



ICAR NEWSLETTER

Focus on SERVICE-ICAR s.r.l, Visit to Slovakia, INTERBULL SC, Programme for 33rd ICAR Session

1. Establishment of SERVICE-ICAR S.r.l.

ICAR activities increased very much in the last two-three years. Each and every ICAR member could easily perceive the many new services and activities that ICAR has provided in recent years; among others, there are some services requiring an additional major effort by the ICAR Secretariat. The "Meters and Jars" and "Identification" Sub-Committees are today responsible for the tests of approval for the measurements and identification devices for official milk recording and herd book keeping of ICAR members. These tests are organized by the relevant Sub-Committee, technically performed by one authorized test center and managed by the ICAR Secretariat.

The ICAR Board decided, during the meeting of May 2001 held in Paris, to create a service company owned by ICAR. The establishment of this company took some time to the ICAR Secretariat and finally on September the 25th 2001 "SERVICE-ICAR S.r.l." was formally established in Rome. "SERVICE-ICAR S.r.l." is a limited responsibility company with a single share holder, namely ICAR. The company has its official seat in Rome and operates according to the relevant Italian laws. The members of the Board of "SERVICE-ICAR S.r.l." are also members of the ICAR Board, the President of "SERVICE-ICAR S.r.l." is Dr. Joseph Crettenand, as President of ICAR. The basic capital amounts to 10.400 Euro.

"SERVICE-ICAR S.r.l." has already started operating for the "Meters and Jars" and "Identification" Sub-Committees. "SERVICE-ICAR S.r.l." will be very useful in the future for the many possible developments ICAR can have to give better and broader services to its members. The general goals of "SERVICE-ICAR S.r.l." are in line with those of ICAR. In a nutshell it was created to serve specific needs of the ICAR membership, not easy to handle through the traditional ICAR structure.

INSIDE

- [Establishment of SERVICE ICAR S.r.l.](#)
- [Special Stamp visit to Slovak Republic](#)
- [INTERBULL Sub-Committee](#)
- [Beef Recording WG](#)
- [Milk Testing Laboratories WG](#)
- [Conformation Working Group](#)
- [Lactation Calculation WG](#)
- [Recent publications](#)
- [Welcome to the 33rd ICAR Session and INTERBULL Meeting](#)

2. Special Stamp visit to Slovak Republic

On September 28th, the 29th and the 30th Dr. Reinhard Pauw and Dr. Andrea Rosati, of the ICAR Board, visited the Slovak ICAR member. The visit was requested by Dr. Lubomir Dobrovic, Director of the State Breeding Institute of the Slovak Republic, the Slovak ICAR member, to be assured by ICAR of the animal performance recording status existing in Slovakia and informed the ICAR Board of the possibility to grant the Special Stamp to Slovak member. Pauw and Rosati were invited by the ICAR Board to undertake the visit. Due to sanitary problems that were present in some European countries, (foot and mouth disease) the visit, originally planned for April 2001, was postponed, because the Special Stamp visit requires to observe recording activities in farms.

The technicians of the State Breeding Institute of the Slovak Republic organized the visit in a perfect manner. The good schedule and the timing of the visit allowed to perform, in the planned time, the visit with full

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satisfaction of both ICAR board members and of the Slovak ICAR member. At the end of the visit Dr. Pauw and Dr. Rosati, for ICAR, Dr. Dobrovic, for the State Breeding Institute held a meeting in Bratislava. The ICAR Board members expressed their appreciation for the welcome and the good organization of the visit. A discussion followed, in which Pauw and Rosati informed of both strong and weak points of the animal recording organization they observed in Slovakia. The Slovak member was also asked to solve as soon as possible the outlined weak points. The situation of the organization was good. Pauw and Rosati will report to the ICAR Board to allow the Board to decide about granting the Special Stamp to the State Breeding Institute of the Slovak Republic. The decision is expected for the next Board meeting that will be held during the 33rd ICAR General Session in Interlaken (Switzerland) .

3. Interbull Sub-Committee

3.1 Interbull evaluation services expands

The routine evaluation of May 2001 introduced exciting additions, since international genetic evaluations for udder health traits for five breeds, and conformation traits for the Jersey breed were run for the very first time.

