





UNIVERSITY "Ss. CYRIL AND METHODIUS" INSTITUTE OF ANIMAL SCIENCE SKOPJE - MACEDONIA

V INTERNATIONAL SYMPOSIUM OF LIVESTOCK PRODUCTION

SKOPJE, 5-7 SEPTEMBER, 2012

FIRST ANNOUNCEMENT

Institute of Animal Science organizes the V^{-th} International Symposium of Livestock Production, which will be held in the period 5-7 September, 2012 in Skopje, Republic of Macedonia. The program of the Symposium will be focused on the most significant achievements in the field of livestock production, as well as on the exchange of knowledge and experience in the agricultural practice.

TOPICS OF THE SYMPOSIUM:

- 1. Genetics and Selection
- 2. Animal Nutrition;
- 3. Food Safety and Quality;
- 4. Ecology, Natural Resources and Environment;
- 5. Fishery and Aquacultures;
- 6. Economics in Animal Husbandry;
- 7. Open topics

Deadline for submission of abstracts is 30.04.2012 and for complete papers is 31.07.2012. Along with abstract, authors should to send and **Registration form (in attach)**. Notification of abstract acceptance you will receive at the latest to 31.05.2012. Working languages are Macedonian and English.

All papers will be subject of recension by the Scientific Committee. Book of abstracts will be published till the beginning of the Symposium.

Only complete papers who will obtain a positive recension, will be published in the Journal "Macedonian Journal of Animal Science", which is to publish in printing and electronic form (<u>www.mjas.ukim.edu.mk</u>).

Registration fee which includes: symposium material, attendance of all sessions of the Symposium, publishing of paper in journal "Macedonian Journal of Animal Science" and tourist program (sightseeing of Skopje) is 100 EUR.

Papers shall not be published without the payment of registration fee.

Instructions for abstracts:

The whole text of the abstract has to be in Times New Roman font. In the first line of the abstract write the title of the paper, bold and with size 14.

In the next line write the complete names and surnames of the authors (bold), as well as their addresses (italic) in size 12. First write the name and then the surname (without titles). Mark the names and the addresses with numbers in superscript and beside the contact author, after the number put *, also in superscript. Under the addresses of the author/s write the contact e-mail. Leave one blank row and write your text in normal line spacing with letter size 12.

Again leave one row blank and write the key words (not more than 8). The abstract should not contain more than 1500 signs including the spaces (Tools – Word count), including the title, names and addresses of the authors. Each abstract should be written in Macedonian and in English. The margins of the abstract should be 3 cm (1,18"), top, bottom, left, right (see in attach).

Instructions for complete papers you can find on the next web site: www.mjas.ukim.edu.mk

Please send the abstracts and complete papers (in Word format) to the following address (e-mail):

Institute of Animal Science bul. Ilinden, 92A 1000, Skopje, Macedonia Post. Fax 207 Phone: ++389 2 306 51 20

E-mail: vsymposium_2012@yahoo.com

Organizing Committee President

Ass. Prof. Nikola Pacinovski

Scientific Committee President

Prof. Dr Mirjana Menkovska

POLYMORPHISM IS INFORMATIVE QTL MARKER FOR MEAT QUALITY IN BEEF CATTLE

Piotr Urtnowski*, Jolanta Oprządek, Edward Dymnicki

Polish Academy of Sciences Institute of Genetics and Animal Breeding, Jastrzębiec, 05-552 Wólka Kosowska, Poland *p.urtnowski@ighz.pl

A b s t r a c t: Acyl-CoA:diacylglycerol acyltransferase-1 (DGAT1) is a key enzyme involved in triglyceride synthesis. DGAT1 gene is located in the centromeric region of the bovine chromosome (BTA) 14 and considered polymorphism was identified as a candidate gene for milk and meat QTLs. One of mutation which is substitution $AA \rightarrow GC$ in exon 8 causes amino acid change in product. The effect of the lysine/alanine (K232A) diallelic polymorphism on meat production traits has been studied.

Genotyped were 156 young Black-and-White (Fresian) steers. The association between diacylglycerol acyltransferase polymorphism and slaughter performance and meat technology analysis was examined. Moreover fatty acid profile (C12-C20:5) including CLA in sample of longissimus dorsi (LD) muscle was evaluated.

Differences ($P \le 0.05$) were found between genotypes in slaughtering performance traits as well as fat and retail cuts content and meat-fat ratio. The significant difference occurred also in water holding capacity. Heterozygous individuals AA/GC were characterrized by the greatest values compared with homozygous once. Bulls of DGAT1 genotype GC/GC showed significantly higher ($P \le 0.05$) content of lauric acid in LD muscle and heterozygous animals differ in CLA content with homozygous AA/AA.

Key words: DGAT1, cattle, beef, gene polymorphism, carcass traits