

# ICAR-NIVEDI

## Newsletter

Vol.14(1) Jan to Jun 2024

### Director's Desk

Dear Colleagues,

Greetings from ICAR-NIVEDI!

I am pleased to present the ICAR-NIVEDI newsletter for January to June 2024. During this period, we achieved significant milestones, including the recognition of our PPR and Leptospira Laboratories as WOAHA Reference Laboratories.

In addition, we have successfully launched the activities of the Bengaluru Academic Hub, under the IVRI Deemed University. The MVSc and Ph.D. courses in Veterinary Microbiology and Veterinary Public Health and Epidemiology have commenced, with seven students enrolled for the 2023-24 academic year.

ICAR-NIVEDI has also signed several MoUs with esteemed organizations to foster collaboration in academic and research fields, including Manipal Academy of Higher Education, GITAM University, Gujarat Biotechnology Research Centre, and ICAR-NRC on Mithun.

We also organized various training programs, including an ICAR-sponsored ten-day short course on 'Advances in GIS Applications in Epidemiological Analysis of Livestock Diseases in India', a training on 'Field Veterinary Epidemiology' for veterinarians from Kerala, and a hands-on training on 'Geospatial Epidemiology for Zoonotic Disease Surveillance and Mapping'. The NIVEDI Seminar Club also hosted a talk by Dr. Georgina Limon-Vega from the Pirbright Institute, UK, on "Understanding Drivers for the Transmission and Spread of Transboundary Diseases."

Our NaaViC Agri Business Incubation Centre successfully organized a 'State-Level Incubator Conclave' in association with the Karnataka Science and Technology Academy (KSTA), Bengaluru, which brought together 33 incubators from across Karnataka.

Our scientists have been active participants in various workshops and meetings at both national and international levels, offering valuable insights at events such as the "Episystem Workshop for PPR Eradication" in the Lake Chad Basin, Cameroon, the "7th PPR Advisory Committee Meeting" at FAO, Rome, and the "DAHD Meeting on Avian Influenza Outbreak Response" in Bhopal. We also filed five copyright applications, with one granted, and our scientists received awards and fellowships by various professional societies in recognition of their research contributions.

I sincerely thank the editorial team for their efforts in compiling this newsletter and the entire ICAR-NIVEDI team for their dedication., which continues to bring professional recognition to our institute.

JAI HIND!



Baldev Raj Gulati

## Research News

### WOAH recognition of referral lab for PPR and Leptospirosis Lab at ICAR-NIVEDI



The World Organization for Animal Health (WOAH) Biological Standards Commission has recognized the ICAR-NIVEDI laboratories as two of the new WOAH Reference Laboratories for Peste des petits ruminants (PPR) and Leptospirosis, with designated expert Dr. V Balamurugan, endorsed by the WOAH Council on 26<sup>th</sup>

March 2024. This decision aligns with Resolution No. 33, “Designation of WOAH Collaborating Centers” adopted during the 91<sup>st</sup> World Assembly of WOAH Delegates at the General Session held on 30<sup>th</sup> May 2024. (<https://www.ppr-labs-oie-network.org/>)

### Swine Leptospirosis Outbreak in Mandya, Karnataka

A farm owner and veterinarian in Mandya district, Karnataka, reported a series of pig abortions, suspecting leptospirosis. A thorough outbreak investigation was conducted during 22<sup>nd</sup> April – 2<sup>nd</sup> May 2024, to identify the cause of the abortions and determine potential sources of infection. Farm owners and workers were interviewed, and serum, urine, and vaginal swab samples from sows and finisher pigs, tissue samples from aborted fetuses, and water and soil samples in and around the farm were collected. Twenty-one pig serum samples were subjected to the Microscopic Agglutination Test (MAT) using 20 reference serovars covering 17 serogroups of *Leptospira*. DNA was extracted from the aborted tissue, soil, and water samples and subjected to PCR targeting the LipL32 gene, followed by sequence analysis targeting the rpoB, LipL32, and LipL41 genes. Nine out of twenty-one serum samples showed positive reactions in MAT. PCR results were positive for all the seven aborted fetuses and one out of three sows. Sequencing of aborted samples revealed *Leptospira interrogans* and *Leptospira meyeri*. All rodent samples were negative for both PCR and culture. Out of 31 water samples from the pig farm, 9 were found positive in PCR and sequence analysis revealed the presence of *L. interrogans*. Three *Leptospira* isolates

were confirmed by isolation using EMJH medium, and their characterization is in progress. The investigation confirmed the presence of pathogenic *Leptospira* serogroups/strains in both pig and environmental samples from the affected farm. The introduction of a new lot of purchased pigs from an external source, and contaminated water in the feeding area were identified as potential factors in the leptospirosis outbreak. These findings underscore the need for stringent biosecurity measures, regular screening, and vaccination to mitigate the risk of leptospirosis in swine populations and reduce zoonotic transmission.