Udder health data from 12 countries (Canada, Denmark, Estonia, Finland, France, Germany, The Netherlands, Norway, Sweden, Switzerland, United Kingdom, and USA) were included, providing international genetic evaluations for milk somatic cells and clinical mastitis for a total of almost 60,000 bulls. Such information will help farmers worldwide to select bulls with not only excellent production capacity, but also good functional ability.

The Jersey conformation trait evaluation included data from 7 countries (Australia, Canada, Denmark, New Zealand, Republic of South Africa, United Kingdom, and USA). It considered the same 18 traits as for the Holstein breed, and the same subcontractor performed the computations.

Detailed information about the international genetic evaluations of Interbull can be found on the Interbull home page at <http://www.interbull.org>.

3.2 Annual meeting held in Budapest, Hungary, August 29th - 31st, 2001

The Interbull annual meeting was held from August 29th to 31st, in conjunction with the EAAP meeting in Budapest. The purpose of the Interbull meetings is to share both new scientific findings as well as experiences of their applications, attracting a mix of people from science and industry. This year's Interbull meeting assembled more than 160 participants, representing 31 countries, and featured 37 presentations in the Open Meeting.

The first session was devoted to *International genetic evaluation based on performance records*, and was chaired by Mark Jeffries (New Zealand). The papers covered international, as well as regional, genetic evaluations of bulls and dams based on performance records, but also efforts to achieve borderless genetic evaluations. Research on the use of individual lactation records across countries/environments will likely guide the future development of methodology.

The second session, chaired by Hans Wilmink (The Netherlands), addressed *Advances in MACE and applications to functional traits*. Studies on international genetic evaluations of conformation traits for breeds other than Holstein and Jersey were presented, as well as studies on a range of functional traits within the Nordic countries. Improvements of the currently applied methods, for instance modified parameter estimation procedures and multiple-trait MACE, were also covered in this session.

A third session, under the topic *National genetic evaluation developments*, was divided into two parts. The first part was chaired by Enrico Santus (Italy) and dealt with general developments in national evaluations, with papers covering a multitude of areas. Noteworthy is that several presentations addressed the current shift in national selection goals toward increased emphasis on health and other functional traits, lending further support for Interbull to investigate possibilities for international genetic evaluations for functional traits. A second part, chaired by Reinhard Reents (Germany), focused on developments of test-day models with application to milk production, persistency and milk somatic cell counts. This has been an important topic for a

couple of years at the Interbull meetings, and is likely to remain so since more and more countries are moving towards test-day models for genetic evaluations.

The Interbull meeting in Budapest was conducted in a very good atmosphere. Thanks to Dr. Janos Gundel, secretary of the organising committee of the EAAP meeting, and to Ms. Júlia Banyai, who had arranged the Interbull meeting according to the highest expectations. The proceedings of the Open Meeting are published in Interbull Bulletin No. 27, also available through the Interbull home page.

The next Interbull meeting will be in Interlaken, Switzerland, from May 26th to 27th, 2002, in connection with the 33rd ICAR session.

3.3 On-going research

Research on international genetic evaluation of dairy cattle is a continuing process focusing on different areas. Monitoring and improving input data quality is one area of research, for example investigating the usefulness of analyses of Mendelian sampling variance. Research is also done to improve current MACE methodology, where selection of data for genetic (co)variance estimation, use of parsimonious models, and multiple-trait MACE are examples of on-going projects.

Investigations of applications of MACE on new traits, e.g. calving performance, longevity, fertility, conformation traits for "coloured" breeds, are also under way. Finally, international or regional genetic evaluations based on performance records and alternative ways to deal with genotype by environment interactions, e.g. reaction norms and structural models, are projects receiving significant attention.

A complete listing of on-going research projects known to Interbull and identified research priorities is under preparation and will be made available on the Interbull homepage.

