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Session 56

Impact of immunocastration of gilts on instrumental and chemical traits of Teruel dry-cured hams

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In a previous trial carried out with gilts intended for the Protected Designation of Origin (PDO) ‘Teruel dry-cured ham’, a positive impact of immunisation against GnRH was detected on carcass fat thickness. According to the Regulation of this PDO, more than 16 mm of fat depth over the glutus medius muscle are required to favour salting and avoid excessive drying of pieces. Nowadays, a study was carried out with 32 dry-cured hams of Duroc × (Landrace × Large White) gilts to evaluate the effects of immunocastration on weight losses during the dry-curing process and on instrumental and chemical characteristics. Half of them belonged to intact gilts (IG) and the other half to immunocastrated gilts (IMG). All pigs received the same management in the farm and in the abattoir. Hams were weighted several times during the dry-curing process (lasted 19 months). Once cured, colour, texture and chemical composition by near-infrared spectroscopy (NIR) and by classical analyses were determined in the biceps femoris muscle of 10 hams per treatment chosen at random. Data were analysed using the GLM procedure of SAS. The fresh-ham weight and the dry-cured-ham weight were used, when significant, as covariates for weight losses and for instrumental and chemical characteristics, respectively. Total ham weight losses during the dry-curing process tended to be lower (P=0.058) in IMG than in IG, leading to hams from IMG tended to be heavier (P=0.057). Yellowness (P=0.055) and chroma (P=0.017) were lower in IMG than in IG. Hams from IMG presented lower moisture (P=0.001) and water activity (P=0.015), higher intramuscular fat content (P=0.049 by classical analyses and P=0.077 by NIR) and tended to show higher ash proportion (P<0.10) than those from IG. Under our experimental conditions, it can be concluded that immunocastration improves some parameters related to the quality of Teruel dry-cured hams of gilts. This work was funded by MINECO (Project AGL2016-78532-R) and by FITE and FEDER, through the operative programs ‘Construyendo Europa desde Aragón’.

Session 56

Sensory differences of Vinhais (Portugal) meat sausages with 3 ripening times

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This work aimed to evaluate the effect of 3 (6, 9 and 12 days) ripening times on the sensory characteristics of Vinhais meat sausages produced according to the PGI specifications, to investigate the possibility of creating a new PGI product: Vinhais meat sausage to roast. Twenty-four appearance, odour, texture and taste attributes were evaluated by a qualified taste panel. The data were submitted to the product characterisation procedure. The results show that 13 of the 24 assessed attributes have significant discriminatory power over the sausages with different ripening times. The sausages with 12 days of ageing were firmer and harder, had a darker colour, more difficult chewability, and had a higher flavour intensity and persistence, also presented more spots in the exterior. Sausages with nine days of curing showed higher brightness, and also, not significantly different from 12 days sausages, darker colour after cooked, and not significantly different from 6 days sausages less firmness. Sausages with six days of ripening showed smaller values for most of the attributes. They were more tender, more homogeneous, and presented the lowest values of firmness, colour, chewability, brightness, flavour persistence, lighter muscle colour, more opaque aspect of the fat, fewer spots, more pink muscle colour and more intact wrapping.