Joint IDF and ICAR initiative to improve consistency in milk somatic cell counting – certified reference materials launched by EC Joint Research Centre

The European Commission's Joint Research Centre (JRC) has announced the launch of the first certified reference materials for somatic cell counting in milk, an integral part in a joint project of the International Dairy Federation (IDF) and the International Committee for Animal Recording (ICAR) to establish an international reference system for somatic cell counting in raw milk.

The reference materials are the result of several years of cooperation between IDF, ICAR and EC JRC, the European Commission's science and knowledge service. The materials were developed in response to an identified need to have available a common, robust, and internationally accepted anchor point to implement and safeguard equivalent somatic cell counting worldwide.

Significant importance for the sector

Somatic cell counting is a key indicator for udder health in several lactating animals, including dairy cows. Accurate counting therefore has relevance in food quality regulations, milk payment testing, farm management and breeding programmes. The counting of somatic cells relies on the performance of high capacity routine somatic cell counters. However, prior to the release of the new reference materials, no robust common reference was available.

Caroline Emond, Director General of IDF said:

“Current practice requires milk laboratories in different geographies to link to their own individual reference materials, creating potential issues with comparability and thus equivalence. Thanks to the combined expertise of IDF, ICAR and the JRC, we are a step closer to overcoming these issues. This work could not have been achieved without the significant expertise and tireless efforts of the IDF/ICAR network and the Reference Materials Unit within JRC’s Directorate F (Health, Consumers and Reference Materials), located in Geel, Belgium”.

The reference materials (ERM-BD001) are arranged as sets. Each set consists of two bottles with spray-dried cow milk, one with low and one with high somatic cell count, characterized by means of an interlaboratory comparison with 32 laboratories worldwide. The reference materials' documentation includes instructions on the reconstitution, and defines the intended use: calibration material for routine methods, and quality control material for both reference methods and routine methods. Moreover, the materials can be used to assign values to in-house materials.

Dr Silvia Orlandini, Milk Analysis Certification Executive for ICAR said:

"These reference materials will be of great practical importance to many within the livestock sector, including raw milk testing laboratories, national and international bodies responsible for regulations on measuring somatic cell count, supervising bodies in milk payment testing and many others. Looking ahead, IDF and ICAR are working on additional guidance to provide further information on the use of this material to establish international metrological traceability for milk analyses".

In addition to the applications already mentioned, the material will be of specific interest to dairy herd improvement organisations, QA services, manufacturers and distributors of routine equipment for somatic cell counting, providers of secondary reference materials for somatic cell counting, organizers of proficiency testing, animal health organizations, universities and research institutes and accreditation bodies.

The reference materials can be acquired directly through EC JRC or its authorized reference material distributors [https://ec.europa.eu/jrc/en/reference-materials/catalogue]. It should be noted that delivery may be delayed till the course of May due to the COVID-19 outbreak. For more information about the reference materials, please contact Reinhard Zeleny.

ENDS
About IDF

*Helping nourish the world with safe and sustainable dairy*

The IDF is the leading source of scientific and technical expertise for all stakeholders of the dairy chain. Since 1903, IDF has provided a mechanism for the dairy sector to reach global consensus on how to help feed the world with safe and sustainable dairy products. A recognized international authority in the development of science-based standards for the dairy sector, IDF has an important role to play in ensuring the right policies, standards, practices and regulations are in place to ensure the world’s dairy products are safe and sustainable.

**Media contact**
E-mail: communications@fil-idf.org

About ICAR

ICAR is the recognised global standard for livestock recording. Since its inception in 1951 ICAR has promoted the development and improvement of animal identification, performance recording and evaluation in farm animal production. This is achieved through the establishment of guidelines and standards, specific for the purpose of identifying animals, the registration of their parentage, recording their performance and evaluating their genetics, (including their bearing on animal health, care, productivity, food safety and the environment). Through its global network of some 170 professionals in ICAR’s 14 sub committees and working groups, these guidelines are published and maintained for all on www.icar.org.

**Media contact**
E-mail: icar@icar.org