MEETING OF THE ICAR SHEEP, GOAT, SMALL CAMELIDS WORKING GROUP

12th June 2017, Edinburgh, Scotland, UK

Draft minutes

Attendees:
Jean-Michel Astruc (French Livestock Institute-IDELE | France),
Joanne Conington (SRUC | UK),
Mojca Simčič (University of Ljubljana | Slovenia),
Samuel Boon (AHDB/Signet | UK),
Daniel Brown (AGBU/MLA | Australia),
Sharon McIntyre (Beef & Lamb NZ | New Zealand),
Pera Herold (LGL- Baden-Württemberg | Germany),
Zdravko Barać (Croatian Agricultural Agency | Croatia),
Ming-Che Wu (Taiwan Livestock Research Institute | Taiwan)
and briefly Mike Coffey (SRUC | UK).

The meeting was held from 14:45 to 18:00 in Ochil 3 room and was chaired by Jean-Michel Astruc (chairperson of the SGC-WG).

Just before the meeting, a conference session on sheep, goat and camelid took place in the same room. This conference session was chaired by Joanne Conington and comprised 5 presentations, 4 on goats, 1 on sheep.

Agenda

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1-Opening and welcome

The agenda (see above) was adopted.

2-Presentation of the Working Group (WG) and its Expert Advisory Groups (EAG)

The Sheep Goat and small Camelid WG (SGC-WG) is born from the merging of the former Performance Recording of Dairy Sheep, Goat Performance Recording and Animal Fiber WG. In this new organization, the field covered by the new WG include meat, reproduction and maternal traits recording, that was not covered before. The ICAR Board at its meeting on 19th July 2016 approved the Terms of Reference for the SGC-WG. Regarding the importance of the topics, the SGC-WG is helped by 3 Expert Advisory Groups (EAG) to make its missions easier. The scope are the type of traits managed: milk recording, fiber recording, meat/reproduction/maternal trait recording.

The following figures summarizes the new organization:

The objectives of the new SGC-WG are to (i) facilitate the collaboration, exchange and learning on performance recording and genetic evaluation for SGC between ICAR members; (ii) maintain, update, promote, extend guidelines for SGC performance recording for the full range of traits relevant to decisions; (iii) conduct and report results of periodic international surveys on SGC performance recording.
and genetic evaluation; (iv) facilitate and co-ordinate international collaboration in research and development on SGC performance recording & genetic evaluation

In terms of guidelines, the priority of the SGC-WG is to develop section(s) on meat recording in sheep and goats, reproduction recording, maternal trait recording. These traits are not covered by the guidelines so far and there is a need / demand from members to have this field dealt with. In particular, it would be a support for the Certificate of Quality on meat sheep/goat.

Part of the job produced over the last 8 months, since Puerto Varas has been to establish membership of the EAG, and basically the meat/reproduction/maternal trait EAG. Members from New Zealand, Australia, France and Ireland were appointed. Joanne Conington has accepted to take the chair of the EAG. Membership from South Africa and Spain is still pending. The SGC-WG itself should comprise the chairpersons of each group (Joanne Conington, Marco Antonini, Zdravko Barać and Jean-Michel Astruc). Formally, it has been agreed to find 2 or 3 additional members, picked up from the EAG.

The figure below is an update of the membership of each part of the WG:

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**EAG Milk**
- J.M. Serradilla
- Silverio Grandol
- Antonello Carta
- Alessia Tondo
- Pera Herold

**EAG Meat**
- Sharon McIntyre
- Eamon Wall
- Daniel Brown
- Valérie Loywyck
- X from South Africa
- X from Spain/Italy

**EAG Fiber**
- Hugh Galbraith
- Wenguang Zhang
- Zhang Wenxin
- Claudio Tonin
- Oscar Toro

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**SGC-WG**
- Zdravko Barac
- Joanne Conington
- Marco Antonini
- J.M. Astruc

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**Figure**

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29/11/17 3/8
Action:

- Find 2 or 3 additional members (maybe one per EAG), among the persons of the EAG to enlarge the WG itself. Each EAG chairperson (J. Conington, M. Antonini, J.MJ Astruc & Z. Barac) propose a member before the end of 2017.
- Moreover, we should ensure representation from a less developed nation, given the current impetus in small ruminants internationally. Everyone can make suggestion and final decision will be taken in Auckland.

