTOR'S COLUMN...

It is a matter of great pleasure in introducing this edition of newsletter of this Directorate for the period July to December, 2015.

Two unconventional feed ingredients were included in the poultry diet to exploit optimum production potential. A two and three way crosses were developed and are being evaluated at the farmer's backyard. Under All India Coordinated Research Project on Poultry Breeding, College of Veterinary Science and Animal Husbandry, Nanaji Deshmukh Pashu Chikitsa Vigyan Vishwa Vidyalaya, Jabalpur has developed a dual purpose coloured chicken Variety, Narmadanidhi having higher growth production potential under backyard or free range scavenging system than native birds.

During the period under report institute participated in various Exhibitions, Pashu Melas and Farmers' days such as Poultry India 2015; Southern Regional Agricultural Fair, ANGRAU, Guntur and Farmers' day at IIRR and IIOR, Hyderabad. A model training program on backyard poultry farming sponsored by Directorate of Extension, Ministry of Agriculture, Govt. of India was also conducted at this Directorate in which Animal Husbandry Officers from different parts of the country participated. The Directorate is implementing various Govt. Schemes. During this period this Directorate adopted two villages under the Mera Gaon Mera Gaurav (MGMG) program, where farmers were trained for scientific poultry farming and distributed improved poultry varieties for enhancing their



income and livelihood. Under Swachh Bharat Mission, staff of this Directorate participated in weekly cleanliness programmes for upkeeping the premises neat and clean. The staff of this Directorate also visited the adopted villages and spread the awareness among the villagers about the importance of cleanliness and its impact on health. This Directorate celebrated Hindi Pakhwada and conducted two Hindi workshops to improve the skill of the staff to work in Hindi in their day to day official work. This publication is a brief achievements of the Directorate in the field of research, extension and development during last six months.

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Dr. Trilochan Mohapatra

The Director and staff of DPR family congratulate and welcome Dr. Trilochan Mohapatra on assuming the new responsibilities of Secretary (DARE) and the Director general (ICAR). We assure you that under your dynamic leadership this Directorate will grow further to become one of the major Research Institutions of the country with Global repute.



Dr. S. Ayyappan

We, the DPR family convey our sincere gratitude and thanks to Dr. S. Ayyappan, Secretary (DARE) and Director general (ICAR) for his visionary leadership and unparalleled contributions to the Indian Agricultural system including Livestock, Poultry and Fishery Sectors. On the eve of his relinquishing the office, we gratefully acknowledge the whole hearted support in overall progress of the Directorate including creation of infrastructure for conducting research and extension in frontier and emerging areas of Poultry Science very effectively and efficiently.



Dr. H. Rahman

The Director and the staff of DPR congratulate and welcome Dr. H. Rahman in his new assignment as Deputy Director General (Animal Science). We are sure that under his leadership, the Animal Science Division in general and this Directorate in particular will flourish and achieve institutional and individual excellence by developing and transferring new technologies to the door step of the farmers.



Prof. K.M.L. Pathak

The DPR family convey sincere thanks and gratitude to Prof. K.M.L. Pathak, Deputy Director General (Animal Science) for his whole hearted support and able guidance in creating infrastructure and facilities at the Institute. On the eve of his superannuation, the Director and staff of the Institute wish him a very happy, healthy and prosperous retired life.



RESEARCH

Utilization of solid state fermented rape seed meal as a source of protein in commercial broiler diets

