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Agrisearch with a human touch



NIVEDI (PD_ADMAS)

News

Proposed new building of NIVEDI at Yelahanka, Bengaluru

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Jul - Dec, 2013



From the Director's Desk...

Greetings!
Happy and Prosperous New Year-2014.

Another year is added to the age of the institute with significant achievements and many more tasks to be accomplished in the year ahead. As we are aware that UN has declared 2014 as an "International Year of Family Farming", we have to focus on such activities wherein the entire farmer's family realizes benefit from farming activities. It is highly applauded that Honourable Secretary, DARE and DG, ICAR has rightly said "Smart Farming for Small Farmers". It is noteworthy to mention that small and landless farmers largely depend on animal husbandry activities to support their family.

Last year the institute was loaded with many activities. We are indeed glad to put on record that PD_ADMAS was renamed as National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI) in October 2013 which shoulders the additional responsibility of informatics related research activities on many livestock diseases. The progress made in the construction of state of art BSL-II Laboratory and Administrative building at Yelahanka, Bangalore was highly appreciated by DG, ICAR and DDG(AS), ICAR and we are hopeful of shifting to new lab cum administrative building by August 2014.

The institute has the credit of launching an unique e-bulletin on Animal Disease Information-EpiNET_India which throws light on livestock disease scenario in India and was dedicated to the Nation by Hon'ble Prof. K.M.L. Pathak, DDG(AS),

ICAR on 10th October 2013. DDG (AS) also released a book on "Animal Disease Informatics" and five other technical bulletins.

The institute is recognised as Trainers Training Center under National Control Programme on Brucellosis (NCPB) and conducted trainings on Brucellosis. We also imparted training to staff of line departments, scientists and teachers in disease epidemiology, biostatistics and Economics.



Dr. S. Ayyappan, Secretary DARE & DG, ICAR is honoured with Rajyotsava Award by Govt. of Karnataka

Launching of EpiNET_India



Dr K.M. L Pathak, Deputy Director General (Animal Sciences) ICAR, New Delhi launched EpiNET_India, a monthly epidemiological information e-bulletin on 10th October 2013.



Dr. S. Ayyappan, Secretary, DARE and DG, ICAR reviewing the progress of the construction work of Laboratory cum Administrative building at Yelahanka, Bengaluru on 5th July 2013

(4) Classical Swine Fever (Kannada version) by Dr. S. S. Patil and (5) Fascioliasis in Animals by Dr. P. P. Sengupta. Dr. H. Rahman, Project Director and all the scientists of the Directorate were present in the meeting.

DDG(AS) interacting with Scientist of NIVEDI (Formerly PD_ADMAS)



Dr. K.M.L. Pathak, DDG(AS), ICAR reviewing the progress of the construction work of Laboratory cum Administrative building of NIVEDI at Yelahanka, Bengaluru on 24th October 2013

Institute Foundation Day



Institute Flag hoisting by Dr. Gaya Prasad, ADG(AH), ICAR at Yelahanka, Bengaluru

Release of technical Bulletins by DDG (AS), ICAR



Dr. K. M. L. Pathak, DDG (Animal Sciences), ICAR, New Delhi released one book and five technical bulletins on 10th October 2013. A book entitled "Animal Disease Informatics" by Dr. B. R. Shome, Dr. P. Krishnamoorthy and Dr. S.S. Patil was released. The technical bulletins released were (1) Epidemiology of Anthrax in India by Dr. M. R. Gajendragad, (2) Status of Haemorrhagic Septicaemia in India by Dr. M. R. Gajendragad, (3) Peste des petits Ruminants by Dr. V. Balamurugan,



Institute Flag hoisting by Dr. Gaya Prasad, ADG(AH), ICAR at Hebbal, Bengaluru

Institute Foundation Day was celebrated on 1st July 2013 at Yelahanka, Bengaluru. Dr. Gaya Prasad, ADG (AH), ICAR hoisted the Institute Flag and appreciated the endeavours of the scientists in bringing up the fame of the institute at national level. Dr. H. Rahman, Director promised that new laboratory cum administrative building will start functioning by August 2014. Later on all dignitaries planted saplings

as a mark of celebration. Dr. R. Venkataramanan, Joint Director, IVRI, Bengaluru also participated in the celebration.