3-State of the art: which achievements of the former WG so far

As most of the members at the meeting are new, an overview of the different issues and achievements of the former WG is presented.

Guidelines
They are the core of ICAR activity.
A pictorial summary of the existing guidelines in the small ruminant and camelid sector is shown as follows:

A re-design of the guidelines is pending at ICAR level, with the goal to improve content, have better editing procedures, construct tools for access and maintenance, and increase usefulness. New guidelines will be written to include: (1) an overview
Survey
So far, a yearly enquiry is proposed on-line for dairy sheep and dairy goats (and also in cattle. It establish the state of the art on different topics related to the Term of Reference of the WG. Raw data are published in a booklet with biennial statistics on cows milk, sheep milk, goat milk and beef recording related to number of performance recorded populations amongst other information. For sheep and goats, a summary is made at each biennial session and presented at the WG meeting.

Cooperation with other relevant ICAR bodies
The example of the cooperation with the Sub-Committee on Recording Devices is taken, where discussions have taken place on at least 2 issues: the relevance of the limits (bias, standard deviation) in sheep and goats and the relevance and publication of the installation where the devices are tested.

Contact with non-ICAR organizations
Eg. CIHEAM, EAAP, non ICAR countries

Organization of technical sessions
At each ICAR Conference, a technical session dedicated to small ruminants and camelids is organized. The audience differs annually according to the location of the conference and the relevance of small ruminants to that country.

Communication
The page dedicated to the WG on the ICAR website is presented.

Action:
- Improve the page. Add all the members of the group. Put the presentation of to-day’s meeting. JM. Astruc propose an update to ICAR Secretariat.

4- Meat/Reproduction/Maternal traits recording EAG

Joanne Conington presented her view about how to proceed to draw up new guidelines on meat/reproduction/maternal traits. Discussions took place throughout the presentation. Zdravko Barać also presented the survey the goat WG conducted on meat recording in goat in 2013 and 2015, as an example for a survey to set up in 2017.

The main features of the discussions can be summarized as follows:

- It is agreed that the guidelines should concern sheep and goats.
- It seems better to group the traits by type of traits (reproduction, growth, carcass) more than ewe/lamb/ram.
- Novel traits such as health traits or semen production traits should be addressed after the completion of main traits.
- Reproduction: it must cover meat & dairy animals (not only meat animals).
- A survey should be developed and sent to ICAR members to collate data on which traits are phenotyped, which calculation is done.
  - Zdravko will send the previous goat survey to the group.
  - We will circulate this to get feedback from the group
  - Ask ICAR secretariat (Cesare) to send a SurveyMonkey or SurveyMethods to ICAR members [discussions with Cesare Mosconi after the meeting were positive: ICAR secretariat will help]
  - Close survey in December
  - Analyze survey in early 2018
  - Present the results in Auckland
  - It was proposed to include a section on whether or not wool traits (and if yes, which traits) are recorded by the countries.
- Three traits (one per group) will be chosen and worked as a prototype to be completed in the end of 2017 in order to discuss it in Auckland. Formalizing reporting structure for consistencies across traits will be necessary. A proposition of traits will be made in early autumn 2017 (Joanne makes a proposition).
- Provide guidelines for all main traits from all groups. A V1 should be delivered in 2019

5- Fiber recording EAG

Marco Antonini, chairperson of the Fiber Recording EAG is presenting a poster at the 3rd European Meeting on Animal Fibers held in Assisi, Italy on “Guideline for the animal fiber production in Alpaca and Cashmere, and new rules for the organization of the fiber and fleece collection centers”.