Two experiments were conducted to study the possibility of utilizing processed (solid state fermented) rape seed meal (RSM) in broiler (Cobb 400) diets (1 to 42d of age). RSM is a good source of protein, but it contains glucosinolates, which depress bird performance. When maize – soybean meal control diet (CD) and two diets with raw (RRSM) and processed RSM (PRSM) at 10% each (experiment 1) were fed, the results indicated that 10% RRSM depressed body weight gain (BWG), feed intake (FI), feed efficiency (FE), ready to cook (RTC), breast weight and increased liver weight. In experiment 2, when a CD was fed, either RRSM or RSM processed by two methods of solid state fermentation which differed in length of fermentation (RSMP1 and RSMP2) and were included each at 3 levels (5, 10 and 15%), it was observed that PRSM significantly reduced FI, maintained BWG and improved FE compared to those fed the CD. RTC was similar, while breast weight was higher in the PRSM group compared to those fed CD. Incorporating RRSM progressively depressed BWG, FI and FE with different inclusion level. BWG was not affected by including RSMP1 and RSMP2 up to 10 and 5%, respectively but depressed at higher inclusion levels compared to the CD. The BWG in PRSM fed groups were higher than the respective level of RRSM fed groups. However, the RSMP1 and RSMP2 did not affect FE up to 15 and 10%, respectively. Incorporating RRSM progressively depressed the RTC and breast weights compared to those fed the CD. These slaughter variables were not affected by feeding RSMP1 up to 15%. It is concluded that solid state fermentation improved the nutritional value of RSM, which could be incorporated up to 10% in broiler diet without affecting performance and slaughter variables.

SV Rama Rao

Effect of dietary supplementation of distillery dried grain soluble from rice on performance of commercial broilers and White Leghorn layers

Experiments were conducted to study the possibility of utilizing distillery dried grain soluble (DDGS) prepared from rice in broiler (1-35d of age) and White Leghorn layer (24-47 weeks of age) diets. In broilers, incorporation of DDGS significantly improved body weight gain (BWG) at 5% and feed efficiency (FE) at 5 and 10% compared to those fed the SBM control diet (CD) at 21 d of age. At 15% RDDGS, BWG was not affected, but the FE was depressed significantly compared to those fed the CD. BWG and FE at 35d of age were not affected by incorporating RDDGS up to 10% but both the parameters were depressed significantly at 15% RDDGS in broiler diet. In layers, egg production, feed intake (FI), FI per egg, FI per egg mass, period wise egg mass and mortality were not affected by incorporating RDDGS at 7.5%. All these parameters were depressed in layers fed diet containing 15% RDDGS. Egg weight and body weight were not affected by the level of RDDGS in diet. It is concluded that RDDGS can be included up to 10% in broiler and 7.5% in WL layer diet without affecting their performance.

SV Rama Rao

Field evaluation of new promising variety

A new promising two way cross has been developed and being evaluated under field and farm conditions. The chicks were distributed in Bavoji Thanda and Korravani Thanda, which are the adopted villages under MGMG program. A total of 300 chicks were distributed to 35 farmers of Bavoji Thanda and 25 farmers of at Korravani Thanda. The birds were monitored periodically and data are being collected at regular intervals.

U Rajkumar

Narmadanidhi : A Dual purpose coloured bird suitable for rural and tribal areas

All India Coordinated Research Project on Poultry Breeding, Deptt. of Poultry Science, College of Veterinary Science and Animal Husbandry, Nanaji Deshmukh Pashu Chikitsa Vigyan Vishwa Vidyalaya,

Jabalpur has developed a dual purpose coloured chicken Variety, Narmadanidhi which resembles to desi fowl/native chicken in appearance but having higher production potential under backyard and free range scavenging system. It is having 25% inheritance of native local breed (Kadaknath) and 75% of improved broiler germplasm (Jabalpur Colour). It produces brown shell egg weighing around 51g. Male attained 1 kg body weight in 9 to 10 weeks of age and body weight at 20 weeks ranged from 1.5 to 2.2 Kg in males and 1.3 to 1.7 Kg in females. The average age of hen at sexual maturity is 161 days (under intensive system) and produces 181 eggs in backyard system, which is about 4 times higher than the local native breed (45 eggs) and 195 eggs under semi intensive system of management. Dual purpose coloured bird Narmadanidhi is thus, an outcome of specific breeding approaches aiming to utilize maximum heterosis in the progeny.