3.4 Interbull session at 7th WCGALP

Interbull is pleased to be sponsoring the 7th World Congress of Genetics Applied to Livestock Production (WCGALP). The congress will be held in Montpellier, France, August 19-23, 2002, and one day within the large session on breeding ruminants for milk production will be dedicated to a workshop "Future development of international evaluation". The day will focus on two major topics: "Borderless evaluation based on performance data" and "Balanced breeding for milk yield and functional traits". Invited speakers will include a number of distinguished international experts, and contributed papers will also be solicited.

4. Beef Recording WG

The ICAR Beef Recording Working Group currently develops a comprehensive overall guideline for beef recording. The primary objective thereof is to achieve a common understanding of beef recording through international harmonisation of recording procedures.

The ICAR Beef Group meets approximately twice a year. The most recent meeting took place at Keszthely in Hungary from 22 to 23 November 2001. The main issue was the draft of the new guideline. The next meeting will take place in Interlaken along with the 33rd ICAR Assembly 2002.

The rough structure of the guideline will include:

- General: Principles of Data Recording.
- Specific Recommendations for data collection.
 - Identification.
 - Reproduction and life history.
 - Live animal weights and weight gain.
 - Live animal assessments.
 - Ultrasound measurements.
 - Feed intake/feed conversion.
 - Health traits.
 - Longevity traits.
 - Carcass assessments.
 - Molecular genetics information with regard to beef characters.
- Organisation and execution of testing schemes.
 - Field test.
 - Finishing herds.
 - Test stations.
 - Slaughter house.
- Data transfer.

The ICAR Beef Group is composed by Darrh Bullock (USA), C. Diaz (Spain), M. Fioretti (Italy), B. Fürst-Waltl (Austria), H. Graser (Australia), A. Grogan (Ireland), M. Hansen (Denmark), L. Journaux (France), C. Michaux (Belgium), D. Pullar (United Kingdom), H. J. Schild (Chairman, Germany) F. Szabo (Hungary), J. v.d. Westhuizen (South Africa)

5. Milk Testing Laboratories WG

A meeting was held on 19 and 20 November 2001 in Munich, Germany. The following members attended the meeting: Olivier Leray (France, chairman), Ugo Paggi (Italy), Christian Baumgartner (Germany), George Psathas (Cyprus), Harrie van den Bijgaart (The Netherlands). The report of this meeting, is available at the specific space of the ICAR web site (www.icar.org).

5.1 Biennial ICAR Session 2002 from 26 to 31 May 2002

The leaflet with some first general information about the Biennial ICAR Session in 2002 is distributed among the persons present. Relevant program items are:

- 27 May afternoon. Meeting with representatives of the ICAR reference laboratory network members.
- 28 May morning. Meeting of ICAR MTL WG.
- 30 May afternoon. Technical Session 5, where the emphasis is on new technologies. Baumgartner will present a paper on behalf of the MTL WG. This constructive paper will address QA aspects of on-farm testing including suggestions for ICAR how to deal with this development.

5.2 Current activities

The check on the consequences of analyzing a lower number of samples for the statistical values is still to be made.

New work item proposals have been forwarded to IDF/ISO concerning the standardization of reference methods for fat, protein and freezing point determination in sheep and goat milk.

The draft protocol for the evaluation of milk analysers was introduced into IDF. A new work item proposal will be forwarded to IDF/ISO.

After a reminder, 25 out of 48 countries have replied to the Questionnaires on interlaboratory QA. A report will be available before the meeting in Interlaken.

5.3 Progress in current work

The indicated ranges for the compositional parameters of goat milk will be adapted, fat: 2.0-5.5% and protein: 2.5-5.0%.

5.3.1 ICAR reference laboratory network

An updated member list is underway. It is agreed to maintain the program as it is. Some remarks were received on the inclusion of a ranking in the trial reports. The MTL WG members are of the opinion that the present set-up for ranking is soundly based on the main characteristics of the outcome for the individual participants. It provides a quick insight in the relative performance and at the same time points out where required action is outmost. The MTL WG strongly insist on keeping a ranking with the presentation in order to serve the primary goal of the work, that is to get closer to one another.

