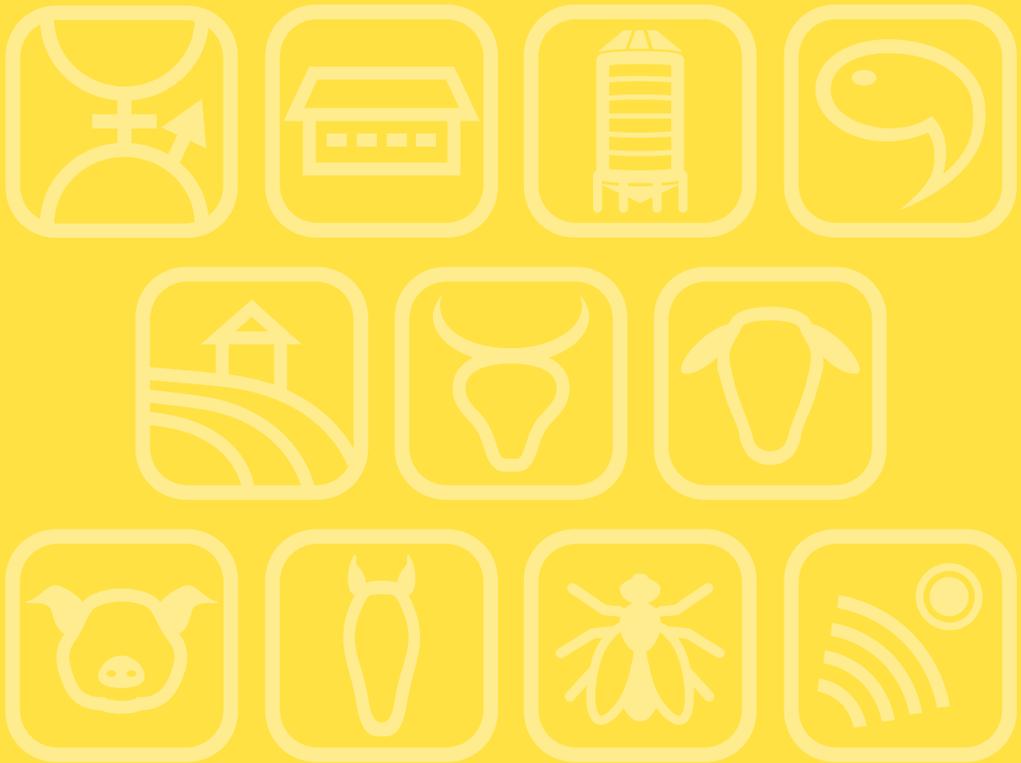


# Book of Abstracts of the 69<sup>th</sup> Annual Meeting of the European Federation of Animal Science



**Book of abstracts No. 24 (2018)**  
**Dubrovnik, Croatia,**  
**27-31 August 2018**

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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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Dubrovnik, Croatia, 27<sup>th</sup> – 31<sup>st</sup> August, 2018



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## Welcome to Dubrovnik and Croatia

On behalf of the Croatian Organising Committee, we are pleased to invite you to attend the 69<sup>th</sup> Annual Meeting of the European Federation of Animal Science (EAAP). The meeting will be held in the Valamar Resort in Dubrovnik, one of the most prominent tourist destinations in the Mediterranean, from 27<sup>th</sup> to 31<sup>st</sup> August 2018.

For decades, the Annual Meeting has hosted scientists and experts from the field of animal science, not only from Europe but also from other countries around the globe. The EAAP Congress provides insights into the latest research results from many areas of animal science. It is a unique opportunity for industry and scientists to meet and acquire new knowledge as well as to exchange experience. Carried out through many sessions, presentations and discussions about scientific achievements in the European and world livestock production are also an opportunity for the application of new ideas in practice. Furthermore, there will be a focus on international research collaboration and knowledge exchange towards innovation. All these preferences make the EAAP one of the largest animal science congresses in the world – we expect approximately 1000 participants from more than 50 countries.