Releasing of Narmadanidhi, a dual purpose chicken variety

Annual review meeting of AICRP and PSP

Annual review meeting of AICRP on Poultry Breeding and Poultry Seed Projects were organised at NASC complex, New Delhi on 15th and 16th September 2016. Dr. R.N. Chatterjee, Director welcomed Dr. R.S. Gandhi, ADG (AP&B), Dr. Vineet Bhasin, PS, Head Quarter and In-charges from various AICRP and Poultry Seed Project (PSP) centres. Dr. S. Ayyappan, Secretary DARE & Director General, ICAR briefly visited the venue of meeting and exchanged the pleasantries with the participants. He enquired about

the best and poor performing centres of AICRP and PSP. Prof. K.M.L. Pathak, DDG (Animal Science) reviewed the progress of the centres. The centre Incharges presented progress of the respective centres. Dr. M. Niranan, Incharge, AICRP Cell presented the technical programme of the AICRP project and after deliberation the technical programmes were finalised. Dr. M. R. Reddy, PS explained in brief about the procedure to be followed during the outbreak of Avian Influenza. Dr. S. V. Rama Rao, Incharge, PSP project elaborated about the feeds, feeding standards and feed additives to extract the maximum genetic potential of the birds.



Annual review meeting of AICRP and PSP at NASC complex, New Delhi

EVENTS ORGANIZED

Model Training Course

A Model Training Course on “Rearing and propagation of backyard poultry farming” sponsored by Directorate of Extension, Ministry of Agriculture, Govt. of India was conducted during 29th October to 5th November 2015. A total of 21 Animal Husbandry Officers from nine states attended the training programme. The trainees were exposed to various aspects of poultry production such as breeding, nutrition, management and health care in relation to rural poultry farming. The training module included theory, practical demonstrations and hands on experience on farm and hatchery operations. A field visit to a commercial poultry unit of four lakh layer capacity was arranged for the benefit of the participants.

EXTENSION ACTIVITIES

Participated in farmers day at IIOR

The Institute participated in the Farmer's day organized by ICAR-Indian Institute of Oil Seed Research (IIOR), Hyderabad on 12th September 2015. Farmers took keen interest in the technologies developed by the Institute. During this occasion, literature on the improved chicken varieties were distributed to the farmers.

Participated in farmers day at IIRR

The Directorate participated in the Farmer's day organized by ICAR-Indian Institute of Rice Research (IIRR), Hyderabad on 7th November 2015. DPR stall attracted the attention of the farmers and visitors at the exhibition. The literature on the improved chicken varieties was distributed to the farmers.

Participated in Poultry India 2015

The Directorate participated in Poultry India 2015 exhibition organized by IPEMA at Hitex, Hyderabad from 25th to 28th November 2015. The Institute stall attracted the attention of the delegates and poultry farmers. The technologies developed by the institute especially the improved chicken varieties, *Vanaraja*, *Gramapriya* and *Srinidhi* fascinated the poultry farmers.

Participated in Exhibition and National Seminar at NAARM

Institute participated in the exhibition organized by RICAREA on 13th and 14th December 2016 at NAARM, Hyderabad on the occasion of the National Seminar on "Integrated farming systems for improving the livelihood of farmers". DPR stall attracted the attention of scientists and visitors at the exhibition.

Participated in Southern Regional Agricultural Fair, ANGRAU, Guntur

The Directorate participated in the Southern Regional Agricultural Fair organized by ANGRAU, Guntur from 19th to 21st December 2015. The technologies displayed at the exhibition attracted many farmers and visitors. The literature on the improved chicken varieties was distributed to the farmers.

Students' Visit

Many Graduate and Post Graduate students across the country visited the Directorate on their educational tours during the period.



Trainees at the Model training course

Mera Gaon Mera Gaurav (MGMG) programme

Under the Mera Gaon Mera Gaurav (MGMG) programme, two villages, Bavoji Thanda, Balanagar, Mahbubnagar Distt, Telangana and Korravani Thanda, Manchala, Ranga Reddy Distt., Telangana have been adopted by the Directorate. Improved backyard chicken varieties were distributed to the poor families for upliftment of their socio-economic condition and descent livelihood.



Distribution of improved chicken varieties to the farmers

Independence Day celebrated

The Directorate celebrated Independence Day on 15th August 2015. On this occasion Director, hoisted the national flag. He underlined the various activities, achievements and new initiatives undertaken by the institute.

