

Book of Abstracts of the 61st Annual Meeting of the European Association for Animal Production



**Book of abstracts No. 16 (2010)
Heraklion, Greece
23-27 August 2010**

ISBN 978-90-8686-152-1
e-ISBN: 978-90-8686-708-0
DOI: 10.3920/978-90-8686-708-0

ISSN 1382-6077

First published, 2010

© Wageningen Academic Publishers
The Netherlands, 2010

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned. Nothing from this publication may be translated, reproduced, stored in a computerised system or published in any form or in any manner, including electronic, mechanical, reprographic or photographic, without prior written permission from the publisher:
Wageningen Academic Publishers
P.O. Box 220
6700 AE Wageningen
The Netherlands
www.WageningenAcademic.com
copyright@WageningenAcademic.com

The individual contributions in this publication and any liabilities arising from them remain the responsibility of the authors.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the European Association for Animal Production concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The publisher is not responsible for possible damages, which could be a result of content derived from this publication.

Influence of part-time grazing management on lipid fractions (fatty acids and triglycerides) of sheep's milk

Valdivielso, I.¹, Barrón, L.J.R.¹, Amores, G.¹, Virto, M.¹, Arranz, J.², Beltrán De Heredia, I.², Ruiz, R.², Ruiz De Gordo, J.C.¹, Nájera, A.I.¹, Albisu, M.¹, Pérez-Elortondo, F.J.¹, Mandahuniz, N.² and De Renobales, M.¹, ¹Universidad del País Vasco, Paseo de la Universidad, 7, E-01006 Vitoria-Gasteiz, Spain, ²NEIKER-Tecnalia, P.O.Box 46, E-01080 Vitoria-Gasteiz, Spain; izaskunvz@hotmail.com

Part-time grazing is a traditional flock management used in the Basque Country (Northern Spain) in which pasture feeding is supplemented indoor with forage (alfalfa and pasture hay) and concentrate to meet milk production requirements. This study evaluated the effect of part-time grazing management on the content of fatty acids and triglycerides in the milk. The experiment was conducted during 4 weeks from late April until mid-May. Sheep were separated into 4 homogeneous groups of 12 sheep each, and randomly assigned to 3 different alfalfa hay supplements: 300 g/day (G1), 600 g/day (G2), and 900 g/day (G3). G1-G3 animals were allowed to graze outdoors for 4 hours. The control group (G0) received 600 g alfalfa hay/day and was not allowed to graze outdoors. All animals received 500 g concentrate/day at milking. Milk samples (evening and morning milking combined) were taken once a week. Fatty acids were analyzed by GC-FID and triglycerides by HPLC-ELSD. Part-time grazing significantly ($P < 0.05$) increased the amount of unsaturated fatty acids, particularly the amount of c9t11 CLA isomer and that of trans-vaccenic acid. Relative percentages of triglycerides of partition number (PN) 40 and 34 were also significantly affected by grazing. When the 3 different amounts of alfalfa hay were compared (G1, G2 and G3), milk fat from G1 had the highest level ($P < 0.05$) of unsaturated fatty acids, c9t11 CLA isomer and trans-vaccenic acid. The higher amount of alfalfa hay, the higher relative percentage of PN 48 triglycerides and the lower relative percentage of PN 38 triglycerides was observed. This study was financed by UPV/EHU Cátedra UNESCO 02/05 and INIA TRA2006-00100-C02.

Breed effect on the meat colour and visible spectrum of Spanish suckling kids

Alcalde, M.J.¹, Ripoll, G.², Sañudo, C.³, Horcada, A.¹, Teixeira, A.⁴ and Panea, B.², ¹Univ Seville, Ctra Utrera Km1, 41013 Seville, Spain, ²CITA, Av Montañana 930, 50059 Zaragoza, Spain, ³Univ Zaragoza, Miguel Servet, 177, 50013 Zaragoza, Spain, ⁴CIMO Inst.PolitecnicoBragança, Apdo1172, 5301-855 Bragança, Portugal; aldea@us.es

The effect of the breed (Blanca Celtibérica (BC), Moncaina (MO), Negra Serrana-Castiza (NE), Blanca Andaluza (BA), Pirenaica (PI), Malagueña (MA) and Murciano-Granadina (MU)) on the colour (CIE L* a* b* h* and C*) and visible reflectance (between 400 and 700 nm wavelength region) were evaluated in 105 male kids ranging 4.2±0.12 kg cold carcass weight. All the kids were reared with their dams until slaughter. The variables were measured at 24 hours post-slaughter in Longissimus lumborum after 1 h blooming with a spectrophotometer CM-700d. The average values of colour parameters were L* 48.40±0.51, a* 3.09±0.19, b* 9.11±0.34, C* 9.94±0.30 h* 68.90±1.63, for L*, a*, b*, C* and h*, respectively. There were found significant differences ($p < 0.001$) among breeds on all the variables analysed. BC had the palest and most light-coloured meat whereas BC had the most yellowish and vivid colour and the highest hue angle. Whilst PI had the darker and reder meat, and the lowest chroma, hue angle and b* values. Being b* and C* the variables that can explained a higher percentage of the variation of the results. A discriminant analysis was not able to classified carcasses into their breeds, since only the 58.8% of animals were accurately classified correctly into their breeds, the inclusion of the spectra variables did not improve significantly the % of classification (62.7%).