National Conference on KVK



Dr.K.M.L. Pathak, DDG (AS), ICAR visiting NIVEDI (Formerly PD_ADMAS) stall during 8th National Conference on KVK from 23-25th October 2013 at UAS, Bengaluru

International Krishi Mela

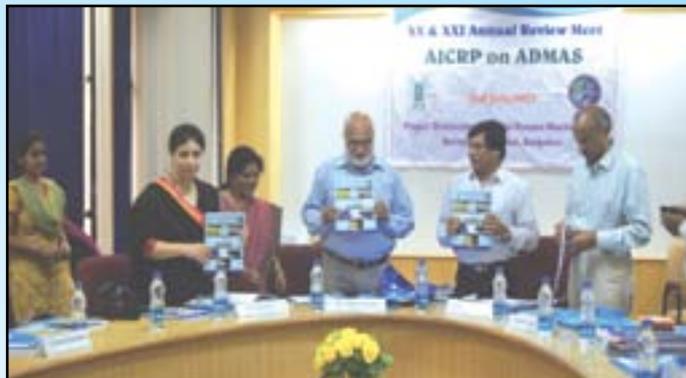


Shri. T.B. Jayachandra, Honorable Minister for Animal Husbandry and Fisheries, Govt. of Karnataka along with Vice Chancellors of UAS, Bengaluru and KVAFSU, Bidar visiting NIVEDI (Formerly PD_ADMAS) stall during International Krishi Mela from 7-11th November 2013 at UAS, Bengaluru.

XX and XXI Annual Meet of AICRP on ADMAS at NIVEDI (Formerly PD_ADMAS), Bengaluru



The XX and XXI Annual Review Meet of AICRP on ADMAS was held on 2nd July 2013 at NIVEDI (Formerly PD_ADMAS) under the Chairmanship of Dr. Gaya Prasad, ADG (AH), ICAR. Dr. H Rahman, Project Director coordinated the meeting. The Principal investigators from 14 AICRP centers participated in the Meet. Dr. Gaya Prasad released the Annual Report of AICRP on ADMAS.



Dr. Gaya Prasad, ADG (AH), ICAR released the Annual Report of AICRP on ADMAS during XX and XXI Annual Review Meet at NIVEDI (Formerly PD_ADMAS), Bengaluru on 2nd July 2013.

Annual Review Meet of DBT Network Project on Brucellosis



Annual Review Meet of DBT Network Project on Brucellosis organized at GADVASU, Ludhiana on 29th- 30th October 2013

Training Programmes Organized



NIVEDI in collaboration with ZPD organized Interactive Workshop on Livestock Disease Surveillance for the Animal Science Scientist working under ZPD on 30th November 2013 at ZPD, Kanpur, U.P. Dr. H. Rahman, Director and Dr. M. R. Gajendragad, Principal Scientist participated in the programme.



ICAR sponsored 10 days short course on "Advances in Livestock Disease Informatics and Biostatistics" from 19-28th August 2013.



North East Regional Disease Diagnosis Laboratory, Guwahati, Assam on 22nd August 2013



NIVEDI (Formerly PD_ADMAS) organized 5 days NAIP training programme on "Data Analysis Using SAS (SAS for NARS)" from 24-28th September 2013.



Animal Husbandry & Veterinary Department, Panaji, Goa on 20th September 2013

Project Monitoring Unit (PMU) of DBT Network project on Brucellosis



NIVEDI organised training programme for PDFMD - PD_ADMAS collaborative project staff from 16-18th August 2013.