## NIVEDI team surveys Davanagere district, Karnataka for data collection on Anthrax

ICAR NIVEDI staff surveyed 13 villages in Harihara taluk, Davanagere district to gather data on the risk of anthrax under One Health Anthrax Initiative (OHAI) project at ICAR-NIVEDI. Our focus was on understanding farmers' knowledge and awareness of anthrax, their socioeconomic behaviour, risk exposure, and their mitigation strategies concerning anthrax. We interviewed 122 farmers and conducted focus group discussions as part of this survey. One of the notable observations was the tendency for underreporting and non-reporting of Anthrax cases. To combat this issue, an initiative was undertaken to disseminate informative leaflets among the farming communities. These leaflets aimed to enhance awareness regarding the symptoms, transmission, and effective control measures for Anthrax. Key milestones include calculating the risk period at the village level to estimate the probability of anthrax occurrence in the Harihara taluk,

Davanagere region annually.



## Estimation of antibiotic use and AMR in migratory flocks of sheep in Chitradurga and Tumkur District, Karnataka

Antibiotic use at farm level was estimated and quantified in 35 migratory sheep flocks in Chitradurga and Tumkur District, Karnataka and correlated with antimicrobial resistance in sheep. Defined Daily Dose (DDD) was measured and the average daily dose of an antibiotic per animal was calculated. DDD vet in this study was estimated to be 160mg/animal/day. The average antimicrobial use was 4.10mg/kg in sheep in Chitradurga district which is much lower than Global average (96.73 mg/kg as per 7<sup>th</sup> AMU report of WOA, 2019). The most common antibiotics used were Oxytetracycline and Enrofloxacin in sheep for therapeutic purposes. The percent prevalence of ESBL *E. coli* was 9.09% (31/341) in sheep and 15.51% (9/60) in farm environments.



## Scientific Activities

### Secretary, DAHD interacted with NIVEDI Scientists



Hon'ble Smt. Alka Upadhyaya, Secretary, Department of Animal Husbandry and Dairying (DAHD, GoI), along with other senior officials interacted with NIVEDI scientists on 5<sup>th</sup> April 2024. Dr. B R Gulati, Director of ICAR-NIVEDI, showcased the institute's profile and presented the plans for establishing the National Animal Disease Information and Control Centre (NADICC) as part of the National Digital Livestock Mission. This centre will develop a comprehensive

digital platform for real-time reporting and analysis of livestock diseases. He expressed gratitude towards Secretary, DAHD and the Animal Husbandry Commissioner for their pivotal roles in securing WOA Reference Laboratory status for two of NIVEDI's laboratories. Dr. Abhijit Mitra, Animal Husbandry Commissioner, praised the institute's efforts in managing national animal disease control programs, specifically targeting diseases like Brucellosis, PPR, and CSF. Mrs. Varsha Joshi, Additional Secretary (CDD/IT), emphasized the importance of using AI and machine learning in disease management. Mrs. Sarita Chauhan, Joint Secretary (LH), highlighted the need to integrate zoonotic disease studies and public awareness into all projects, while Shri G.N Singh, Joint Secretary (Admin/Trade/GC/IC), called for increased exports of livestock products. Secretary Mrs. Upadhyaya, commended the institute's advancements in livestock disease epidemiology and its proactive approach in disease forecasting and forewarning. She also advocated for a collaborative national project to tackle Antimicrobial Resistance (AMR) and Antimicrobial Usage (AMU).