5.3.2 Sheep and goat's milk analysis and other species

Three new work items have been proposed to IDF/ISO. During the meeting of the IDF Project Group on somatic cell counting in milk on 29/30 October in Kiel (DE), the possibility to expand the scope of the reference method to ewes and goats milk was addressed.

The earlier forwarded proposal of Psathas and Paggi for a small ruminants reference laboratory network and the comments of Leray were discussed. It is concluded that the cows and the small ruminants network should operate side by side, whereby Cecalait is the service supplier to the cows milk network and AIA can be the supplier to the small ruminants network. In both networks a clear separation should be kept between the ICAR related efforts and other commercial oriented activities in this field. The need for a harmonized execution of the proficiency trials and the presentation of the results is stressed.

5.4 ICAR approval of existing milk analysers

The persons present are of the opinion that the ICAR approval should be reserved for those instruments which have strictly been evaluated according to the protocol as mentioned before. It is agreed to contact Foss Electric about an evaluation of the MilkoScan FT6000 as a model project. For other existing analysers an inventory will be made to what extent they have been reviewed. The outcome will be put at the disposal of the ICAR secretariat/board.

5.5 Next meeting

An informal meeting of MTL WG can eventually be held in Toledo (ES) during the next Analytical Week of IDF/ISO/AOAC from 22 to 26 April 2002. The next official meeting is scheduled in Interlaken on 28 May 2002 at 08.00 to 12.00 hrs.

5.6 Documentation and activities

Guidelines for Quality Assurance in DHI Analysis. A recent update includes requirements regarding quality assurance to be met by analytical quality assurance service suppliers, i.e. reference materials and proficiency testing. The document is aimed at being approved and distributed for the ICAR Session 2002.

Protocol for the evaluation of milk analysers and official approval by ICAR. All the parts of the document have been completed. It was circulated to Board members in May 2001 for comments. Since practical examples were added and the text reviewed by group members for last remarks. The protocol is aimed to being distributed and approved for the ICAR Session 2002. ICAR will be contacted about the appropriate procedure.

Questionnaire of milk testing laboratories situation within ICAR. Answers to a questionnaire on analytical quality assurance in milk recording laboratories are being processed. It implies two levels of information to be gathered through two questionnaires dealing with national AQA organisation on one hand and AQA laboratory routine practices on the other hand. A report will be made available for the ICAR Session 2002.

MTL WG in on-farm/on-line milk recording analysis. A letter about changes and future consequences of the development of these analyses was sent by MTL WG to ICAR Board in the spring of 2001. The concerns of the group met the interest of Swiss Organizing Committee of ICAR Session 2002, which incorporated the item in the program for Technical Session 5 on May 30, 2002. The viewpoint of the group for such types of measurement with regard to AQA and application/adaptation of guidelines produced by the group was considered of a major interest for ICAR. Therefore a paper will be presented during this Technical Session on behalf of the MTL WG.

5.7 Standardisation

Members of MTL WG will participate as experts in IDF/ISO/AOAC Analytical Week in Toledo in 2002 (April 22-26). Items of interest are updates and revisions of standardized analytical methodology for determination of fat, protein, lactose, SCC, urea, and casein in milk.

5.8 International DHI Reference Laboratory Network

Composition. At the present time, 37 laboratories have been nominated by 31 National Committees (NC). The list was updated and circulated lastly in September 2001 to Network members and NCs. The next update will be available in December 2001.

Network meeting. A first meeting of the network participants has been scheduled on 27th of May 2002 from 13.30 to 17.30 hrs during the 33rd Biennial Session of ICAR in Interlaken. A first announcement with a pre-registration form has been circulated to the network members and was renewed for both ICAR network members and NCs.

5.9 ICAR International Interlaboratory Studies

Year 2001. The numbers of participants were, respectively for March-September trials, 20-21 for fat, 21-21 for protein, 15-15 for lactose, 16-16 for somatic cells and 17-17 for urea determination. An increased interest is observed for urea compared to 2000 (8-8), causing an 18 % overall participation increase.

