

LACTATION CURVES OF DUTCH AND CROSSBREED BOVINES FROM CASTRO, PARANÁ

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- *ABSTRACT: The study of the milk production, usually made by lactation curves, provides a better knowledge of the herd's behavior, also contributing with the productivity growth and reaching of better results. Non-linear models with the inclusion of covariates were used to obtain lactation curves associated with the production of Dutch breed females at first parturition. In these models there are some important measurements to producer, like peak time and persistence. The sample had production data of 557 females from January 2008 to May 2012. The covariates available were: animal's age, racial group, number of daily milking and producer's size. Among several proposed models in literature, the chosen one was the model with best adjustment according to Akaike's Criterion (AIC), Pearson's linear correlation and log-likelihood. Akaike's Criterion was also used to choose the significant covariates. Wood's model was the one with lower AIC, higher log-likelihood and Pearson's linear correlation. The significant covariates were the number of daily milking and racial group. The estimated peak time was of 3.86 months and the persistence of 3.35.*
- *KEYWORDS: Non-linear model; Wood's model, milk production; persistence, peak time.*

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