

Report on the AForGen meeting 2016

Locality: Sacel, Maramures County, Romania, 22-26 June, 2016.

Report by Maria Höhn, SZIU

This year AForGen meeting was organized in the Rodnei Mountains, Eastern Carpathians. The highest within the Eastern Carpathians, Rodnei Mountains presents all zonal plant communities specific for East-central Europe: broadleaf forests, coniferous forests as well as dwarf pine region and alpine heaths. Stretching over an area of 46.399 hectares, Rodnei National Park includes the oldest protected areas within the Eastern Carpathians where large natural forest areas are being conserved. Sacel village, situated at the bottom of the mountain, is known for its traditional rural activities, its inhabitants living mainly from animal farming and wood industry. The most characteristic traditional activities that have been maintained almost unchanged from centuries are haymaking and sheep pasturing.

The program of the meeting included two half-day scientific sessions, two field trips and optional programs.

The first part of the session on the 23rd June included the geographical-historical presentation of the region by Marcel Mindrescu and an overview on the local forestry activities from the times of the Habsburg monarchy presented by Berthold Heinze. Two detailed research reports were presented by Dusan Gömöry and then by Dragos Postolache on beech adaptive patterns and their genetic and physiological background. The genetic variation in natural stands of some Romanian beech forests was summarized by Elena Ciocarlan. Further progress in breeding for browsing “resistance” in Norway spruce and its genetic background was presented by Carlos Trujillo-Moya.

The second part of the session continued on Saturday morning, the 25th June and started with two reports by Christoph Sperisen. One included a summary on the research results in genome-environment association studies, the role of local adaptation to climate at the regional scale in forest trees, a research conducted by Aline Frank and co-workers. The second study was linked to drought resistance mediated gene expression detected in poplar species. Transcriptomes involved in flower development of Swiss stone pine was presented by Berthold Heinze. Instead of Alexis Sullivan who was not able to attend the meeting Bertalan Lendvay gave a talk on the first results from the genetic analysis of subfossil pine forests remnants in the Zürich area and presented the achievements in the development of a paleogenetic lab in WSL Zürich. First results on the genetic signals and adaptive strategies in East-central peripheral populations of Scots pine was presented by Endre Tóth, and a summary of research results in natural pine populations along the Carpathians was presented by Maria Höhn.

The session ended with strategic discussion and concluding remarks. Participants agreed with the proposal of David Neale that the next AForGen be organized in 2017 and the region would be the Pyrenees as the westernmost adjacent mountain area of the Alps.

The participants of the meeting agreed to join the IUFRO Global Network by establishing the Alpine Genomic working party.

A joined project for the AForGen members was initiated by David Neale. Details on this project will be shared soon with the AForGen members.

Two field trips had been organized in the Rodnei National Park. The tours were guided by Ioan Muntean, head ranger of the National Park and Marcel Mindrescu, geographer from Suceava University. The first day trip followed the Iza valley with two stops, and walking up to the Buhaiescu peak (2122m asl). The Friday guided tour took place towards the upper part of the Lala valley close to the bottom of Ineu peak where the largest Swiss stone pine stand from the region lies. During the trips participants have also visited two traditional sheepfolds from the region.

Optional programs on Saturday afternoon and Sunday included excursions to the Horse waterfall and travel in the Maramures Mountains along with the historical mountain railway "Mocanita".