



Animal Biotechnology 2017, Nitra, Slovakia

“Biodiversity - Animal Genetic Resources”

The conference Animal Biotechnology 2017 was held on December 7th, 2017 in the National Agricultural and Food Centre (NPPC), Research Institute for Animal Production Nitra in Lužianky. The main topic of the conference was biodiversity, especially animal genetic resources (AnGR).

Presentations

First part of the conference was focused on activities related to conservation of AnGR in different European countries and implementation of the Nagoya protocol in the European Union. Presentations were given by invited speakers:

Štefan Ryba (Ministry of Agriculture and Rural Development of the Slovak Republic, Bratislava, Slovakia),

Tomáš Němeček (Research Institute of Animal Science, Praha, Czech Republic),

Beate Berger (Institute of Organic Farming and Biodiversity of Farm Animals, Wels-Thalheim, Austria),

Danijela Bojkovski (University of Ljubljana, Ljubljana, Slovenia),

Grażyna Polak (National Research Institute of Animal Production, Kraków, Poland),

Elżbieta Martyniuk (Warsaw University of Life Sciences, Warszawa/ National Research Institute of Animal Production, Krakow, Poland),

Ante Ivanković (University of Zagreb, Zagreb, Croatia),

Gita Jansone (Ministry of Agriculture, Riga, Latvia),

Srdjan Stojanovic (Ministry of Agriculture and Environmental Protection, Belgrade, Serbia),

Rūta Šveistienė (Institute of Animal Science of Lithuanian University of Health Sciences, Lithuania).

Second part of the conference was focused on animal genetic resources in Slovakia. Presentations were given by:

Ján Tomka (NPPC – Research Institute for Animal Production Nitra),

Radovan Kasarda (Slovak University of Agriculture in Nitra, Nitra),

Marko Halo (Slovak University of Agriculture in Nitra, Nitra),

Milan Margetín (NPPC – Research Institute for Animal Production Nitra)

Peter Supuka (The University of Veterinary Medicine and Pharmacy in Košice, Košice)

Emília Hanusová (NPPC – Research Institute for Animal Production Nitra),

Miroslav Bauer (NPPC – Research Institute for Animal Production Nitra),

Peter Chrenek (NPPC – Research Institute for Animal Production Nitra).

Panel discussion

Speakers participated also in the panel discussion, which addressed the legislative issues and gene banks in Europe. The panel discussion was moderated by Elżbieta Martyniuk (Warsaw University of Life Sciences, Warszawa/ National Research Institute of Animal Production, Krakow, Poland).

Panelists:

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Beate Berger (Institute of Organic Farming and Biodiversity of Farm Animals, Wels-Thalheim, Austria)

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Summary

The moderator summed up the changes in the new European legislation in the field of animal genetic resources including basis for the EU reference centers and exclusion of the limits for breed endangerment assessment. The question whether the common European or the country-driven approach in animal genetic resources conservation should be prioritized was raised.

At the European level there are no common guidelines for management and conservation of animal genetic resources (AnGR). Panelists agreed that every country is different and has different AnGR, however, common guidelines are necessary. At the moment, countries are using FAO guidelines for in vivo conservation of AnGR. In some countries, specific criteria for the assessment of the local breeds' endangerment are applied. It was underlined that countries have the best knowledge of their local breeds' endangerment and production systems and they are able to apply appropriate activities, which are most effective in their country and their production systems. In case of transboundary breeds, countries can profit from the joint approach. It was concluded that the combination of common guidelines and activities based on the country's requirements is appropriate for the conservation of animal genetic resources.

The gene banks in European region are developing and they will join in common network EUGENA (European Gene Bank Network for Animal Genetic Resources). The general objectives of the network are to support the *ex situ* conservation and sustainable use of AnGR and facilitate the implementation of the FAO's Global Plan of Action for AnGR and the Nagoya Protocol for ABS in Europe. In this regard, the moderator raised the question of their roles in conservation of animal genetic resources.

Different states of functioning of gene banks were presented based on their development. In the case where gene bank is starting the sample collection, the gene bank serves more as repository of samples. After reaching sufficient numbers of collected samples, the gene bank should provide the samples to the farmers. In countries where a gene bank as well as a conservation programme is well-developed, the gene bank provides material for the farmers. The exchange of the material goes in both directions, i.e. from the gene bank to farmer and vice versa. Based on the examples the panelists concluded that a gene bank needs to be an active stakeholder in the conservation of animal genetic resources via cooperation with farmers. It was pointed out that gene banks should also collaborate on the international level. EUGENA was given as an example of network of national gene banks in the European region, which share information on types, numbers and conditions for access to the samples of participating gene banks. Important role of gene banks as providers of reproductive material of animal genetic resources in regard to exchange between EU and non-EU countries was highlighted.

Poster session

During the poster session, 28 posters were presented by researchers, scientists and PhD. students from different European countries.