Book of Abstracts of the 70th Annual Meeting of the 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.

Book of Abstracts of the 70th Annual Meeting of the European Federation of Animal Science

Ghent, Belgium, 26th-30th August, 2019

EAAP Scientific Committee:

E. Strandberg
G. Savoini
H.A.M. Spoolder
H. Sauerwein
M. Lee
J.F. Hocquette
J. Conington
E.F. Knol
A.S. Santos
T. Veldkamp
I. Halachmi
G. Pollott

OASES
Online Academic Submission and Evaluation System

Session 11. Raising awareness on the importance of animal genetic resources

Date: Monday 26 August 2019; 14.00 – 17.00
Chair: Leroy

Theatre Session 11

Session 12. Novelties in genomics research and their impact on genetic selection

Date: Monday 26 August 2019; 14.00 – 17.00
Chair: Mulder

Theatre Session 12

Session 13. Towards a climate smart European livestock farming

Date: Monday 26 August 2019; 14.00 – 17.00
Chair: Peyraud

Theatre Session 13

Session 14. Differentiation of consumers oriented milk & meat products (e.g. A2A2 milk, pasture based milk & meat / hay milk / …)

Date: Monday 26 August 2019; 14.00 – 17.00
Chair: Penasa

Theatre Session 14

Poster Session 14

An improvement in animal welfare in a large Swiss abattoir through the consistent evaluation of data

M.K. Kirchhofer[1] and L.V.T. Von Tavel[2]
[1]Privat, Wohlen, 3033, Switzerland, [2]Swissgenetics, Zollikofen, 3052, Switzerland; lvt@swissgenetics.ch

On the basis of the Animal Welfare Act the 'Directive on the protection of animals at the time of slaughter' governs the handling of animals in Swiss abattoirs. One of its stipulations is that cattle must remain in sheds for a maximum of 4 hours under the reduced shed conditions in abattoirs. However, enforcement and control of this requirement by the veterinary service in large operations with approval to slaughter several hundred cattle per day has proven difficult. In SAP, the software used by the meat processor for data processing, individual animals are registered at three separate time points: by the livestock trade on arrival, by the abattoir at the time of stunning and by Proviande (Swiss Organisation of Meat Marketers) at the time of valuation. The various datasheets were transferred and evaluated by the veterinary service in an Excel spreadsheet and the results were displayed graphically. At 30 minute intervals the graphic shows the frequencies of deliveries, slaughter, shed occupancy and theoretical stall occupancy in the event of a problematic slaughter, valuation and those animals who had to wait more than 4 hours in the abattoir shed. The following parameters were also calculated as key indicators: animals with excess time as a total and in percentages, the cumulative excess time in hours of all animals held too long in sheds and the number of animals listed with excess time after the 30-minute interval of their arrival. The graphic has enabled the dynamism of the abattoir as regards its deliveries, slaughter and animal shed time to be displayed in a clear and understandable way. The key indicators can then be used to objectively evaluate the success of animal welfare improvement measures. The consistent use of these evaluations also enables a fact-based and constructive dialogue between abattoir personnel and the veterinary service. It is also worthwhile to use existing data consistently in an abattoir. This improves animal welfare without impairing the commercial performance of the abattoir. These fact-based evaluations have led to a daily dialogue between veterinary service and abattoir staff and an awareness of animal welfare was promoted by staff in the shed.

Effect of ripening time and salt reduction or substitution in pork sausages sensory characteristics

S. Rodrigues, C. Grando, E. Pereira, L. Vasconcelos and A. Teixeira
CIMO, Instituto Politécnico de Bragança, Campus Sta Apolónia, 5300-253, Portugal; srodrigues@ipb.pt

This work aimed to evaluate the sensory characteristics of meat sausages with 4 different salt formulations (Form1: 2% NaCl, Form3: 1.5% NaCl+0.5% KCl, Form4: 1.5% Sub4 salt+0.5% NaCl, Form5: 0.5% Sub4 salt+1.5% NaCl) and 2 ripening times (6 and 12 days). The evaluated attributes were related to appearance (exterior and interior colour), odour (intensity before and after cutting), taste (salty, bitter and metallic), texture (firmness perceived by thumbs and hardness, juiciness and chewiness in mouth) and flavours (set sensation, intensity and persistence). Five samples of each formulation were evaluated considering the salt formulations in two sessions for a shorter ripening time. The same number of samples were evaluated for a longer ripening time. Samples were evaluated by a 10 elements meat products qualified taste panel, following the Portuguese standards, and using a 7 points scale. Data were submitted to the Product Characterization procedure and to a Generalized Procrustes Analysis (GPA). GPA shows that Form1 had more intense inner odour and flavours persistence, Form3 had a darker interior colour (darker red), the higher odour intensity, hardness and bitter taste, Form4 was where higher values of basic, yet not very high, flavours were noted, and Form5 had the highest values of texture, outer colour and flavours intensity. Results of the characterization of the products indicate that only firmness felt by the thumbs presented a discriminatory power between sausages with shorter ripening time, Form3 had significantly lower firmness than the other formulations. In the sausages with a longer ripening time, GPA indicated Form1 with higher values for hardness, chewing, exterior colour, internal odour, bitter taste and persistence of the flavours, Form3 was considered the most succulent and salty, Form4 was the one that had the most firmness, and Form5 had the highest intensity of interior colour and metallic taste. The characterization of the products identified the external colour as the only attribute with significant discriminatory power. Form1 had significantly darker colour and Form5 had a lighter colour.