



Josip Juraj Strossmayer
University of Osijek

**Faculty of
Agrobiotechnical
Sciences Osijek**

**Joint International Congress on Farm Animal Diversity
and the 31st Annual Conference
of the International Association for the Conservation of Animal Breeds
in the Danube Region (DAGENE),**
co-organized by the Faculty of Agrobiotechnical Sciences Osijek (FABSO),
Josip Juraj Strossmayer University of Osijek,
and the Balkan Environmental Association (B.EN.A.)

Osijek–Đakovo, Croatia, 1–3 July 2022

Joint International Congress will take place in the FABSO's exquisite edifice in Osijek, a Slavonian city with historically advanced handicrafts, and in Đakovo, hometown of world-known **National Lipizzaner Stud Farm in Ivandvor**, Croatia, from 1 to 3 July 2022.

The Congress will proceed under the auspices of the Croatian Academy of Sciences and Arts (CASA), Department of Natural Sciences, with co-organizational support provided by the City of Osijek.

President of the Congress Organizing Committee is Prof. Mirjana Baban (FABSO).

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ORAL PRESENTATION

Comparison of two successor breeds of the Zaupel sheep, Cikta and Forest Sheep, based on their mtDNA control region

FOGARASSY, Leonie¹ – BERGER, Beate² – ZENKE, Petra¹ – KOVÁCS, Endre¹ – SÁFÁR, László³ – BECSKEI, Zsolt⁴ – MARÓTI-AGÓTS, Ákos¹ – GÁSPÁRDY, András^{1*}

¹Institute of Animal Breeding, Nutrition and Laboratory Animal Science, University of Veterinary Medicine Budapest, István u. 2, 1078 Budapest, Hungary

²Institute for Organic Agriculture and Biodiversity, Austrasse 10, AT-4601 Wels-Thalheim, Austria

³Hungarian Sheep- and Goat Breeders' Association, Lőportár u. 16, 1134 Budapest, Hungary

⁴Department of Animal Breeding and Genetics Faculty of Veterinary Medicine, University of Belgrade, Bulevar Oslobođenja 18, 11000 Belgrade, Serbia

* Corresponding author and presenter: GÁSPÁRDY András, gaspardy.andras@univet.hu

Abstract

The aim of this work is to research, preserve and archive the exact genetic background and the associated ancestry of native sheep breeds in a genetic database. In this study, the focus is on the direct comparison of the Cikta and the Forest Sheep (Waldschaf). For this purpose, the genomes of both breeds were compared with the control region in the mtDNA. The biological samples for this study were collected between 2015 and 2017 from a total of 97 individuals, 70 from Cikta (Hungary) and 27 from Forest Sheep (Austria). The total number of polymorphic sites was 125; the number of shared mutations was 51, showing significant genetic identity between the breeds. The result of Tajima's D-test was -0.47672 and showed no significance ($P > 0.10$) as well as the value of the Fs statistic of FU and LIs (0.76212), which is also considered not significant. These are still in the genetic equilibrium. A deviation from it does not endanger the examined community of Zaupel derivatives. This study confirms the common ancestry of Cikta and Forest Sheep, which are known for their breeding history.

Key words: Zaupel sheep, Cikta, Forest Sheep, mtDNA control region