The main elements of the poster are presented. In particular, the future directions of the fiber activities are established:

- identification of the objective and criteria of selection in Alpaca breeding
- new guidelines on the definition and organization of the animal fibre collection centers
- start a work on recommendations for non-merino wool

The question is raised on the differences, regarding recording, between merino and not merino wool. Recording of wool traits is seemingly not covered by IWTO. The question should be discussed with Marco.

6- Milk recording EAG

The activity since Puerto Varas has been the writing of updates of guidelines in goats, from the decisions taken in Chile.
A presentation by Agnès Piacère in Krakow (2015) was made on the method Liu experimented in France to make the goat recording more flexible and less expensive. It was agreed in Puerto Varas to update the guidelines with new correction methods, but also frequency and number of visits, interval between kidding & test-days. The writing to take into account these conclusions was sent to the milk recording EAG before the meeting in order to get feedback. As there was no remark, nor new suggestion, the writing is presented as it was sent, without going into detail. The methods Z and Y are explained.

The main input are summarized below with regards to Puerto Varas decisions:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Proposition discussed &amp; agreed in Chile</th>
<th>Guidelines updated ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>New methods</td>
<td>Add Z: alternate scheme, with milk yield from the two daily milking and only one-milking sampling alternately the morning and the evening on the next recording visit. As the alternate scheme is realized, there is no obligation to correct daily contents in order to calculate fat yield and protein yield for the whole lactation. ADD Y: milk yield from the two daily milking and only one-milking sampling that occur at any milking at each recording visit; this scheme implies to use a correction method among those described to estimate the daily fat and protein contents.</td>
<td>yes §2.3.9</td>
</tr>
<tr>
<td>Correction method</td>
<td>Different correction methods may be listed in the guidelines (ex. Liu method). It is up to the ICAR member to describe precisely the correction method in its own situation</td>
<td>yes §2.3.9</td>
</tr>
<tr>
<td>frequency &amp; number of milk recording visits</td>
<td>≠ in section 2.1 and especially 2.1.2 (ICAR standards for recording intervals) where there are lower and upper bounds</td>
<td>to be corrected later. Speak with Pavel’s group</td>
</tr>
<tr>
<td>Tolerance interval between lambing / kidding and first test-day and between 2 consecutive test-days</td>
<td>It is up to each country/breed/breed society to describe the tolerance accepted in its situation about : •Interval between lambing/kidding and first test-day; •Interval between 2 consecutive test-days</td>
<td>yes §2.3.8.2</td>
</tr>
</tbody>
</table>

As there is no comment during the meeting, the timeline proposed is as below:

**Timeline:**

- Early SEP 2017: wait for new (last?) suggestions until early Sep from WG
- Late SEP 2017: send writing to ICAR Secretariat
- NOV 2017: New guidelines with update put on the ICAR website for remarks from all ICAR’s members
Question from Pera Herold: should the question of long lactation in goats be tackled in the guidelines? This question should be worked and presented at the next meeting. Suggestion: Pera might make a short presentation in Auckland on long lactations in goats and how it could be taken into account in the guidelines. It will be a point at the agenda.

7- Genomics as a term of reference of the SGC-WG

So far across-country evaluations do not exist (or if so, hardly exist) in small ruminants. Genomics, necessity to share reference population, especially for hard-to-measure traits, increase in exchange of germplasm might raise the interest of across-country evaluation, such as it is done in Interbull for dairy cattle and Interbeef for beef cattle. A H2020 European project proposed by INRA and gathering 10 European countries, ICAR and EAAP and 2 American countries aims at going ahead towards this direction. ICAR’s involvement should be through guidelines on novel traits and building foundations for international evaluation in small ruminants.

8-Any other business

None

9- Date of next meetings

The next ICAR biennial session is scheduled in Auckland (NZ) on 7-11 February 2018. In the same period, at the same place, there will be the Interbull session (9-13 February) and the WCGALP (11-16 February). Regarding ICAR, the technical conference will be held on 10-11 Feb. To avoid “empty days”, we agree to try to organize the WG meeting on Friday 9 February in the afternoon.

Further sessions:
-Prague, Czech Republic: 24-28 June 2019
-the Netherlands: 2020

10-Closure

Closure is set at 18:10.