Hindi Implementation Activities

The Directorate conducted two quarterly meetings of Official Language Implementation Committee (OLIC) on 22nd August and 17th December 2015, in which different issues related to effective implementation of Hindi Language in office were discussed. The Directorate also conducted two Hindi workshops, on 15th September and 19th December 2015 for upgrading the Hindi skills of staff in day to day official work. The Directorate also celebrated Hindi fortnight during 11th - 26th September 2015 and Hindi Day on 26th September 2015. During these celebrations different literary competitions were conducted for the staff. Dr. Rekha Sharma, Principal, Vivek Vardhini College, Hyderabad graced the occasion as the chief guest and she elaborated the importance of Hindi language and its history. All the winners of different competitions were awarded with cash prizes on this occasion.



Hindi Day celebration

Swachh Bharat Mission

Under the Swachh Bharat Mission, employees of this directorate conducted cleaning programme within the Institute as well as at the adopted village, Ameerguda. The staff members of the institute actively participated in keeping the premises clean. The villagers and school children were also sensitized for cleanliness and its impact on health and other issues.



Staff of the Institute cleaning the premises of the school of the adopted village, Ameerguda



Staff of the Institute cleaning the premises of the Directorate

PARTICIPATION IN SYMPOSIA/ CONFERENCE SEMINOR/ WORKSHOP

Sl. No.	Symposia/ conference Seminar/ Workshop	Scientist(s)/Officer(s)	Duration	Venue
1	World Congress on Beneficial Microbes-2015	Dr. Bhukya Prakash, Scientist	25 th - 27 th August 2015	Valencia, Spain
2	Workshop on "High throughput Genotyping with Fludigen Technology"	Dr. K.S. Rajaravindra, Scientist	3 rd & 4 th September 2015	Sandor Life Sciences, Hyderabad

3	National workshop on “Current Trends in Agricultural Bioinformatics”	Dr. SP Yadav, Sr. Scientist	22 nd -24 th September 2015	NAARM, Hyderabad
4	XIV NAVS Convocation	Dr. M.R. Reddy, Pr. Scientist	4 th November 2015	IVRI, Izatnagar
5	National Hindi Workshop	Sri J. Srinivas Rao, ACTO	7 th November 2015	ICAR-DKMA, New Delhi
6	IPSACON 2015	Dr. R.N. Chatterjee, Director Dr. M.V.L.N. Raju, Pr. Scientist Dr. M. Niranjana, Pr. Scientist Dr. U. Raj Kumar, Pr. Scientist Dr. R.K. Mahapatra, Pr. Scientist Dr. S.P. Yadav, Sr. Scientist Dr. B. Prakash, Scientist Dr. T.R. Kannaki, Scientist Dr. K.S. Rajaravindra, Scientist Dr. S.K. Bhanja, CTO	19 th - 21 st November 2015	CASM, Palakkad, Kerala
7	Seminar by Poultry India	Dr. M.V.L.N. Raju, Pr. Scientist Dr. M. Niranjana, Pr. Scientist Dr. U. Rajkumar, Pr. Scientist Dr. D. Suchitra Sena, Pr. Scientist Dr. B. Prakash, Scientist Dr. M. Shanmugam, Scientist Dr. T.R. Kannaki, Scientist Dr. K.S. Rajaravindra, Scientist Dr. S.K. Bhanja, CTO	24 th November 2015	Hitex, Hyderabad
8	Veterinary Pathology Congress-2015	Dr. M.R. Reddy, Pr. Scientist	2 nd December 2015	College of Veterinary Science, SVVU, Gannavaram
9	Workshop on Biochemical and Molecular Analysis of Medicinal Plants of India as a Source of Life Saving Drugs	Dr. D. Suchitra Sena, Pr. Scientist	7 th December 2015	CCMB, Hyderabad

