

## MEETING OF THE ICAR WORKING GROUP ON MILK RECORDING OF SHEEP

*1<sup>st</sup> June 2010, Lambda room, Riga, Latvia*

### Draft minutes

Attendants : Jean-Michel Astruc (France), Francis Barillet (France), Antonello Carta (Italy), Mauro Fioretti (Italy), Silverio Grande (Italy), Sotero Salaris (Italy).

Mauro gives apologize from Alessia Tondo  
The meeting was held from 8.00 to 12.00 hours.  
The draft agenda (see below) was adopted.

### Draft Agenda

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As an introduction, there is a discussion about the opportunity to have a joint meeting with the goats working group. The content and conclusion of this discussion is reported in the § 8 'Miscellaneous'.

## 1-Changes in the constitution of the MRS WG

2 changes are proposed :

- Alessia Tondo from Italy in replacement of Mauro Fioretti who is now involved in the Sub-Committee on Recording Devices. Alessia works for AIA.
- Zdravko Barać from Croatia. Zdravko works at the Croatian Agricultural Agency in Zagreb. He is chairman of the Goats Working Group in replacement of Drago Kompan. It is proposed that Drago remain member of the group.

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)*  
*Zdravko BARAĆ (Croatia)*

*Francis BARILLET (France)*  
*Antonello CARTA (Italy)*  
*Elisha GOOTWINE (Israel)*  
*Drago KOMPAN (Slovenia)*  
*Franz-Josef ROMBERG (Germany)*  
*Alessia TONDO (Italy)*  
*Eva UGARTE (Spain)*

As suggested in Niagara Falls, Georgios Banos has been asked to become member of the group, as a Greek member in the group. He answered that he would be pleased to participate but we must ask the Ministry of Agricultural Development and Food which is the official ICAR representative. This has to be done.

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

The following activities have been carried out over the last 2 years.

### 21-Report of the activities of the MRS WG and communications

-A synthesis of the situation of the working group was done for the ICAR Board to be presented in Porec session in Croatia in May 2009. None of us were present in Porec to present the report.

22-On-line enquiry : preparation of the Riga session : tables, slides.  
*See below §3*

23-Co-operation with other bodies of ICAR.  
*See below §4*

-Jean-Michel Astruc participated at a meeting in Paris with some member of the Recording Devices Sub-Committee, on 21 March 2009, about the requirements of milk recording devices for sheep.

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**

The data from the on-line enquiry have been valorized and are presented through different slides (with tables and figures).

At the time of the meeting, only 10 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.

The countries which submitted data are Belgium, Croatia, Czech Republic, France, Germany, Greece, Italy, Slovak Republic, Slovenia, Spain.

Some important countries concerning dairy sheep are missing (Cyprus, Hungary, Israel, Portugal, Tunisia, Turkey).

The group stresses the fact that, regarding the enquiry, a lot of recordings are implemented without EBV calculation. It should be asked why such a big effort is done if no EBV is computed.

## **4-How to handle situations of recording which do not meet the guidelines?**

In Niagara Falls, Antonello Carta had arisen the following difficulties in Sardinia to meet the guidelines. The following questions were to be solved :

(a)-some flocks have a part of the ewes which are registered and another part non-registered (up to 30 to 40% of the ewes). It is likely that there is no difference of production level between registered ewes and non registered ewes. Large flocks are mainly concerned. On the whole it concerns about 20% of the farms. This implies difficulties to carry on the AC method.

(b)-some flocks have a part of the ewes milked twice and another part milked only once. It occurs mainly in late spring where the primiparous are milked twice a day whereas the multiparous are milked once.

(c)-in some cases, it is likely that there are preferential treatments for specific groups of ewes. For example, daughters from young natural mating rams are not completely milked twice a day before test date whereas daughters from contemporary proven elite rams are completely milked twice a day. This is probably done to positively influence the genetic evaluation of young rams. These situations may be found in other country and must therefore be tackled.

Antonello presents a draft report which proposes an adaptation of the AC method procedure to try to solve the problem.

The proposed approach is based on the inclusion of just one A4 milk recording per flock and year. This approach should allow for estimating the coefficient of adjustment of the single milking yield avoiding the recording of the bulk milk in AC method that could be affected by the previously reported drawbacks. The AGRIS group presented some calculations showing that the application of this approach leads to correlations between A4 based lactation yields and the new approach ranging from 0.9712 to 0.992 depending on the data of the A4 single recording. These values are non worst of the correlations found with the classical AC method (0.992). It has to be kept in mind that in this simulation the calculations were made with a reliable AC method. This is not the case in field conditions given the previously reported drawbacks. Conclusion of the discussion:

First step : domestic discussion must be held with AIA.