The main topic of the congress is 'Conventional and traditional livestock production systems – new challenges' and it includes sustainability, animal welfare, agroecology and product quality. The programme contains various disciplines and the latest findings regarding farm animals such as genetics, nutrition, management, health, welfare and physiology of cattle, sheep, goats, pigs, horses, poultry and fur animals, as well as the use of insects for feed and precision livestock farming..

We are delighted to invite you to participate in the 69<sup>th</sup> Annual Meeting of EAAP which focuses on translating research into animal production practice.

*Assist. Prof. Zdravko Barać,*  
Chairman of the Organising Committee,  
Croatian Agricultural Agency

*Mr. Tomislav Tolušić,*  
Minister of Agriculture,  
Patron of the 69<sup>th</sup> Annual Meeting

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- **Dr. Maja Dražić**, Croatian Agricultural Agency

**Urea-PAGE patterns of PDO Évora cheese manufactured with *Cynara cardunculus* L. ecotypes**

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Some Portuguese and Spanish ewe's cheese are made with the aqueous extracts of *Cynara cardunculus* L. dried flowers. Évora cheese is a Portuguese PDO cheese which is characterized with a semi-hard or hard consistency, a light yellowed colour, by few or no hole and by an intense flavour. It is obtained by draining slowly the curd, after the coagulation of raw ewe's milk with the action of *C. cardunculus* vegetable coagulant. The renewed interest in the enzymes of this extracts prompted to the investigation of its proteolytic effect in Évora cheese. Urea-PAGE of the casein fraction was done to enable the evaluation of the extent of proteolysis of Évora cheese made with three *C. cardunculus* ecotypes (Cynara 1, Cynara 2, Cynara 3), compared with a commercial animal rennet (Animal) after 1, 7, 14, 21, 35, 49 and 60 days of ripening and therefore to establish the pattern of the casein fractions degradation. The results showed a higher protein degradation of cheeses made with vegetable coagulant than cheeses made with animal coagulant. Up to 35 days of ripening there was an increase of the casein degradation rate, remaining relatively constant until the end of maturation. After 63 days of ripening,  $\alpha$ S-caseins (54.90%) were more degraded than  $\beta$ -caseins (37.27%) in cheeses made with *C. cardunculus* ecotypes.

**Quality attributes of PDO dry-cured hams as affected by low-protein diets and genetic line of pigs**

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This study aimed to evaluate the effects of a decrease in the crude protein (CP) of diets on several quality attributes of traditional dry-cured hams provided by pigs of two genetic groups (GG) characterized by different potential for lean growth. Hams data from 96 pigs were used; the half fed a conventional diet (CONV) representative of those commonly distributed to heavy pigs in Italy, the others a low-protein (LP) diet, with a 20% lower CP content with respect to CONV. Pigs were slaughtered at 165 kg average BW and all trimmed hams obtained were processed to produce typical San Daniele dry-cured hams. At the end of seasoning, 10 left dry-cured hams for each diet  $\times$  GG combination were selected and analysed for chemical (fat and salt content, proteolysis index, water activity) and texture traits and fatty acid composition, and evaluated for some sensorial attributes through a consumer test. The effects of diets, GG and their interaction were included in the statistical model. Pigs fed LP diets provided hams with lower protein content ( $P=0.003$ ), whereas a greater fat content was found only in the low lean growth potential GG. Conversely, texture traits and fatty acid composition were unaffected by diet. Hams from high lean growth potential GG showed greater losses at processing ( $P<0.001$ ) and deboning ( $P=0.015$ ), an only nominal greater salt content, greater protein content ( $P=0.039$ ) and a greater proportion of total polyunsaturated fatty acids ( $P<0.001$ ) and  $\omega 6$  ( $P<0.001$ ) than the other GG. In conclusion, lowering the dietary CP has only minimal effects on dry-cured ham quality. Due to its positive effects on sustainability of dry-cured ham chain by decreasing pig farm nitrogen excretion and feeding costs, lowering the dietary CP content seems an advisable strategy for the feeding of traditional PDO heavy pigs. Genetic groups of different lean growth potential exerted only minor effects on the dry-cured ham quality.