MEETING OF THE ICAR WORKING GROUP  
ON MILK RECORDING OF SHEEP  

17th June 2008, Niagara Falls, USA

Draft minutes

Presents: Jean-Michel Astruc (France), Francis Barillet (France), Antonello Carta (Italy), Mauro Fioretti (Italy), Drago Kompan (Slovenia).
The meeting was held from 8.00 to 12.00 hours.
The draft agenda (see below) was adopted.

**Draft Agenda**
1. Changes in the constitution of the working group (MRS WG)
2. Main activities of the group over the last 2 years
3. Presentation of the results of the sheep enquiry on-line and discussion.
4. Co-operation with other ICAR bodies
   - Recording devices
   - Analysis devices
5. Perspectives concerning the working group.

1-Changes in the constitution of the MRS WG

Since the last meeting of the group in Kuopio, 2 changes have been proposed:
- Antonello Carta from Italy in replacement of Sebastiano Sanna. Sebastiano Sanna is no longer working in the technical field of dairy sheep. Antonello Carta works at AGRIS-Sardinia (ex Istituto Zootecnico e Caseario per la Sardegna. He works as researcher in genetics and is also involved in the management of the breeding scheme of the Sarda breed.
- Eva Ugarte from Spain in replacement of Duni Gabina. Eva Ugarte works for the Neiker organization in Vitoria (Alava) and is one of the manager of the animal production department.

There is no opposition among the present members concerning these changes. The constitution of the group is now of 8 members from 6 countries:

Jean-Michel ASTRUC (France)  
Francis BARILLET (France)  
Antonello CARTA (Italy)  
Mauro FIORETTI (Italy)  
Elisha GOOTWINE (Israel)  
Drago KOMPAN (Slovenia)  
Franz-Josef ROMBERG (Germany)  
Eva UGARTE (Spain)
The presence of a Greek member in the group should be interesting regarding the importance of the dairy sheep sector in the agricultural economy of Greece. It is acted to take contact with Georgios Banos who attends Interbull as member of the Scientific Advisory Committee and Andreas Georgoudis who is representative for Greece in ICAR.

2-Main activities of the group over the last 2 years

21-Report of the activities of the MRS WG and communications
   - Report at the joint meeting of the Board & Chairpersons in Verona (Italy) in May 2007.
   - Synthesis of the situation of the working group for the Board.

22-On-line enquiry: the construction of the on-line enquiry dates back from 2006. Submissions were possible from May 2006. It has been necessary to urge ICAR members on filling in the enquiry.
   See below §3

23-Co-operation with other bodies of ICAR (Recording Devices Sub-Committee, WG on Milk Recording of Goats, Working Party on On-farm Milk analysis).
   See below §4

No emendation of the guidelines has been proposed over the last 2 years. The last emendation had been proposed to the board in 2005.

3-Presentation of the results of the sheep enquiry on-line and discussion

31-The data from the on-line enquiry have been valorized and are presented through different slides (with tables and figures).
At the moment of the meeting, only 13 countries (over 40 ICAR member countries) had submitted data.
The slides presented and discussed during the meeting concern the following topics:
   - recorded population (by countries and by countries/breeds)
   - methods and recording intervals with a focus on simplification of milk recording (quantitative and qualitative recording)
   - breeding schemes and selection criteria
   - milk yield: type of lactation calculation and results for some populations
   - milk recording equipment
   - molecular information
   - recording of other traits
All the slides will be available as soon as possible on the ICAR site.
32-Main elements of discussion:

321 : miscellaneous
- The enquiry should be improved in the way to get, for a country, (1) the total number of dairy sheep and the total number of recorded heads (whatever the breed or possible crossbreeding), (2) the number of heads and of recorded heads by breed / type of crossbreeding. This should avoid the fact (for example) that in Italy, the 18,000 crossed-bred recorded ewes are not included in the total figure.
- SCC is analyzed also in Italy (correct the slide).
- SCC is not analyzed in Slovenia (correct the slide).
- The AC recording in Italy is only implemented in the Sarda breed. As well qualitative recording in Italy is only implemented in Sardinia.
- In Italy, the population of Comisana is decreasing whereas the population of Valle de Belice is increasing. The Valle de Belice breed is a cross of Sarda x Pinzirita x Comisana.
- In Slovenia, the improved Bovec is a crossed population of Bovec with East Friesian.