Hands-on Training on Laboratory Techniques in Brucella Research organized by DBT PMU on 1st - 3rd August, 2013 at NIVEDI, Bangalore. Dr. A. J. Rao, Professor & INSA-Senior Scientist, IISc was the Chief Guest of the Programme.

Trainings conducted under National Control Programme on Brucellosis (NCPB)



Animal Husbandry & Veterinary Department, Shillong, Meghalaya on 21st August 2013



Workshop on 'Brucella Genomics' organized on 8th - 12th July 2013 at Madurai Kamaraj University, Madurai, Tamilnadu.

Livestock Disease Investigations



Expert Committee meeting on Incidence of IBR in organized farms at KVK, Baramati, Maharashtra.



Dr. S.S. Patil, Senior Scientist attended CSF investigation at Thathanur, Hoskote, Kolar, Karnataka on 5th December 2013



Expert Committee meeting to review outbreak of FMD in Karnataka at ADSS, Bengaluru, Karnataka



Dr. G. Govindaraj, Scientist had discussion on recent FMD outbreaks with Assistant Director, Kolar, Karnataka



Dr. V. Balamurugan, Senior Scientist and Dr. R. Sridevi, Scientist attended disease investigation in sheep at Sasalu and Belaguli villages of Chikkanayakanahalli, Tumkur, Karnataka



Dr. G. Govindaraj, Scientist and team interacting with women farmers to study the impact of Haemorrhagic Septicemia in Chitradurga.



Dr. S. S. Patil, Senior Scientist attended Malignant Catarrhal Fever investigation at Pattanagere Gollahalli, Anekal, Bengaluru on 20th September 2013

IMC Meeting



FMD outbreak investigation in Karnataka by NIVEDI Scientists (Dr. P. Krishnamoorthy, Dr. R. Sridevi and Dr. M. Nagalingam) along with IAH & VB and Veterinary College, Bengaluru during September to December 2013



Institute Management Committee meeting held on 5th October 2013



FMD outbreak investigation in Mayiladuthurai, TamilNadu by NIVEDI (Formerly PD_ADMAS) Scientists (Dr. B. R. Shome, Dr. V. Balamurugan and Dr. M. Nagalingam) along with IAH & VB Scientists, Bengaluru during November 2013



Mr. R. K. Babu, AF&AO participated in special training programme on "Financial Issues for the ICAR Officers" from 16-20th December 2013 at National Institute of Financial Management (NIFM), Faridabad, U.P.



Dr. P.P. Sengupta & Dr. P. Krishnamoorthy had discussions with Dairy farm owners regarding Trypanosomiasis on 18th August 2013 at Ron, Gadag, Karnataka.

Celebration of "Hindi Saptah" at NIVEDI (Formerly PD_ADMAS)

IAEC Meeting



Dr. P. Krishnamoorthy, Scientist conducted Institutional Animal Ethics Committee (IAEC) meeting on 28th September 2013 at NIVEDI (Formerly PD_ADMAS), Bengaluru



NIVEDI (Formerly PD_ADMAS) celebrated "Hindi Saptah" from 14-20th september 2013. Dr. Divakar Hemadri, Principal Scientist and Hindi Officer organized different activities in Hindi such as Ashubhashan, Quiz, Application writing, Translation, Essay writing and Singing in Hindi. Dr. S.S. Patil, Senior Scientist bagged most of the prizes and Dr. H. Rahman, Director, NIVEDI gave away the awards to the winners.



Smt. Saranya A, Steno Gr.III and Sri Gangadhareshwara L, LDC attended Training programme on "Microsoft Office Suite" from 18th to 22nd November 2013 at ISTM New Delhi

Success story

Indirect ELISA Kit for serodiagnosis of brucellosis in livestock and humans

Brucellosis, an important emerging and zoonotic disease, endemic to India. The diagnosis of brucellosis is done by multiple tests like isolation, PCR and serological tests. In our country, the Rose Bengal Plate Test is widely used for the diagnosis of brucellosis in suspected cases / farms. The RBPT is a slide agglutination test and has limitations of low specificity and sensitivity and practically not suitable as surveillance test for brucellosis. Presently, many imported species specific ELISA kits are being used for ruminants (cattle, buffalo, sheep and goat), pigs and humans apart from earlier PD_ADMAS developed AB_ELISA kit for bovines.

