



## Table of Contents, 25 May 2011

Research Title and Field  
(Abstract) Article

Effect of different ratios of coarse and fine limestone particles on production and shell quality of layers at peak production	Original Research, A13
--	------------------------



Influence of Original  
some major Research,  
genes on A14  
early lay  
traits of

crossbred  
local  
Pullets in a  
Humid  
Tropical  
Environme  
nt





Reproductive  
Performance  
of  
Fogera  
Cattle at  
Metekel  
Cattle  
Breeding  
and  
Multiplication  
Ranch,  
North West  
Ethiopia

Original  
Research,  
A15







Effects of  
supplement  
ed diets  
with garlic  
organic  
extract and  
streptomyci  
n sulphate  
on  
intestinal  
microflora  
and  
nutrients  
digestibility  
in broilers

Original  
Research,  
A16













**Influence of  
the nature  
of the  
energy  
source in  
the  
concentrate  
on the  
concentrati  
on and  
molar  
proportions  
of volatile  
fatty acids  
in rumen of  
sicilo-sarde  
sheep  
breed**

**Original  
Research,  
A17**

Selmi,  
H.,  
Tibaudi,  
G.,  
Ben  
Gara,  
A.,  
Jemm  
ali, B.,  
Rekik,  
B.,  
and  
Rouis  
si H. *Online  
J. Anim.  
Feed Res.*  
, 1(3):  
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20.2011.



## ABSTR

**ACT:** The  
effect of the  
nature of the  
source of  
energy  
supplementa  
tion on  
ruminal pH,  
concentratio  
n of volatile  
fatty acids  
(VFA) and  
the  
proportions  
of the main  
acids in the  
rumen of the  
dairy  
Sicilo-Sarde  
breed were  
evaluated. Four  
rams  
with an  
average live  
weight at the  
beginning of  
the  
experience  
of  $45.25 \pm$   
 $3.5$  kg and  
aged  $4.8 \pm$   
 $0.5$  years,



fitted with permanent cannulas in the rumen were used in this experiment. The animals had a common basal diet at 1.5 kg DM / head / day of oat hay supplemented in turn by four concentrate at 500 g / head / d. Concentrates differed by the nature of energy ingredients they contain. The concentrate A: included 10% barley, 43.3% corn, 25% wheat bran, 17.7 % soybean meal and 4% CMV; The concentrate B was made of 66% white sorghum, 30 % beans and 4% CMV; the concentrate C had 71% triticale, 18% horse bean, 7% soybean meal and 4% CMV; and finally the D concentrate included 71.5% barley, 17.5% field bean, 7% soybean meal, and 4% CMV. 50 ml samples were taken before, 2, 5 and 8 hours after the distribution of the morning meal, and were filtered

through four layers of surgical gauze. These samples were used for the analysis of volatile fatty acids (VFA) concentration by gas chromatography. Results showed that the rumen pH was statistically different ( $P < 0.05$ ) before and 2 hours after the morning meal distribution among concentrates. It was in favour of C and D ( $P < 0.05$ ) concentrate but it has stabilized at the end of the day ( $P > 0.05$ ). The concentration of total VFA was significantly higher ( $P < 0.05$ ) for diets C and D just after the distribution of the meal before it became comparable ( $P > 0.05$ ) among concentrates after 5 and 8 hours post prandial. The proportion of acetate and butyrate (C2 and C4) acids evolved in the same way during the day regardless of the regimen but were in a reversed manner for the propionic acid (C3).

**Keywo**

**rds:** Acetate,

butyrate,  
supplements,  
energy source,  
pH, propionate

Reproductive  
performance  
of  
Rahmani  
and Chios  
sheep and  
their lambs  
under  
Upper  
Egypt  
conditions

Original  
Research,  
A18