## 16<sup>th</sup> Research Advisory Committee meeting of ICAR-NIVEDI

The 16<sup>th</sup> Research Advisory Committee (RAC) Meeting of the ICAR-NIVEDI held on 14<sup>th</sup> March 2024 under the Chairmanship of Dr M.P. Yadav, Former Director, IVRI. The other members present were Dr Ashok Kumar, ADG (AH), ICAR, Dr B.R. Gulati, Director, ICAR-NIVEDI, Dr Mandeep Sharma, Dean, CVSc, Palampur, Dr S.C. Dubey, Ex-Joint Director, NIHSAD, Dr Rajendra Singh, Ex-Principal Scientist, IVRI, Dr C. Madan Mohan, Principal Scientist, IVRI, Dr Lalit Achoth, Ex-Professor, KVAFSU and Dr S.S. Patil, Member Secretary, ICAR-NIVEDI. The

members emphasized the importance of gathering real-time livestock disease data and associated risk factors, improved quality of disease data from state governments for better epidemiological analysis, recommended regular workshops and meetings focused on the One-Health approach involving multi-stakeholder participation from veterinary, medical, and wildlife sectors, and the establishment of a BSL-3 facility at ICAR-NIVEDI to better prepare for emerging livestock diseases.



## 18<sup>th</sup> Institute Research Committee meeting



The 18<sup>th</sup> Institute Research Committee meeting of ICAR-NIVEDI for the financial year 2023-24 was held on 16<sup>th</sup> April, 2024 under the chairmanship of Dr. B. R. Gulati Director, ICAR-NIVEDI, Bengaluru. The external experts,

Dr. Aniket Sanyal, Director, ICAR-NISHAD and Dr. S. C. Yadav, Principal Scientist (Retired), ICAR participated in the meeting. Dr. V. Balamurugan, Nodal Officer, PME cell and Member Secretary, IRC, welcomed the house. In the opening remarks, the Chairman provided an overview of the research accomplishment during 2023-24. Dr. Aniket Sanyal underscored the pivotal role of ICAR-NIVEDI in disease informatics and the surveillance of important livestock disease in the country. Dr. S. C. Yadav in his initial remarks emphasized the significance of NIVEDI's disease data and serum repository, urging scientist to make the utmost use of this valuable resource. Dr. V. Balamurugan, Nodal Officer, PME cell presented the recommendation of 16<sup>th</sup> RAC for the members of the IRC. In this meeting, the thirty seven ongoing research projects were reviewed and three new project proposals were approved by the Chairman.

## Consultation on Field epidemiology training programme for veterinarians in India

Stakeholder Consultation Workshop for Establishing an In-service Field Epidemiology Training Program for Veterinarians (FETPV) in India was organised at ICAR-NIVEDI on 28<sup>th</sup> February 2024. During the workshop Dr Peter Black and Dr Tang Hao from ECTAD (RAP), Dr. R.K. Singh and Team from ECTAD India, Dr.B.R. Gulati, Director, and Scientists of NIVEDI, experts from GADVASU, KVASU and WII deliberated on preparing the Road Map to rollout FETPV in India.



## NIVEDI Seminar Club Lectures by Experts

The NIVEDI Seminar Club hosted series of talks as part of the Continuing Epidemiology Education (CEE). Dr Georgina Limon-Vega, Scientist, Epidemiology from Pirbright institute, UK visited ICAR-NIVEDI on 9<sup>th</sup> February 2024. She delivered a talk on “Understanding drivers for transmission and spread of transboundary diseases “ and interacted with scientists about epidemiological risk factors of sheep pox, CCHF, other diseases and possible collaboration with Pirbright

Institute, UK in the area of livestock viral diseases. The Professor Peter Hudson, Former Director, Huck Institutes of the Life Sciences delivered a talk on the topic “Primary pandemic proposal studying Hendra virus spill over” on 5<sup>th</sup> March 2024. Dr Prabhdeep Kaur, Professor, Isaac Centre for Public Health, Indian Institute of Science, Bengaluru, spoke on the topic of “Event-based surveillance, a unified community-based approach for human and animal health” on 27<sup>th</sup> March 2024.



## Interaction of Director, ATARI, Guwahati with NIVEDI Scientists

Dr G. Kadirvel, Director, ATARI, Guwahati visited ICAR-NIVEDI and interacted with the scientists on research collaborations and effective implementation of schemes in North east region of India on 24<sup>th</sup> January 2024.