There is an increasing trend in the sero-prevalence of disease from 3 to 12% during 2002 to 2012 recorded in countrywide seroprevalence studies conducted at NIVEDI. Understanding the increased emergence of the disease, zoonoses threat and economic losses (350 million losses annually in India), Dept. of Animal Husbandry, Dairying and Fisheries (DADF), Ministry of Agriculture, GOI, initiated National Control Program on Brucellosis (NCPB) during the year 2011.

The surveillance of the disease before and after vaccination of *Brucella abortus* S19 (calhood) under National Control Program on Brucellosis requires large number of surveillance ELISA kits in the country apart from regular requirement of quality tests for brucellosis. Hence, the necessity was felt to improve the existing AB_ELISA kit to a recombinant Protein-G based indirect ELISA kit for diagnosis of brucellosis which suitable to screen different livestock species like cattle, buffalo, sheep, goat, pigs and humans.

The test has been standardized using smooth lipopolysaccharide antigen from a standard strain of *Brucella abortus* S99 and recombinant Protein G conjugated with Horse Raddish Peroxidase. The sensitivity of the test recorded as 92% and 98% in buffaloes and cattle respectively, whereas, specificity ranged from 95% in cattle and 98% in buffaloes.

Advantages of the Protein-G ELISA kit:

1. The use of smooth lipopolysaccharide antigen from *Brucella abortus* S99 strain in indirect ELISA (instead of crude antigen) helps to detect antibodies against other smooth species such as *B. melitensis* and *B. suis*.
2. The use of protein-G conjugate (common conjugate) as universal agent is advantageous over using different conjugates, protocols and reagents for different livestock species.

Trainings/Meetings Attended

Dr. Manjunatha Reddy GB, Scientist attended and presented a research abstract 15th National Conference of APCRI on "Towards Rabies Elimination by 2020 – Progress, Constraints and Challenges" 6-7th, July, 2013 at Hotel Hyatt Regency, Pune, Maharashtra.

Dr. P. Krishnamoorthy, Scientist attended International conference on "Emerging and Transboundary diseases of global importance" organized by TANUVAS, Chennai, India, University of Nottingham, UK and Virginia-Maryland Regional College of Veterinary Medicine, USA at Madras Veterinary College, Chennai, Tamilnadu from 15th to 16th July 2013.

Dr. Sridevi. R participated in one day training on Bio-care Mentorship Workshop for women for the south zone on 19th July 2013 at Chennai, Tamilnadu.

Dr. P. Krishnamoorthy and Dr. Sridevi. R, Scientists participated in ICAR sponsored Short course on Advances in Livestock Diseases Informatics and Biostatistics from 19-28, August, 2013 at NIVEDI(PD_ADMAS), Bengaluru, Karnataka.

Dr. H. Rahman, Director participated in 18th International Symposium on Problems of Listeriosis (ISOPOL) on 21st September 2013 at ICAR Research Complex for Goa, Goa.

Dr. H. Rahman, Director participated in Terminal Workshop on "Immediate technical assistance to strengthen emergency preparedness for HPAI to India" on 24th September 2013 at New Delhi.

Dr. Manjunatha Reddy GB, Scientist participated in NAIP Sponsored foreign training in the area of Carbon Trading/Carbon Sequestration/Climate Change with program "Climate change Vs Immune system: Tools and techniques for studying the immune system under changing environment" in the Immunology and Immunopathology Lab of Dr. Srinivasa Kaveri, Director, Centre de Recherche des Cordeliers (CRC) at l'Ecole de Medecine, INSERM, Paris, France from 1st October 2013 to 30th December 2013.