Second step : at the next session in Ireland, a text must be proposed to be included in the guidelines. The Italian delegation should propose a draft that could be discussed in Ireland.

## **5-Including udder traits in the guidelines**

The purpose is to propose different udder appraisal tables with udder morphological traits. The objective is to be informative and not normative.

The first proposal should be based on the work achieved within an EU contract “Genesheepsafety” (2001-2004) in which 3 tables were described (Sarda, Churra, Lacaune breeds).

The content of the guidelines could be the following :

- explain the purpose
- describe the general principle (several traits to appraise the udder, progressive linear scale)
- describe the existing tables (description of the traits, sketch of the udder to illustrate, pictures ?)
- explain that the traits must be chosen according to the specificity of the udder of each given breed.
- propose genetic parameters (among udder traits and between udder health and udder morphology)
- indicate some references
- describe training, test and approval of the technicians involved in this on-farm udder appraisal.

In cattle, there is a specific part of the guidelines (section 5 : conformation recording method).

In sheep, we propose to insert the udder traits into the section 2.2 dedicated to milk recording in sheep. As a consequence, this section should be renamed in “performance recording in dairy sheep”.

In this respect we propose to rename the working group “Performance Recording in Dairy Sheep” instead of “Milk Recording of Sheep”.

## **6-To relax or not to relax the requirements for recording devices?**

This point must be coped in close co-operation, with the Recording Device Sub-Committee

The issue of the relevance of the requirements about the sheep recording devices is still on discussion.

The requirements proposed and accepted in the nineties were based on the fact that, on the one hand milk yield is lower in sheep compare to cattle, on the other hand fat and protein contents are high in sheep (about twice higher than in cattle) and milk

has a high viscosity. Therefore the limits (bias and standard deviation) were twice higher in sheep than in cattle (meaning a comparable precision).

Thus the current limits are :

Milk yield     3% (or 25 ml) for bias  
                  5% (or 40 ml) for standard deviation.

Fat content    0.10% for bias  
                  0.20% for standard deviation.

In cattle, the demand of the manufacturers was to relax the requirements, mainly given the development of on-farm meters permitting an increase in number of measures. ICAR accepted a change in the limit for standard deviation for milk yield :

From 2.5% (or 0.25 kg) to 5% (or 0.5 kg)

The limits for fat content and for bias for milk yield remained unchanged.

Given what was achieved in cattle, the same type of demand was put forward in sheep.

Jean-Michel Astruc participated at a meeting in Paris on 21 March 2009 with Uffe Lauritsen, Andrea Rosati and Frank Armitage to discuss the issue of decreasing the limits. The conclusion was that it must be discussed within the Working Group in Latvia.

The main elements of the discussion of the working group in Riga are the following :

-2 on-farm electronic meters have passed the test (Afifree from SAE Afikim and MM25SG from SCR, sold by DeLaval), showing that it is possible to pass the test with the current requirements in dairy sheep.

-Some private results from AIA seems to show that after the first ICAR approval, the manufacturers produce devices for which the accuracy has slightly decreased . This fact suggests that “official” requirements must be kept as it is, to maintain the pressure.

-If it would be possible to increase the number of test-day (for milk yield, but seemingly not for fat and protein) with on-farm meters, it is not the case with portable meters. The current situation in sheep is that very few on-farm meters are used.

The position of the working group is clearly in favour to keep the guidelines as they are.

## 7-Glossary

The work achieved by the beef working group consisted in defining about 180 terms, including generic terms (eg. allele, breed, ASCII, ...) besides more specific terms (carcass composition, average daily weight gain, ...).

The purpose in dairy sheep is to concentrate on specific terms only (total milk yield, total milk milked, ...).

2 steps :

- 1) identify the relevant terms to be defined
- 2) propose a definition

## 8-Miscellaneous

### Co-operation with the Working Group on Milk Recording in Goats

Currently, there is a cross participation of the chairmen of both groups in the other group.

The opportunity (i) to joint both meetings of both working groups, (ii) to joint both working group is discussed.

► The group suggests :

-to joint both meeting of both working group, the topic being more or less the same or at least similar. The dairy sheep working group agrees. Jean-Michel Astruc must ask the goats working group if they also agree.

(Remark : this has been done and the goats working group agrees. This means that in Ireland, we would propose a single meeting of both sheep and goats group)

-at the moment, not to merge both groups : maintain two separate groups