## Visit of Director (IFD), DAHD



Shri Anandi Venkateswaran, Director (IFD), DAHD, GoI visited ICAR-NIVEDI on 9<sup>th</sup> February 2024 and the Director Dr B.R. Gulati explained the various activities undertaken by the scientists of the Institute. She was impressed by the expertise and infrastructure of NIVEDI and supported the implementation of NADICC.

## ITMC meetings of ICAR-NIVEDI



Institute Technology Management Committee (ITMC) meetings were held on 29<sup>th</sup> February 2024 (Virtual), 12<sup>th</sup> March 2024 and 21<sup>st</sup> June 2024 in which the proposal for equipment purchase for ABI from ICAR-ABI-NAIF Capital fund was approved. Proposed technologies for the commercialization were evaluated for the further Techno Commercial Assessment Meeting (TCA). The copyright proposals submitted by NaaViC team, ABI centre, ICAR-NIVEDI were approved by ITMC and 17<sup>th</sup> year renewal of Patent No. 250709 (A Kit for diagnosis of Brucellosis) was approved. Validation procedure for web applications and statistical methodologies were evaluated and approved.

# Memorandum of Understandings (MoUs)

## MoU with Manipal Academy of Higher Education, Manipal

A Memorandum of Understanding (MoU) was executed between ICAR-NIVEDI and Manipal Academy of Higher Education (MAHE), Manipal, Karnataka on 6<sup>th</sup> January 2024. MAHE will recognize ICAR-NIVEDI as an Institute for conducting research related to the thesis requirement of the research students for PG/PhD/MPH in One Health. Scientists of ICAR-NIVEDI will be guiding the students of MAHE in their research. Research instrumentation facility and library facilities available with both the institutes will be made available to the faculty and research scholars.



## MoU with GITAM University, Visakhapatnam



MoU was made with GITAM Deemed to be University, Visakhapatnam, Andhra Pradesh on 6<sup>th</sup> February 2024 for facilitating the student's training and post-graduate research in ICAR-NIVEDI and future collaborations in the various research activities.

## ICAR-NRC Mithun signed MOU as NADEN Centre

Dr Girish Patil, ICAR National Research Centre on Mithun visited NIVEDI, Bengaluru on 18<sup>th</sup> March 2024 and discussed the collaborations with NIVEDI scientists in surveillance and monitoring of livestock diseases in Mithun population in North east region. An MoU signed for establishing NADEN centre in NRC Mithun between NIVEDI.



## MoU with GBRC, Gandhinagar

ICAR-NIVEDI has made a MoU with Gujarat Biotechnology Research Centre (GBRC), Gandhinagar, Gujarat on 31<sup>st</sup> May 2024. GBRC is involved in innovative research leading to product / prototype / process development with application in healthcare, agriculture, environment and marine sectors. Operational details of research effort and collaboration were made in common research programmes and/or projects restricted to specific mandated domain within the approved disciplines/divisions. Information/biological samples/materials will be shared between two institutes under collaborative research mode. Research instrumentation facility and library facilities available with both of the institutes will be made available to the faculty and research scholars.



## Important Events

### Republic day celebration

ICAR-NIVEDI celebrated 75<sup>th</sup> Republic Day on 26<sup>th</sup> January 2024 with full of pride and patriotism. Dr. B.R. Gulati, Director, hoisted the national flag in the presence of staff and employees. On the occasion, he urged the entire staff to work for betterment of livestock and farming community of the country. He emphasized the application of modern tools in disease diagnosis, surveillance and epidemiology for betterment of livestock farmers in India.



### International Women's day celebrations



The ICAR-NIVEDI, Bengaluru celebrated the “International Women’s Day” on 22<sup>nd</sup> March, 2024. Overall, 100 lady staff of NIVEDI participated and various events such as invited lectures by experts Dr Rinku Mathappan, Dr Padmakshi P, and Mrs Payal Patel on various health aspects for women were conducted. On this occasion, free eye check-up, body mass index assessment and dietary advisory, testing of GRB, HBA1c, lipid profile and uric acid testing for women were organized.