Year 2002. Still being organised by the French organisation CECALAIT. The annual programme is on to be circulated in December 2000 by e-mail and regular post mail when E-mail addresses are missing. Two series of trials are scheduled in March and September 2002. Criteria concerned remain fat, protein, lactose, urea and somatic cell counting in milk. Experimental schemes and data treatment and presentation are those of CECALAIT published in IDF Bulletin n°342:1999. Participation fees were updated by the organiser according to agreements established with ICAR.

5.10 New activities

Reference materials. Recommendations were introduced in Guidelines for milk recording analysis regarding reference materials suppliers, namely the use of ILAC Guide G12-2000 "Guidelines for the Requirements for the Competence of Reference Material Producers" by those organisation in charge of providing RMs. It was decided for the future that conformity should be kept with the output of the IDF Joint Action Team on Quality Assurance.

Sheep and goat's milk analysis and other species.

Standardisation of analytical methods. Extending existing analytical standards for cow's milk to sheep and goat milk or producing standards adapted to those species has appeared of an urgent necessity and was brought to IDF during the Analytical Week 2001 in San Pellegrino (Italy). There, it was decided to handle these topics within already existing Joint Action Teams and to introduce new items of work for a vote by IDF National Committees. With regards to component analysis of interest for ICAR, new work proposals were made by G. Psathas for international reference methods for fat (Röse-Gottlieb) and protein (Kjeldahl). *International Laboratory Network for small ruminants Implementation.* The proposal for implementing a international laboratory network for small ruminants was approved by group members in Zutphen (Nov.8, 2000) and ICAR Board at Paris session (May 19, 2001). The launching stage of the network – circulation of a questionnaire to National Committees for the nomination/designation of laboratory members - was agreed upon for a start-up from December 2001 at MTL WG meeting in München on November 19-20, 2001.

Organisation. Its structure and organisation were fixed according to the proposal of O. Leray based on consistency and similarity of organisation, information and co-ordination for different species laboratory networks. In practice, there will be an overall Reference Laboratory Network gathering so-called AQA reference (or master) laboratories for every species, within which distinguishment is made between dedicated sub-networks for different species. The nature of the information made available would therefore be identical as would be maintenance and circulation of updates made by one general co-ordinator (currently the chairman of the working group).

Interlaboratory study programmes. Dedicated activities would be assigned to AQA service providers identified by MTL WG and proposed to ICAR. The actual supplier identified for sheep and goat is LSL-AIA (Italy) as is CECALAIT (France) for cow. The scope of the work, the technical details and the financial aspects will be defined and become part of an (expectedly formal) agreement between ICAR and the service provider concerned. Harmonisation in experimental work designs is foreseen – the actual reference basis being the ones used for cow – and, as far as it is possible, harmonisation of fees rates too. *Description.* The production of a document on the organisation of interlaboratory studies for this issue is underway for submission to ICAR Board. At the present stage, a draft document was discussed in MTL WG and is to be amended before being reviewed by the group.

The working group is currently composed by Christian Baumgartner (Germany), Egil Brenne (Norway), Des Johnston (New Zealand), Olivier Leray (chairman, France), Ugo Paggi (Italy), George Psathas (Cyprus), John Rhoads (USA), Harrie van den Bijgaart (the Netherlands).

6. Conformation WG

The Working Group was formed involving members from breed associations, the Chairman of WG on Functional Traits, Ab Groen (Chairman of former GIFT Group). Communication has been by e-mail and it is proposed to hold a Working Group meeting during the Interlaken (Switzerland) ICAR Session.

The standard definitions as approved at the Bled Conference have been posted on the ICAR web site and are therefore available to all organizations. The definitions are used by the World Holstein evaluation systems and are currently being investigated by the World Jersey and Guernsey organizations.

The proposed meeting at Interlaken (Switzerland) will discuss the definition of traits, including the proposed recommended trait from the WHFF Classification, working group of Rear Teat position, with particular reference to the requirements of robotic milking system. Ab Groen has also requested agenda items that link with the WG on Functional Traits. It is important that this liaison between working groups continues and these points will be placed on the agenda.

The members of the Working Group are: Blaine Crosser (World Guernseys), Ab Groen (Chairman of the former GIFT Group), David Hambrook (World Jerseys), David Hewitt (Chairman, Holstein United Kingdom) Seppo Niskanen (Finland), Jay Shannon (Holstein Canada).