Dr. Sridevi. R attended AgrIP 2013 National Workshop on Role of Intellectual Property Rights in Modern Era from 15-16th November 2013 at ZTM-BPD Unit, South Zone CIFT, Cochin, Kerala.

Dr. M. R. Gajendragad, Principal Scientist and Dr. P. Krishnamoorthy, Scientist attended National symposium of Indian Association of Veterinary Pathology held at College of Veterinary Sciences, OUAT, Bhubaneswar from 21st to 22nd November 2013.

Dr. H. Rahman, Director, Mr. Riyaz Ahmed, A.O and Mr. R. K. Babu, AF&AO participated in “Interactive Workshop on Administrative & Finance Matters for the ICAR Institutes located in Southern Region” from 9- 10, December 2013 at NAARM, Hyderabad, A.P.

Mr. N. Narayanaswamy, Assistant participated in Central Joint Staff Council (CJSC) meeting at Delhi on 16th December 2013.

Joining/Promotion

Dr. P. Krishnamoorthy, Scientist was assessed under CAS for next RGP on 30th July 2013

Dr. Yogisharadya, joined as Senior Technical Officer (Vety) (T-6) upon his selection on 16th December 2013.

Trainings/Workshops Organized

Organized 20th and 21st Annual Review meeting of AICRP on ADMAS on 2nd July 2013.

A training programme on Disease Surveillance and Monitoring was organized for MFSc students from CIFE Mumbai from 23-31st July 2013.

Hands-on Training on Laboratory Techniques in Brucella Research was organized under DBT network project on Brucellosis from 1-3rd August 2013.

Training-cum-workshop on Study of economic impact of FMD in India was organized from 16-18th August 2013.

ICAR sponsored 10 days short course on Advances in Livestock Disease Informatics and Biostatistics was organized from 19-28th August 2013.

Organized 5 days NAIP training programme on Data Analysis Using SAS (SAS for NARS) from 24-28th September 2013

New Projects Sanctioned

1. Serosurveillance and Molecular Epidemiology of Bovine Herpesvirus 1 (BoHV-1) infection in bovines of North Eastern states of Mizoram, Meghalaya and Tripura under DBT's Twinning Programme for the NE Region for three years starting from 10th October 2013
2. Prevalence and Molecular Epidemiology of Bovine Viral Diarrhoea (BVD) in Ruminants with special reference to Mithun (*Bos Frontalis*) in North Eastern states of India under DBT's Twinning Programme for the NE Region for three years starting from 30th September 2013
3. Aetio-Pathology and Molecular Epidemiology of bacterial and viral diseases associated with the respiratory problems of Yak in the North Eastern Region of India under DBT's Twinning Programme for the NE Region for three years starting from 7th October 2013
4. Sero-surveillance, molecular characterization and epidemiology of pox viral infections in animals from North Eastern Region of India under DBT's Twinning Programme for the NE Region for three years starting from 28th October 2013

Distinguished Visitors to the Institute

1. Dr. S. Ayyappan, Secretary, DARE and DG, ICAR, New Delhi
2. Dr. K.M.L. Pathak, DDG(AS), ICAR, New Delhi
3. Dr. R. M. Acharya, Ex-DDG(AS), ICAR, New Delhi
4. Dr. M.L. Madan, Ex-DDG(AS), ICAR, New Delhi
5. Dr. R.N. Sreenivasgowda, Ex-Vice Chancellor, KVAFSU, Bidar
6. Dr. B. Pattnaik, PD, PDFMD, Mukteswar, Nainital, Uttarakhand
7. Dr. A. J. Rao, Professor and INSA-Senior Scientist, IISc, Bengaluru
8. Dr. Vasudevappa, Dean (PGS), UAS, Bengaluru

Concept and Guidance: **Dr. H. Rahman**, Director

Editor : **Dr. S.S. Patil**

Co-Editors : **Dr. P. Krishnamoorthy, Dr. G. Govindaraj and Dr. K.P. Suresh**

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