### World Intellectual Property Day celebrated

ICAR-NIVEDI celebrated World Intellectual Property Day on 30<sup>th</sup> April 2024. On this occasion, a session on the theme “Intellectual Property (IP) and the Sustainable Development Goals (SDGs): Building our common future with innovation and creativity” was held with the participation of scientists, research scholars, technical and administrative staff. It emphasized the importance that intellectual property rights, such as patents, copyrights, designs, trademarks, plant varieties, and technological

licensing, play in stimulating innovation and creativity. The speaker, Ms. Soumyashree, Associate partner and Branch Head, Altacit Global, Bengaluru, highlighted the importance of patenting as a tool for protecting innovations and discussed strategies for monetizing intellectual property to support sustainable development efforts. Additionally, the speaker mentioned various forms and processes related to IP management or regulation.



## International Yoga Day celebrated

ICAR-NIVEDI celebrated the International Yoga Day on 21<sup>st</sup> June 2024 and the Yoga session was held for the NIVEDI staff members on this occasion.



## Outreach Activities

### Distribution of cow mats and milk cans to farmers

Under DAPSC scheme, national farmer's day was organized by conducting one-day training programme and a total of 120 farmers belong to scheduled caste from Chinthamani and Doddaballapura taluks have attended the training programme. On 26<sup>th</sup> January 2024, the farmers were provided with one milk can and one cow mat to achieve clean milk production with enhanced biosecurity measures in their dairy farm.



### Skill development programme on poultry farm management

Under Development Action Plan for Schedule Caste (DAPSC) project, ICAR-NIVEDI organized on 2<sup>nd</sup>, 19<sup>th</sup> and 20<sup>th</sup> February 2024 three one day training cum workshops in collaboration with CPDO & TI, Hessaraghatta, Bengaluru. Each batch of training consist of 30 landless farmers, both female and male belongs to scheduled caste community of Hovinahalli, Venukalgudd, Eswaragere, Devarakotta, Vedhavathi Nagar, Hariyabbe villages in Hiriyur taluk, Chiradurga District. Along with training, an exposure visits to IIHR nurseries, vegetable garden and orchards were also arranged to motivate rural farmers to do kitchen gardening for their family's nutritional security. On successful completion of each training programme, 4500 chicks of Kaveri, Aseel and

Kalinga Brown breeds of chicks, 8 weeks old age were distributed to the beneficiaries.



### Nandidurga goat distributed for doubling farm women income

Nandidurga is white coloured goat and mainly reared in Chitradurga district of Karnataka for meat purpose. Under DAPSC scheme ICAR-NIVEDI introduced among Scheduled Caste rural women for developing among them the entrepreneurship in Bengaluru Rural District. NIVEDI has chosen NANDIDURGA because it has higher fecundity and twinning is very common (50-60%), and at times triplets, quadruplets and occasionally pentaplets. Adult weight varies from 26 to 56kg in males and 24 to 41kg in females depending upon the management by farmers. In this programme, a total of 35 beneficiaries were given with 2 female +1 male goat unit to each, which covered 31 women beneficiaries, having

11 widows on 22<sup>nd</sup> February 2024.





## Special Veterinary Health Camp and Training Programme for farmers organized



During the Special livestock health camp programme organized on 27<sup>th</sup> February 2024 at Arasampati village, Pochampally taluk, Krishnagiri district, the animals were

given deworming drug, distributed mineral mixture for cattle and salt licks for calves, etc. The brucellosis vaccines in female calves of 4-8 months of age, LSD vaccination in cattle, Rabies vaccination in dogs and Ranikhet disease vaccinations in poultry were done in the camp. Seventy six SC farmers and a total of 385 livestock species of animals and 24 dogs were provided health care during the camp. The castration in dogs was also undertaken in this camp. The dung samples were tested for detection of parasitic eggs and milk samples were tested for mastitis using CMT test. The cattle were examined for pregnancy and infertility by using ultrasound sonography during the Infertility camp. The training programme on Scientific rearing of farm animals in Tamil Nadu was organized for the benefit of the Thirty SC farmers in the village.

## Human Resource Development

### ICAR Short course on Advances in GIS applications in epidemiological analysis of livestock diseases organized

ICAR NIVEDI organized an ICAR sponsored ten days short course on “Advances in GIS applications in epidemiological analysis of livestock diseases in India” during 7-16<sup>th</sup> February 2024. Twenty five participants

from nine states participated and gained knowledge on GIS mapping of livestock diseases outbreaks and epidemiological analysis using open source software such as EpiInfo and QGIS.



