

## भा.कृ.अनु.प.-राष्ट्रीय मांस अनुसंधान संस्थान

(पूर्व भा.कृ.अनु.प.-राष्ट्रीय मांस अनुसंधान केंद्र) चेंगिचेर्ला, पोस्ट बॉक्स सं 19, बोडप्पल, हैदराबाद - 500 092, तेलंगाना भारत



### ICAR - National Meat Research Institute

Chengicherla, P.B. No. 19, Boduppal PO, Hyderabad-500 092, Telangana, India (ISO 9001:2015 और FSSC 22000 प्रमाणित, ISO/IEC 17025:2017 NABL मान्यता प्राप्त, FSSAI रेफरल प्रयोगशाला)

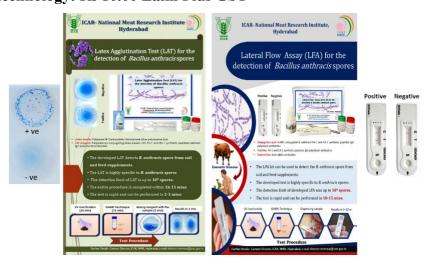
# <u>Latex agglutination test and Lateral Flow Assay for the detection of *B. anthracis* spores from soil and feed supplement</u>

Inventor: Dr. Deepak B. Rawool, Dr. S. B. Barbuddhe

**Brief Description:** PA-1 and EA-1 peptide-oriented IgY/IgG antibody-based LAT/LFA have excellent specificity (highly specific to *B. anthracis* spores and does not cross react with other *Bacillus* spp. viz., *B. subtilis*, *B. cereus*, *B. mycodies*, *B. thurigiensis*, *B. lichneformis*) and a good sensitivity (detection limit of LAT: 10<sup>5</sup> spores/g of soil/animal feed supplements while LFA can detect 10<sup>3</sup> spores/g of soil/animal feed supplements) when compared with WOAH-recommended PCR assay (10<sup>3</sup> spores/g).

- The developed LAT/ LFA test is meant for rapid and onsite detection of *B. anthracis* spores. Hence the requirement for higher infrastructure, sophisticated types of equipment, trained manpower, and most importantly time can be saved for the detection of *B. anthracis* spores.
- The problems such as cross-reactivity and low specificity available with earlier diagnostic antigens have been solved; as earlier diagnostic antigens (proteins) employed were not stable, however, synthetic peptides identified in this innovation are highly stable, cost-effective, scalable, and reproducible with utmost purity.

### Cost of the technology: Rs 10.00 Lakh Plus GST



#### For further details please contact:

Director,

ICAR - National Meat Research Institute

Chengicherla, P.B. No. 19, Boduppal PO, Hyderabad-500 092, Telangana, India

Phone: 040-29801672/73/74; Email: director.nmri@icar.org.in; Website: https://nmri.res.in/