7. Lactation Calculation WG

The working group is currently working on two tasks: a) review and update of current ICAR Guidelines for milk recording; and b) development of guidelines for milk recording from robot and automated milking systems. Newly investigated methods for lactation calculation will be added to the current guidelines. Also methods for AM/PM recording will be improved.

Regarding robotic milking system three group members have been involved in research on this topic. In France researchers have highlighted all the main challenges in robotic milk recording. In the Netherlands the investigation has concluded that under specific restrictions (milking interval at least 4 hours, no interrupted milking and correct matching of sample jars with milkings) one sampled milking suffices to get a satisfactory estimate for the test day fat yield. In Canada the research found that the inclusion of 12 milkings back in time (from robotic milkings) would provide an optimal estimate of 24-hour milking rate regardless of days in milk or parity of the milked cow. The Canadian investigation is working now on estimating fat and protein content. Working Group members are now working in drafting preliminary guidelines for robotic milk recording.

The next planned meeting will be held during the ICAR Session in May 2002, Interlaken (Switzerland).

8. Recent publications

- Beef recording guidelines A synthesis of an ICAR survey. ICAR T.S. no. 6
- Physiological and Technical Aspects of Machine Milking, Proceedings of a meeting held in Nitra, Slovak Republic, 26-27 June 2001, ICAR T.S. no. 7

Both books are freely available at the ICAR web site as PDF file (www.icar.org/publicat.htm).

As we go to press, we are informed that a convention has now been signed between ICAR and CECALAIT regarding the interlaboratory proficiency services. All interested laboratories are welcome to participate, contacting directly:
CECALAIT, BP 129 F-39802 Poligny Cedex, France. Tel.: +33-384-736320;
Fax: +33-384-736329; E-mail: leray@poligny.inra.fr.

9. Welcome to the 33rd ICAR Session and INTERBULL Meeting to be held 26-31 May 2002 in Interlaken, Switzerland

by Hans Künzi President of the Organising Committee

On behalf of the Organising Committee, I am pleased to forward to you the programme of the 33rd ICAR Session and INTERBULL Meeting to be held 26-31 May 2002 in Interlaken, Switzerland. We trust that the scientific and professional part of the session and reports presented in the programme will provide for fruitful exchange of experiences and knowledge. The adoption of future strategies of ICAR will certainly represent a historical event for ICAR members and the animal production sector in our respective countries. The social programme of the session has been prepared in close co-operation with Swiss breeders which are, together with the Organising Committee, looking forward to welcoming you in Interlaken.

Those who still did not register, can do this using the registration form available or on our home page: www.asrbern.ch/icar2002

Finally, I want to take this opportunity to express our appreciation for the support given by the Ministry of Agriculture of Switzerland, as well as by other sponsors.

Request

Please let us know what you would like to be covered in future issues of the Newsletter or suggestions to improve its content.

Congress Agenda

Saturday, 25th May 2002

- ICAR Board Meeting
- INTERBULL Steering Committee Meeting

Sunday, 26th May 2002

- INTERBULL Business and Open Meeting

Monday, 27th May 2002

- INTERBULL Open and Business Meeting
- FAO/ICAR Seminar
- Meeting of ICAR Reference Laboratory Network
- ICAR Sub-Committees, Task Force and Working Groups Meetings
- ICAR Board with Chairpersons Meeting

Tuesday, 28th May 2002

- Industrial Exhibition
- ICAR Sub-Committees, Task Force and Working Groups Meeting
- Open Meeting of Working Group on Functional Traits
- ICAR Opening and Technical Session 1
- ICAR General Assembly (Part 1)

Wednesday, 29th May 2002

- Industrial Exhibition
- ICAR Parallel Technical Sessions 2 + 3
- Mid Conference Tour

Thursday, 30th May 2002

- Industrial Exhibition
- ICAR Technical Session 4 + 5
- ICAR General Assembly (Part 2)
- ICAR Second Board Meeting

Friday, 31st May 2002

- Post Conference Tours

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