### Field Veterinary Epidemiology training for Kerala Vets



ICAR NIVEDI organized the five days training program on “Field Veterinary Epidemiology” for Veterinarians of Kerala and sponsored by Kerala State Animal Husbandry Department, Government of Kerala during 26<sup>th</sup> February – 1<sup>st</sup> March 2024. The five-day training focused on systematic outbreak investigation and use of tools such as QGIS and Ep-Info were covered during the training

## Training on GIS applications in Zoonotic Disease Surveillance

Under National One Health Programme for Prevention and Control of Zoonoses (NOHPPCZ) of the National Centre for Disease Control (NCDC) “Hands-on training on Geospatial epidemiology for zoonotic disease surveillance and mapping” was organized during 4-8<sup>th</sup> March 2024 at ICAR-NIVEDI, Bengaluru. Thirty participants from eight states of India have been registered and participated. The training is intended to provide preliminary insights into th



## Episystem workshop for PPR eradication in the Lake Chad Basin, Cameroon

Dr V. Balamurugan, Principal Scientist participated in the Episystem workshop for PPR eradication in the Lake Chad Basin and Regional Advisory Group for Central Africa organized by the Food and Agriculture Organization (FAO) of the United Nations and World Organization for Animal Health (WOAH) at Yaounde, Cameroon during 3-4<sup>th</sup> April 2024. The workshop gave good exposure and opportunity to interact with renowned international scientists in the field of PPR / PPR virus research. Further, helped to understand and learn the episystem-based epidemiology approach for control and eradication programme strategies. Additionally, following the direction and guidance of experts from the WOA and the FAO, activities under the National Strategic

Plan for PPR Eradication, to eradicate the disease from India by 2030 as proposed by DAHD, Government of India as planned.



## State level Incubator's Conclave organized

NaaViC Agri Business Incubation Centre, ICAR-NIVEDI, Bengaluru has organized 'State level Incubator Conclave' uniting 33 Incubators over for those who are operating in the state of Karnataka implementing flagship program of both Central & State at Karnataka Science and Technology Academy (KSTA), Bengaluru on 17<sup>th</sup> May 2024. The conclave included Industry Partners represented by BCIC along with K-Tech from the Government of Karnataka end. NaaViC is at the forefront of incubation in Animal Husbandry and Veterinary Services and has been a key



player in executing the RKVY-RAFTAAR program under the flagship of the Ministry of Agriculture & Farmers Welfare (MoA & FW), Government of India, in collaboration with ICAR-NAIF-ABI.

## 7<sup>th</sup> PPR Advisory Committee Meeting at FAO, Rome

Dr V. Balamurugan Participated in the 7<sup>th</sup> PPR Advisory Committee Meeting and the GREN vaccination thematic group meeting organised by Food and Agriculture Organization (FAO) and World Organization for Animal Health (WOAH) at FAO Headquarters in Rome, Italy held during 25-28<sup>th</sup> June 2024. In this meeting, various strategies to control and eradicate the PPR in various countries of the world were discussed.



## World Bank and DAHD workshop on Avian Influenza outbreak response

Dr M.M. Chanda and Dr Chethan Kumar H.B, Scientists attended Avian Influenza outbreak and Response Simulation Exercise organized by The World Bank and Department of Animal Husbandry and Dairying during 19-20<sup>th</sup> June 2024 at Bhopal, Madhya Pradesh. During the exercise, expert from State Disease Diagnostic laboratories, wild life officials, public health officials and ICAR scientists were divided into

different functional groups and simulated avian influenza outbreaks scenarios were created. The goal of the exercise was to assess the existing capacity, identify the gaps and needs for better preparedness and outbreak response for Avian Influenza in India. In addition, there were expert talks on surveillance and current global and regional status of Avian Influenza.



## Classes of Post-Graduate courses of IVRI-DU Bengaluru Hub started in ICAR-NIVEDI

Being a Centre of Bengaluru hub of the IVRI-DU, ICAR-NIVEDI started the post-graduate teaching classes both on-and offline. At present there are total seven students enrolled in this centre. Out of which five for M.V.Sc. and two for Ph.D. degree for the academic year 2023-24. In M.V.Sc. courses, three are in Veterinary Microbiology and two are in Veterinary Public Health & Epidemiology whereas in Ph.D.

course, two are in Veterinary Public Health & Epidemiology discipline. All the students are accommodated in hostels in NIVEDI campus. All the basic amenities including water purifier, geysers, smart class room, sport facilities etc. have been provided to them. The scientists of ICAR-NIVEDI are taking their theory and practical classes.

