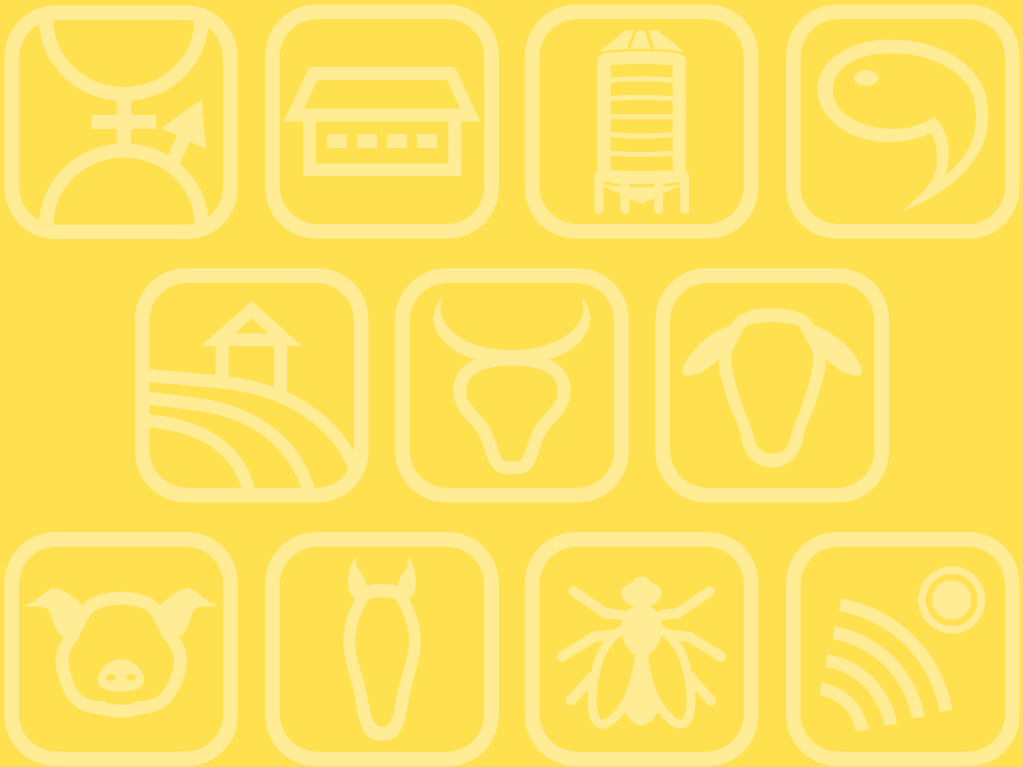


Book of Abstracts of the 68th Annual Meeting of the European Federation of Animal Science



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68th ANNUAL MEETING OF
THE EUROPEAN FEDERATION
OF ANIMAL SCIENCE

28 August – 1 September 2017, Tallinn, Estonia

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European Federation of Animal Science**



EAAP

European Federation of Animal Science

The European Federation of Animal Science wishes to express its appreciation to the Ministero delle Politiche Agricole Alimentari e Forestali (Italy) and the Associazione Italiana Allevatori (Italy) for their valuable support of its activities.

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Tallinn, Estonia, 28 August – 1 September 2017



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Welcome to Tallinn, Estonia

On behalf of the Estonian Organising Committee, it is my pleasure to welcome you to the 68th Annual Meeting of the European Federation of Animal Science at the Solaris Tallinn. It is our first opportunity to host the EAAP Annual Meeting – the Europe's largest animal scientific conference.

The main theme of this years' meeting is Patterns of Livestock Production in the Development of Bioeconomy, which is a hot topic worldwide and a very appropriate subject in view of the current challenges for both human society and livestock industry. Knowledge-based innovation in the livestock sector is needed to integrate animal production into a viable bioeconomy value chain and ensure food security along with improving animal health and reducing environmental impacts. The programme will cover the latest findings and views on developments in animal genetics, health and welfare, nutrition, physiology, livestock farming systems, precision livestock farming, insects and cattle, horse, pig, sheep and goat production, as well as their allied industries.

The participants will have the opportunity to attend a very interesting scientific programme, to meet scientists working with a wide range of animal species and in various disciplines, to make new contacts and discuss the latest developments in animal sciences. The social events will offer the participants a unique occasion to get a glimpse of Estonian culture and the beautiful city of Tallinn.

We hope that all of you will have a very productive meeting and that you will enjoy the social events and our warm and friendly atmosphere.

Toomas Kevvai

Chairman of the Estonian Organising Committee
Deputy Secretary General for Food Safety, Research and Development
Ministry of Rural Affairs of the Republic of Estonia

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The effect of acidic marinades to the quality of the pork*A. Tänavots¹, A. Põldvere^{1,2}, K. Veri¹, T. Kaart¹, K. Kerner¹ and J. Torp¹**¹Estonian University of Life Sciences, Institute of Veterinary Medicine and Animal Sciences, Kreutzwaldi 62, 51014 Tartu, Estonia, ²Estonian Pig Breeding Association, Aretuse 2, 61406 Märja, Tartumaa, Estonia; alo.tanavots@emu.ee*

The pork quality parameters of the longissimus muscle subjected to ageing with white wine vinegar (WWV, pH 3.0), apple vinegar (AV, pH 3.1), mustard-honey (MH, pH 3.9) and kefir (K, 4.5) marinades for 7 days were studied in 8 repeats. pH (raw only), electroconductivity, colour, weight loss and shear force of the raw marinated and cooked meat was determined at 1., 3. and 7. days of storage. MH and K marinades retained its initial pH during the ageing period. A considerable lower pH value was in the samples treated with AV and WWV marinades and additional drop occurred on 3. day after treatment ($P < 0.05$, analysis of variance). The electroconductivity differed in a larger scale between marinades after thermal treatment. The acidity in AV and WWV marinades turned raw samples significantly ($P < 0.05$) lighter (L^*). The cooked samples treated with K were lighter within the 7 day period ($P < 0.05$) and the MH samples were darker only on the 7. day (67.31). The raw samples treated with MH marinade had lower redness (a^* , $P < 0.05$), but larger yellowness (b^*) value, whereas cooking increased b^* value considerably. The K marinade decreased raw samples yellowness ($P < 0.05$), but cooking increased b^* value close to the value of the WWV and AV treated samples. The weight loss of K treated raw samples was not remarkable during the ageing period (0.27-1.35%), compared to the other groups (4.25-8.70%), which lost a significant amount of weight, especially on the 7. day of storage. Thermal treatment had the modest effect to the samples treated with MH (25.43-27.41%), whereas samples treated with K lost weight almost at the same level as in two other groups. The marinade and storage time had no effect on the raw meat samples shear force. However, the thermal treatment brought out the differences between marinades during storing. The samples treated with WWV and AV turned tougher compared to the other two marinades. Obtained data demonstrated that mustard-honey marinade had the ability to retain moisture better, which turned samples softer after cooking. The meat softening effect had also marinade with kefir.