Simplex Regression Model Applied to Longitudinal Data of Metabolizable Energy Consumption With Overdispersion

Lucimary Afonso dos Santos [1], **Vanderly Janeiro** [2], **Ricardo Souza Vasconcellos** [3] **Terezinha Aparecida Guedes** [4]

Abstract: *The simplex distribution is useful in modeling data in the unit interval. In this work, the methodology was applied to the felines' feeding longitudinal data with the purpose of determining the metabolizable energy consumption after a regimen of weight loss, considering overdispersion of the data.*

Keywords: Repeated Measures; Simplex Distribution; Dispersion; Protein Intake.

[1] Matemática/UNESPAR. e-mail: *lucimaryafonso@hotmail.com*
[2] DES/UEM. e-mail: *vjaneiro@uem.br*
[3] DZO/UEM. e-mail: *rsvasconcellos*
[4] DES/UEM. e-mail: *taguedes@uem.br*