## Copyrights

**Copyright granted** - “National Animal Disease Referral Expert System version 2 (NADRES V2) Web Application” (Authors: Suresh KP, Hemadri D, Patil SS, Krishnamoorthy P, Siju SJ) registered with ROC No. SW-18400/2024 by Registrar of Copyrights, New Delhi on 12<sup>th</sup> March 2024.

**Copyrights filed** - NaaViC logo, NaaViC Bengaluru logo, NEST Logo, NOVICE Logo and NEXUS Logo from NaaViC, ABI centre, ICAR-NIVEDI were filed and got the Diary Nos. in the month of March 2024.

## Awards/Recognitions

Dr. V. Balamurugan awarded as a Fellow of the Indian Association of Veterinary Microbiologists, Immunologists and Specialists in Infectious Diseases 2024, in recognition of his Significant contributions for the advancement of Veterinary Microbiology and received Best oral presentation award in the National Conference on “IAVMICON-2024, XXXVI Annual Convention of IAVMI” on “XXXVI National Conference of “Indian Association of Veterinary Microbiologists Immunologists and Specialists in Infectious Diseases” “Impact of Animal Health on One Health and National Prosperity” held at Udaipur organized by Department of Veterinary Microbiology, College of Veterinary and Animal Science, Udaipur during 6-7<sup>th</sup> June 2024.



Dr M. Nagalingam received best poster award (third place) for abstract presentation on “Epidemiological investigation of abortions in sheep due to *Brucella melitensis*: A study in Karnataka” at Winter Symposium & South zone Microcon 2024 organized by Christian Medical College, Vellore during 1-3<sup>rd</sup> February 2024.

Dr M. Nagalingam received best oral presentation award (first place) for abstract presentation on “Assessment of prevalence and risk factors of brucellosis in sheep in Karnataka, India: A cross sectional study.” at International Conference of Indian Society for Sheep and Goat Production and Utilization (ISSGPUCON-2024) on Recent Trends and Future Perspective to Improve the



Performance, Health and Welfare of Small Ruminants Under Changing Climate Scenario, Rajiv Gandhi Institute of Veterinary Education and Research (RIVER), Kurumbapet, Puducherry, during 24-26<sup>th</sup> April 2024.

## Personnel joined/transferred/promoted

- Smt. Suma Srinivas, AF&AO, joined at ICAR-NIVEDI on 01.01.2024 (F/N) from ICAR-IIHR, Bengaluru.
- Dr. Z.B.Dubal, Principal Scientist, joined at ICAR-NIVEDI on 10.01.2024 (F/N) after transfer from ICAR-IVRI, Baireilly.
- Shri. Sadik Ali, Finance and Accounts Officer, Joined ICAR-NIVEDI on 22.04.2024 (F/N).
- Mr. Purshotam Yadav, joined as T-1 at ICAR-NIVEDI from 25.04.2024 (A/N).
- Mr. Praveen, joined as T-1 at ICAR-NIVEDI from 06.05.2024 (F/N).
- Mr. Md Razi Ahmad, joined as T-1 at ICAR-NIVEDI from 07.05.2024 (F/N).
- Dr. R. Yogisharadhya, Assistant Chief Technical Officer (ACTO), relieved from ICAR-NIVEDI on 11.01.2024 (A/N) to join as Senior Scientist-cum-Head, KVK Hailakandi, Assam.
- Dr. Awadhesh Prajapati, Assistant Chief Technical Officer (ACTO), relieved from ICAR-NIVEDI on 29.04.2024 (A/N) to join as Associate Professor at Bihar Veterinary College, Patna.
- Smt. Suma Srinivas, AF&AO, relieved from ICAR-NIVEDI on 25.04.2024 (A/N) to join at ICAR-ATARI, Bengaluru.
- Dr. Jagadish Hiremath, Principal Scientist, has been promoted from senior scientist to Principal Scientist with effect from 01.03.2023.
- Dr. G. Narayanan, Senior Scientist, has been promoted to next higher grade of Senior Scientist, Research Pay Level-13 A with effect from 27.04.2023.

*Concept and Guidance*

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