Effects of different sources of nitrogen on performance, relative population of rumen microorganisms, ruminal fermentation and blood parameters in male feedlotting lambs

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**Supplementary material**

The experimental data on dry matter intake and body weight gain was determined by completely randomized design.

$Y\_{ij}=μ+T\_{i}+ε\_{ij}$ (Model 1)

Yij  is the score for the ith observation in the jth treatment

μ is the overall population mean (grand mean)

Ti is the effect of having treatment level i

$ε\_{ij}$is the error effect associated with Yij

Sampling time was included as a repeated measure in statistical analyses of plasma samples and for ruminal parameters.

$Y\_{ijk}=μ+A\_{i}+εa\_{ik}+B\_{j}+AB\_{ij}+εb\_{ijk} $ (Model 2)

Yijk is the amount of observation of treatment i and the time of measurement j in the repetition k

μ is the overall population mean

Ai is the effect of i treatment

$εa\_{ik}$ is main error

Bj is the effect of j sampling time

ABij is the intraction effect of i treatment and j sampling time

$εb\_{ijk}$ is minor error

Proc GLM;

class Treatment repitation;

model parameter = Treatment

means treat / Tukey alpha=0.05;

proc glm;

class treat rep time;

model parameter = treat rep(treat) time treat\*time;

test H =treat E = rep(treat);

means treat / Tukey alpha=0.05;