

## BAYESIAN INFERENCE FOR THE ANALYSES OF FEED CONVERSION IN PIGS SIMULATED EXPERIMENTS

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- **ABSTRACT:** – *This study aimed to evaluate the feed conversion in simulated data by bayesian inference in bivariate analyzes of feed intake and weight gain, considering parameters of a population of breed Landrace pigs, belong to EMBRAPA-CNPSA. The simulation results based on the quantiles of the distributions of feed intake and weight gain performed analogously. Already discriminant results for treatments considering the averages posteriori feed conversion tend to follow the feed intake and weight gain. It has been found in large samples ( $n \geq 100$ ) that frequentist and bayesian results were the most coincident with the exception of an increase in the mean levels of between 0% and 2.5%. In general, there was greater accuracy in bayesian estimates because of the lower amplitudes in their credibility intervals. Additionally, the proposed model proved to be suitable, since it allowed the detection of significant differences between levels of factors that are not detected by traditional procedures frequentist ANOVA, especially in small samples.*
- **KEYWORDS:** *Animal production; nutritional performance; MCMC; multivariate.*

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