



राष्ट्रीय पशु जैव प्रौद्योगिकी संस्थान
National Institute of Animal Biotechnology
(An Autonomous Institute of the Department of Biotechnology,
Ministry of Science & Technology, Govt. of India)

Expression of Interest (EOI)

Expression of Interest is invited to transfer the following technologies:

Naked eye detection of subclinical and clinical mastitis using nanoadsorbed paper-kit comprising magnetic nanoparticles

About the invention:

The present technology is aimed to develop a method for detection of subclinical and clinical mastitis and assessment of microbial quality of milk using magnetic nanoparticles, without the need of any high-end equipment. The results can be visualized by pouring them onto the aggregation visualization module (AVM-made up specially designed membrane packed in a cassette). Results can be obtained within 10 minutes and a quick screening of several samples can be done with 200 times higher limit of detection as compared to “California Mastitis Test”. The overall cost to perform the test is less than Rs 20/test. The materials used to prepare the test have no known toxicity and can be stored at room temperature. The test may find utility in routine screening besides barn-side diagnosis.

A portable device for field level rapid antimicrobial sensitivity testing

About the invention

The present invention is in the field of portable field level assay for determining antimicrobial sensitivity in biological fluids like milk, serum, urine, sputum etc. The Invention provides a system and corresponding method for field level rapid antimicrobial sensitivity testing. It is easy to perform, rapid and allows field level antimicrobial sensitivity testing in 2-6 hours' time without the requirement of a proper laboratory setup. It will find potential application in veterinary medicine (to select appropriate antibiotic at the field level to treat bacterial infection like mastitis). It can also be used for selection of appropriate antibiotic for any other bacterial infection. The overall cost to perform the test will be less than Rs 50/test.

Interested firms/parties/companies may send their interest along with the brief profile of the Company/Industry addressed to Senior Manager, NIAB (admin@niab.org.in) with a copy to pankajsuman@niab.org.in