10	Hindi Workshop at MANAGE	Dr. S.P. Yadav, Sr. Scientist Sri J. Srinivas Rao, STO	9 th December 2015	MANAGE, Hyderabad
11	Conference by RICAREA	Dr. R.N. Chatterjee, Director Dr. B.L.N. Reddy, Pr. Scientist Dr. T.K. Bhattacharya, National Fellow Dr. M. Niranjana, Pr. Scientist Dr. U. Raj Kumar, Pr. Scientist Dr. R.K. Mahapatra, Pr. Scientist Dr. S.P. Yadav, Pr. Scientist Dr. T.R. Kannaki, Scientist Dr. K.S. Rajaravindra, Scientist Dr. Chandan Paswan, Scientist	13 th December 2015	NAARM, Hyderabad
12	Competence Enhancement Programme for Technical Officers of ICAR	Dr. Daryab Singh, CTO Dr. R.V. Rao, CTO	14 th - 23 rd December 2015	NAARM, Hyderabad

MEETING CONDUCTED

Women Cell Meeting

During the period under the report, women cell meetings were held on 29th August 2015 and 28th December 2015 at this Directorate, where issues pertaining to the subject were discussed.



Women Cell Meeting at the Institute

Institute Joint Staff Council (IJSC) Meeting

The Institute Joint Staff Council meetings held at this Directorate for the period from 1st July 2015 to 31st December 2015 were:

- 3rd meeting of 9th IJSC on 28th August 2015
- 4th meeting of 9th IJSC on 16th October 2015
- 5th meeting of 9th IJSC on 22nd December 2015

TALK DELIVERED

- Dr. Chandan Paswan, Scientist delivered a talk on 'Animal model and its application in animal breeding' on 31st August 2015
- Dr. S.V. Rama Rao, Principal Scientist delivered a talk on 'Enzyme application in poultry diet' on 11th December 2015

PERSONALIA

Joining

- Sri A.V.G.K. Murthy, Administrative Officer joined on Promotion from ICAR – Central Tobacco Research Institute, Regional Station, Hunsur on 15th October 2015.
- Dr. Anand Laxmi, Pr. Scientist from ICAR – National Dairy Research Institute, Karnal joined on 9th December 2015 on transfer.
- Dr. S.K. Verma, Sr. Scientist from ICAR – Central Institute for Research on Cattle, Meerut joined on 30th December 2015 on transfer.



Transfer

- Sri K.V.S. Satyanarayana, A.A.O. transferred on Promotion as Admn. Officer to ICAR – Central Institute for Brackish water Aquaculture, Chennai on 14th October 2015.

Promotion

- Sri M.S.N. Acharyulu, Assistant has been promoted as A.A.O. w.e.f. 16th October 2015.
- Smt. T.R. Vijaya Lakshmi, U.D.C. has been granted 1st MACPS to the next higher Grade Pay of Rs. 2,800/- w.e.f. 5th July 2015.
- Sri K. Venkataiah has been granted 2nd MACPS to the next higher Grade Pay of Rs. 2,000/- w.e.f. 2nd September 2014.

AWARD/ RECOGNITION

- IPSACON- 2015 Best oral presentation award to M. Nirajan, Rajkumar, U., Paswan, C., Yadav, S.P. and Raja Ravindra, K.S. for the article “Short term response to selection for part period egg mass up to 40 weeks in PD-3 line”, held at Kerala Veterinary and Animal Sciences University, Pallakad, Kerala during 19th–21st November 2015.

- IPSACON-2015 2nd Best oral presentation award to Divya. D., Bhattacharya, T.K., Gnana Prakash, M., Chatterjee, R.N., Dushyanth K., Shukla, R. and Dange, M. for the article “Comparative assessment of expression profile of BMP3 gene during embryonic and post hatch period in broiler and layer chicken”, held at Kerala Veterinary and Animal Sciences University, Pallakad, Kerala during 19th–21st November 2015.
- IPSACON-2015 Best poster presentation award to Satheesh kumar, P., Bhattacharya, T.K., Kumar, P., Chatterjee, R.N. and Paswan, C. for the article “Cloning and expression profile of activin receptor type II gene in in two different chicken lines”, held at Kerala Veterinary and Animal Sciences University, Pallakad, Kerala during 19th – 21st November 2015.

DISTINGUISHED VISITORS

- Dr. M.P. Yadav, Former Vice Chancellor, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut
- Mr. M. Narmadeshwar Lal, Secretary, Animal & Fishery Resources Deptt., Govt. of Bihar

Edited by

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To



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