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Book of Abstracts of the 69th Annual Meeting of the European Federation of Animal Science

Dubrovnik, Croatia, 27th – 31st 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 69th 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 27th to 31st 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 delegated to invite you to participate in the 69th Annual Meeting of EAAP which focuses on translating research into animal production practice.

Assist. Prof. Zdravko Barać, 
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Croatian Agricultural Agency

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- Dr. Danko Dežđek, Croatian Chamber of Agriculture
- Dr. Maja Dražić, Croatian Agricultural Agency
Milk metabolites are non-invasive biomarkers for nutritional and metabolic disorders of Dairy Herds?

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The interpretation of milk metabolites from milk recording can be indicative of nutritional and metabolic disorders. The nutrient imbalances as the relationship between carbohydrates fermentability and protein degradability in the rumen can be diagnosed by milk urea nitrogen (MUN), protein and relation of fat/protein (F/P) in milk. The metabolic imbalances, as the negative energy balance, hyperketonemia, ketosis and acidosis can be diagnosed by β-hydroxybutyrate (BHB), fat and the relation of F/P in milk. Thus, milk metabolites can be indicators of health and welfare of the cow. This study analysed 110,461 individual milk samples of 9,523 lactating dairy cows collected monthly from January 2015 to March 2017 from 27 herds of South of Portugal, with an official milk recording. The mean of lactating cows per herd was 353±270 (mean ± SD) and milk production per cow was 35.08±9.80 kg/day. During the first 30 days of lactation 7.7% of milk recording had BHB concentration over 0.2 mmol/l, indicating that these cows had high possibility of being with clinical ketosis. 44.8% of milk recording had the relation of F/P over 1.4 and 49.3% had milk fat over 4.5% indicating that about 45% of the cows were probability mobilizing body fat. 86.7% of milk recording had MUN concentration between 101 and 299 mg/kg indicating that the relation between carbohydrates and protein of the diet was appropriate. On the other hand, 11.9% of milk recording had the relation of F/P above 1.4 and 21.6% had milk protein above 3% indicating that some animals are ingesting a small proportion of protein in the diet comparing with the quantity of carbohydrates. In conclusion, these non-invasive biomarkers can reflect nutritional and metabolic disorders, but the interrelation between them must be taken into account. The thresholds of this milk metabolites to indicate health disorders are not consensual among the authors.