

ISAG Conference 2004, Tokyo

**ISAG/FAO advisory group on animal genetic distance  
work**

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**(new name: ISAG/FAO advisory group on animal genetic diversity)**

The workshop took place on Sunday, September 12, from 17.30 to 20.30 in Room 309G. The participation was very good, with more than 75 attendants in the beginning. The program encompassed seven scientific presentations and a business meeting. The following presentations were made:

Roswitha Baumung *University of Natural Resources and Applied Life Sciences, Division Livestock Sciences, Vienna, Austria*

**Results of a Global Survey of Domestic Animal Diversity Studies**

Irene Hoffmann: *Animal Production Service, Animal Production and Health Division, FAO, Rome, Italy*

**The further development of MoDAD in FAO's Global Strategy for the Management of Farm Animal Genetic Resources**

Henner Simianer *Institute of Animal Breeding and Genetics, Georg-August-University, Goettingen, Germany*

**New MoDAD marker lists and future needs in global farm animal biodiversity studies**

Qi Xuebin, Han Jianlin, J.E.O. Rege and Olivier Hanotte, *Biodiversity group, International Livestock Research Institute (ILRI), Nairobi, Kenya*

**Microsatellite DNA phylogeography and domestication and dispersion of domestic yak**

Han Jianlin and Olivier Hanotte, *Biodiversity group, International Livestock Research Institute (ILRI), Nairobi, Kenya*

**Domestication and genetic diversity of the Old World camelids: a molecular genetic perspective**

Masaoki Tsudzuki, Sayed A-M Osman, Masahide Nishibori and Yoshio Yamamoto, *Graduate School of Biosphere Science, Hiroshima University, Hiroshima, Japan*

**Genetic Variability of Japanese Native Chickens Assessed by Means of Microsatellite DNA Polymorphisms.**

Ning Li

*State Key Laboratory for Agrobiotechnology, College of Biological Science, China Agricultural University, Beijing, China*

**Development of a Microsatellite Set for Diversity Studies in Ducks.**

In the **business meeting**, the following points were decided with majority

- The name of the standing committee should be changed to:  
**'ISAG/FAO advisory group on animal genetic diversity'**.

This proposal was approved by the ISAG business meeting on September 15.

- Henner Simianer was already elected as chairman of the group at the ISAG meeting 2002 in Göttingen. At this session, the following persons were elected as new members of the ISAG/FAO Advisory Group on Animal Genetic Diversity:

Paolo Ajmone Marsan

Stuart Barker

Gus Cothran

Olivier Hanotte

Hans Lenstra

Denis Milan

Steffen Weigend

The chairman thanked the leaving members Dan Bradley, Nat Bumstead, Allan Crawford, Frank Nicholas, Louis Ollivier, and Ruedi Fries as former president for their very successful work in the past.

In an **internal meeting** of the newly formed working group (plus Irene Hoffmann, FAO, and Roswitha Baumung, BOKU Vienna), on Tuesday, September 14, the following points were discussed:

- The group has proposed new marker lists for diversity studies in the farm animal species, which were presented for the first time at this conference (Poster E130).
- The group is invited to write a scientific paper on this activity to be published in 'Animal Genetics' to spread this information in the scientific community, which also will be pursued by other activities (through AGRI, DAD-IS etc.)

For the future work of the group, high priority is given to the following activities:

- The co-ordination of diversity studies in farm animals should be improved, which ideally would be propagated by providing free primers for the standardised markers to researchers. A first attempt in this direction is made through a co-ordinated research project of ILRI and the FAO/IAEA joint division focusing on diversity of small ruminants in

Asia. This can be seen as a pilot project. Collaboration of major projects in farm animal diversity, including exchange of data and samples, is strongly encouraged.

- The possibility of a joint data base to collect marker genotypes resulting from diversity studies was critically discussed. The group agrees, that such a data base would be extremely useful to monitor the activities in this field and to have access to up-to-date diversity information. However, the sensitivity of such data is recognised. Researchers can be motivated to submit their data to such a data base, if the following problems are solved:
  - access and use rights have to be clearly defined in a legally binding material transfer agreement, which should be developed by FAO.
  - a physical data base needs to be developed and installed with appropriate access possibilities. The starting point for this development could be a software (DAGRIS-mol) which is being developed at ILRI, a revised version of DAD-IS at FAO, or similar system being developed by other partners.
  - at present, researchers should not be pushed too hard to make their data available, but this should rather be an offer to them (eventually with the option, to become a co-author in regular global analyses to be published in highly ranked scientific journals).
  - the willingness to submit data in a joint data base can be traded against the access to free primers for the ISAG/FAO-markers once they can be provided for the major farm animal species.
- Despite all standardisation efforts, diversity studies have used and likely will continue to use different marker sets. For this reason, a statistical methodology needs to be developed to combine results of partly overlapping studies in a joint meta-analysis, leading to consensus trees of the major farm animal species on a global scale. H. Simianer and R. Baumung will develop a research program in this direction and search for funding.

Goettingen, December 9, 2004

Henner Simianer, Chairman