

ISAG Conference 2006, Porto Seguro, Brazil

Applied Genetics in Sheep and Goats Workshop

The Workshop “Applied Genetics in Sheep and Goats” was held on August 22nd, and was attended by 55 participants. The agenda items were: 1) Comparison Test: results and discussion; 2) Poster presentation; 3) Election for Standing Committee.

1. Comparison Test

Thaïs Pantano, representing the duty laboratory (LABOGENA, Jouy-en-Josas, France) gave information on the 2005-06 Test. First of all, she pointed out that 30 laboratories requested to participate in the test, while only 22 sent the results back. Then she summarized the results of the test.

Sheep - Twenty-one markers were used for sheep: CSRD247 – D5S2 – HSC – ILSTS87 – INRA005 – INRA006 – INRA023 – INRA049 – INRA 063 – INRA172 – MAF065 – MAF214 – McM042 – McM527 – OarAE129 – OarCP49 – OarFCB11 – OarFCB20 – OarFCB304 – SPS113 – TGLA53. These markers are included in the panels used by LABOGENA (France) and by LGS (Italy): six (in red) are in common, six (in blue) are used only by LABOGENA, and nine (in green) only by LGS. A consistent number of labs tested for markers other than those listed here, but in this case no comparison was possible. Seven to twenty laboratories (according to the marker) sent the results back. The agreement among the laboratories was very variable according to the marker: medium to excellent for most of them, while for INRA023, MAF214 and OarCP49 many discrepancies were observed; for MAF214 and OarCP49 the test confirmed the poor results obtained in the previous Comparison tests.

Nine laboratories tested also for PrP, with excellent results, as in 2003-04 Comparison test.

Goats - Nineteen markers were used for goats: CSRD247 -HSC – ILSTS019 – ILSTS008 – ILSTS030 – ILSTS087 - INRA005 –INRA006 - - INRA023 - INRA063 – INRA172 – MAF065 - McM527 – OarFCB11 - OarFCB20 – SRCRSP05 – SRCRSP08 - SRCRSP23 - SRCRSP24. As for sheep, these markers are included in the panels used by LABOGENA (France) and by LGS (Italy): three (in red) are in common, seven (in blue) are used only by LABOGENA, and nine (in green) only by LGS. Also for goats a consistent number of labs tested for markers other than those listed here, but in this case no comparison was possible. Six to eighteen laboratories (according to the marker) sent the results back. For goats, the agreement among laboratories was good to excellent, except for INRA 023 and OarFCB20.

Thaïs Pantano also underlined the main practical aspects that should be improved to make easier the organization and carrying out of the Comparison test: respect of the deadlines, complete information for receiving the samples (laboratory identification, sanitary documents, carrier information), respect of the instructions in reporting the results.

The large heterogeneity of markers used by the different laboratories led once again to discuss about the need of defining a list of markers for sheep and goats, as already done for other species. Until now no recommendations were given by ISAG for sheep and goats, due to the absence of exchanges of animals and records between countries, but now the situation seems to be changing. Therefore, the opportunity to recommend a set of markers was carefully

considered and, after a general discussion, it was agreed that the Standing Committee will suggest a list of markers.

After a short discussion, it was also decided that a Comparison Test for sheep and goats will be organized for 2007-08, jointly by the University of Melbourne – Centre for Animal Biotechnology, Australia (contactperson: Jill Maddox - e-mail: jillm@rubens.its.unimelb.edu.au) for sheep and by the University of California – Genetics Laboratory, Davis, USA (contactperson: Cecilia Penedo – email: mctorrespenedo@ucdavis.edu) for goats. Any suggestion or request on the test can be addressed to the contactpersons.

2. Poster presentation

The selected posters were: a) *Novel Y chromosomal haplotypes reveal wild and domestic sheep diversity* (D052), presented by Jennifer Meadows, CSIRO, Australia; b) *Enhanced mapping tools for the sheep genome – BACs, SNPs and the virtual map* (F051), presented by Jill Maddox, University of Melbourne, Australia.

3. Election

Liliana Di Stasio announced that she was going to definitely resign as chairperson and George Erhardt was going to resign as member of the Standing Committee. About the other members, she informed that Bertram Bed'hom and Attila Zlsonai had already left, while Michele Blasi and Cecilia Penedo agreed to stand again for nomination. The elected members for 2007-08 were:

Michele BLASI (micheleblasi@lgscr.it)

Allan CRAWFORD (allan.crawford@agresearch.co.nz)

Gesine LÜHKEN (Gesine.Luehken@agr.uni-giessen.de)

Jill MADDOX (jillm@rubens.its.unimelb.edu.au)

Thaïs PANTANO (Thais.Pantano@jouy.inra.fr)

Cecilia PENEDO (mctorrespenedo@ucdavis.edu)

The new Standing Committee met immediately afterwards and elected Jill Maddox as chairperson.