322 : discussion with further developments
- Antonello Carta explains the difficulty in Sardinia to meet the guidelines about two questions:
  (a) Large size flocks have a part of the ewes which are registered and another part non-registered. This is due to difficulties in organizing the milk recording and reproduction activities for a large number of ewes. There is no evidence of preferential treatments of the registered part of the flock.
  (b) Some farmers are used to milk part of the flock twice and another part only once. This practice is particularly spread at the end of the milking period (May-June-July) when primiparous are always milked twice while adult ewes are often progressively dried-off by decreasing the milking frequency.

These two points make the AC recording difficult to implement. Antonello Carta suggests the implementation in the classical AC design of one random A4 daily milk recording. This is expected to allow at least one precise calculation of the AC adjustment factors to compare to those classically calculated. A system of rules should be built to define the application of this practice. As A4 recording is prohibited in Italy, the test-day with 2 milkings recorded should be considered as a way to check the validity of the classical AC design applied to one milking.

The AC over 2 milkings once a year should be made profitable to get data either for an individual correction or a better estimate of the flock correction. However, it has to be assessed the evolution of the coefficients with the lactation (within flock-year x days in milk) in order to verify the feasibility of a single (individual or collective) adjustment for all the test-days. This study could be combined with enquiries on the number of daily milkings (knowing moreover that the number of milkings may not be the same whatever the categories of ewes - primiparous vs multiparous).

These issues must exist in other situation and must be tackled by the MRS WG.

To go further, and as a conclusion, it is demanded to Antonello Carta a short report (one page of preliminary note) to present the problem. Then we should organize an exchange within the group, for example by videoconference, to discuss this note and
propose if necessary emendations of the guidelines, or at least recommendation or experimentations/studies to face this situation.

- It is also proposed to collect, within the AC design (at least in a study step, possibly routinely), the number of daily milkings of the flock, the day of the test (assuming that the number of daily milkings is the same for all the ewes of the flocks).

4-Co-operation with other ICAR bodies

41- With the Recording Devices Sub-Committee
The underlying issue is the adaptation of the guidelines to the small ruminants and especially to sheep. Until 2006, no device had been tested nor agreed for sheep. In 2006, 2 on-farm electronic milk meters were tested, but failed the first tests. The question quickly arose whether the guidelines were relevant or not for sheep (meeting with the chairmen of the Sub-Committees on Recording Devices and Analysis Devices, of the WG on Milk Recording of Sheep and the test centers involved in the tests, in February 2006 in Paris). Following the session of Kuopio in June 2006, it was acted that the requirements were relevant for sheep and did not have to be relaxed. In addition, it was acted that the approval should be separate for sheep and goats.
Up to now, only the meter Afifree from SAE Afikim passed the tests and was provisionally approved for sheep (as well as for goats). The meter MM25SG from SCR, sold by DeLaval, is provisionally approved only for goats. In addition, the portable electronic meter Lactocorder from WMB AG is provisionally approved for goats (it is not officially tested, currently, in sheep).

42- With the Working Group on Milk Recording in Goats
There is a cross participation of the chairmen of both groups in the other group.

43- With the Working Party on On-farm Milk Analysis
This working party was created in summer 2007 and held its first meeting on 27 November 2007 in Roma. The goal is to deal with on-farm milk analysis for milk recording purposes. Indeed new portable devices (or analytical modules) are proposed by some manufacturers allowing either on-farm “at line” analysis (device separate from the milk line) or direct in-line analysis (measure and analysis in real time of the milk flow).
The program of work is to elaborate the guidelines. Olivier Leray is the chairperson and this working party includes representatives from different working parties of ICAR, including de MRS WG.
The outlines are to accept a lower analytical performance of the devices if it is compensated by more analysis performed.
The position of the WG may be the following:
(a)-It is very difficult in dairy sheep to get more samples, given the rapidity of the milking routine and the number of animals, if the analysis are not performed on-line, in real time.
(b)-The number of places in a milking parlor is often bigger in sheep (24 or more) than in cattle, which should require more devices in sheep, meaning an increasing cost. This point must be taken into account.
It is acted that the document produced by the working party should be sent to the members of the MRS WG.

5-Perspectives concerning the working group

In addition of the enquiry and the co-operation with other bodies of ICAR, the working group:
1. must tackle the problem arisen by Antonello Carta concerning milk recording
2. should work on the following topics:
   - prepare a glossary of the main specific terms of the guidelines for sheep.
   - describe in the guidelines the scoring of udder morphology made by different countries, with an informative objective. It is suggested to present at the next ICAR Session a synthesis about the scoring of udder morphology in dairy sheep.
   - describe the calculation of lactation in the case of a suckling period. Comparison of different calculation implemented in different countries.
3. About the question of meat sheep. The group considers that it is a specific issue that the group should not handle.