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# Report of the ICAR Working Group on Animal Fibre

*M. Antonini*

*ENEA CR Casaccia Dept. BAS secondment at the Industrial  
Liaison Office, University of Camerino, Italy*

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The ICAR Executive Board approved in 2007 the new “Animal Fibre” Task Force currently Working Group (AF-WG). Soon the AF-WG defined their terms of reference. ICAR presented the AF-WG and its terms of reference in the International Conference “The wool roads” held in Italy on 12 October 2007

The ICAR Animal Fibre Working Group, at present, is composed by the following nine members:

- Marco Antonini (Italy) ENEA / University of Camerino.
- Lou Yujie (China) Jilin Agricultural University.
- Claudio Tonin (Italy) CNR Italian National Research Council.
- Hugh Galbraith (United Kingdom) University of Aberdeen.
- Oscar Toro (Peru) Ong DESCO.
- Eduardo Frank (Argentina) Catholic University of Cordoba.
- Moises Asparin (Peru) Michell Group.
- Malcolm Fleet (Australia) SARDI Research Scientist (Wool).
- Fabrizio Castagnetti (Italy) Ermenegildo Zegna Group.

The AF-WG members represent 6 Universities/Research Centres and 3 private companies worldwide. The Peruvian member DESCO is also ICAR affiliate.

During the 36th Niagara Falls ICAR Session (June 2008), a participant at the section on Alpaca fibre production, Mr. Davis Barbosa from the Alpaca Owner and Breeders Association, expressed the interest to participate at the AF-WG as representative for the USA area.

During the reference period the ICAR AF-WG actions were conducted by email and produced the following activities:

- Participation at the ICAR Meeting held at Verona (Italy) in May 2007. During the event a proposal of the AF - WG members and the terms of reference have been illustrated to the ICAR Board, which approved the proposal giving the new WG activities the green light;

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## Introduction

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## Activities

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- According to the terms of reference at the moment two of them have been agreed: the Alpaca identification methods and the guidelines of Alpaca fibre harvesting and grading.
- In order to offer an active service to the Alpaca breeders and to the Alpaca textile processors, ICAR AF-WG suggests a common approach to Alpaca breed management with particular attention at the fibre product management, in order to exploit at the best the animal selection development.
- According to the auto certification methodology still applied in other advanced fibre animal breeding systems, critical points for Alpaca fleece collection have been identified.
- For the above reasons AF-WG drafted an ICAR official document for the definition of the instruments and methods for Alpaca breeding identification (ICAR rules, standards and guidelines on methods of alpaca identification) and an other official document on the standard definition of correct methods of Alpaca fibre harvesting and grading (ICAR Guide Line for Alpaca shearing management, fibre harvesting and grading).
- ICAR final goals in the Alpaca fibre production is a correct approach to solve the fibre heterogeneity problems which affect strongly the textile factories end users.
- All the activities have been presented at the 36th Niagara Falls ICAR Session (June 2008) in a specific meeting organized by the AF-WG on Alpaca. During the meeting ICAR Guidelines for alpaca shearing management, fibre harvesting and grading have been presented;
- Genetic Improvement Programmes on Alpaca of the Caylloma Province, Promege (Peru) and ITALPACA: The first experience of Alpaca Genetic Improvement programme in Europe. The reunion has been closed with Round Tables on Recording systems method in domestic South American Camelids roundtable in which participated representatives of Breeders association from USA, South Africa, Peru and Italy.
- Finally ICAR AF-WG together with the Michell Group presented actions and services at industrial level in Peru, one of the most important Alpaca fibre, producing countries and ICAR member, in March 2008, and in Italy, one of the main Alpaca fibre textile processing countries, during a meeting held in Biella in May 2008 with Ermenegildo Zegna Group and Trivero Spinning Mill.

## **Working programme**

The future actions of the ICAR AF-WG foresee a first period of activities addressed towards Alpaca fibre production according to the ICAR terms of reference. Firstly, the WG should define objective criteria to describe Huacaya and Suri fibre type; present action should be carried out during the period 2008/09. At the same time ICAR AF-WG will have to define the objective and criteria in Alpaca fibre selection programme worldwide. Defined the above parameters (type of fibre, objective and criteria of selection), the following step foresees the contribution to determine adequate analysis of performance quality of Alpaca fibre for recording purposes worldwide.

Subsequently, AF-WG will establish liaisons with International Organizations/bodies involved in natural fibre analysis in order to discuss and define together specific parameters of fibre certification taking into account the issues

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dealt by ICAR. The final goal will be the development of a reference document and standards on methods of Alpaca fibre analysis and quality certification in laboratories, which could be applied to animal fibre recording.

At present, we are verifying possible cooperation with CCMI - Cashmere and Camel Hair Manufacturers Institute <[www.cashmere.org/cm/index.php](http://www.cashmere.org/cm/index.php)>.

Finally AF-WG will explore the opportunities to open a branch with the purpose of studying other domestic animal species and breeds for textile fibre (i.e. merinos sheep, Angora goat, cashmere goat etc.). At this moment we would like to verify together with the Australian member of the AF-WG the possibility of proposing International Guidelines for determining quality of merino sheep wool, starting from the Australian wide experience on wool production and selection.

Part of the natural textile industry is still animal based, the value of animals has become directly related to their fibre diameter and the textile factories require more quality than quantity. Therefore, the major demand is currently for fine (and preferably white) fibre. By improving alpaca fibre, generally animal fibre quality and its preparation, producers will be better able to define common objective of selection. The ICAR guidelines will have to comply to the Alpaca breeders needs in the improvement of the final quality products and in the more accurate animal fibre recording method in the perspective of the planning of genetic selection. Present guidelines represent the first step of ICAR service for alpaca breeders at the international level. ICAR aims to approach the problems of Alpaca fibre heterogeneity due to the great variability in type of fleece and type of fibre in order to supply the end users with the best raw material possible.

For these reasons during the ICAR board meeting held in Niagara fall, the AF-WG convenor suggested to involve, as ICAR members, the highest number possible of interested Textile factories, in order to create the necessary and fruitful links between breeders and end users, links that have never had an important role, especially in fine fibre production from Alpaca, Cashmere and Mohair.

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## Conclusion

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