

## Three-Day Workshop on Molecular and Serological Diagnosis of Brucellosis conducted at ICAR-IVRI

A three-day workshop on “Molecular and Serological Diagnosis of Brucellosis” was concluded on 13 March 2026 at ICAR-Indian Veterinary Research Institute (IVRI), Izatnagar, Bareilly. The workshop was organized from 11–13 March 2026 with the objective of strengthening laboratory capacity and enhancing technical expertise in the diagnosis of brucellosis, an important zoonotic disease that affects both livestock and human health and results in significant economic losses due to reproductive disorders in animals and occupational



infections in humans. ICAR–Indian Veterinary Research Institute, one of the premier veterinary research institutes in the country, has been playing a pivotal role in research, diagnostics, and capacity building in animal health and zoonotic diseases. The institute has made significant contributions to the development of diagnostic technologies, vaccines, and disease surveillance strategies for several important livestock diseases.

The workshop was conducted under the National One Health Programme for Prevention and Control of Zoonotic Diseases (NOHP-PCZ), funded by the National Centre for Disease Control (NCDC), New Delhi. The programme aims to promote integrated surveillance, improved diagnostic preparedness and coordinated response between veterinary, medical and public health sectors under the One Health framework.

The workshop was inaugurated by Dr. S. K. Singh, Joint Director (Research), ICAR-IVRI, who highlighted the importance of strengthening diagnostic infrastructure, laboratory networking and skilled manpower for effective surveillance and control of zoonotic diseases in India. He emphasized that training programmes of this nature play an important role in building national capacity for early detection and response to zoonotic pathogens. During the inaugural session, Dr. Premanshu Dandapat briefed the trainees on the significant progress made by ICAR-IVRI in Brucella research, highlighting various diagnostic assays and technologies developed by the institute, including advancements in molecular detection, serological screening methods and genomic approaches for pathogen characterization. He also emphasized IVRI’s contributions in national surveillance programmes,

diagnostic standardization and collaborative One Health research initiatives. Dr. Bablu Kumar elaborated on the current epidemiological status of brucellosis in India, discussing its impact on livestock productivity, reproductive health and public health. He also



explained the major diagnostic challenges associated with *Brucella* detection, including biosafety concerns during culture, limitations of conventional tests, and the need for sensitive molecular and serological techniques for early and accurate diagnosis.

The workshop attracted participants from several reputed medical institutions across the country including AIIMS Rishikesh, Post Graduate Institute of Medical Sciences Rohtak, SMS Medical College Jaipur, Pandit Raghunath Murmu Medical College and Hospital, AIIMS Rajkot, PDU Medical College and Hospital Rajkot, and King George's Medical University Lucknow. The participation of professionals from the human health sector reflects the growing emphasis on interdisciplinary collaboration for zoonotic disease control.

The programme included expert lectures and intensive hands-on laboratory sessions on various aspects of brucellosis diagnostics. The first day covered introduction to brucellosis and laboratory methods for isolation and preliminary identification of *Brucella* spp. from clinical samples, followed by practical sessions on



preparation of culture media and processing of samples for bacterial isolation. The second day focused on molecular diagnostics using PCR and serological techniques for brucellosis detection along with hands-on laboratory training. The programme also included an expert lecture on the National Animal Disease Control Programme for brucellosis and its role in national disease control strategies. The third day included sessions on genotyping and genomic techniques for epidemiological surveillance of *Brucella* spp., followed by a wind-up discussion and valedictory session.

The programme was coordinated by Dr. Premanshu Dandapat, Dr. Bablu Kumar, Dr. M. Suman Kumar, and Dr. Mukesh Bhatt along with other investigators of the IVRI unit of the National One Health Programme for Prevention and Control of Zoonotic Diseases project including Dr Himani Dhanze, Dr G. K. Sharma, Dr. Abhishek, Dr. S. K. Biswas, and Dr. B. C. Saravanan.



The workshop concluded with a valedictory session on 13 March 2026, where participants shared their feedback and experiences from the training programme. The workshop significantly contributed to capacity building of laboratory professionals and strengthening national efforts in the surveillance, diagnosis and control of brucellosis in India.

