

## Accepted Manuscript

Title: Comparison of faecal crude protein and n-alkanes techniques to estimate herbage intake by grazing sheep

Authors: Jean V. Savian, Teresa C.M. Genro, Armindo Barth Neto, Carolina Bremm, Eduardo B. Azevedo, Diego B. David, Horacio L. Gonda, Paulo C.F. Carvalho



PII: S0377-8401(17)31281-6  
DOI: <https://doi.org/10.1016/j.anifeedsci.2018.06.010>  
Reference: ANIFEE 14022

To appear in: *Animal Feed Science and Technology*

Received date: 27-10-2017  
Revised date: 21-6-2018  
Accepted date: 22-6-2018

Please cite this article as: Savian JV, Genro TCM, Neto AB, Bremm C, Azevedo EB, David DB, Gonda HL, Carvalho PCF, Comparison of faecal crude protein and n-alkanes techniques to estimate herbage intake by grazing sheep, *Animal Feed Science and Technology* (2018), <https://doi.org/10.1016/j.anifeedsci.2018.06.010>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Comparison of faecal crude protein and n-alkanes techniques to estimate herbage intake by grazing sheep

Jean V. Savian<sup>1,\*</sup>, Teresa C. M. Genro<sup>2</sup>, Armindo Barth Neto<sup>1</sup>, Carolina Bremm<sup>1</sup>, Eduardo B. Azevedo<sup>3</sup>, Diego B. David<sup>4</sup>, Horacio L. Gonda<sup>5</sup>, Paulo C. F. Carvalho<sup>1</sup>

<sup>1</sup>Grazing Ecology Research Group, Federal University of Rio Grande do Sul, Porto Alegre, Brazil;

<sup>2</sup>Brazilian Agricultural Research Corporation, Bagé, Brazil; <sup>3</sup>Federal University of Pampa, Itaqui, Brazil;

<sup>4</sup>Department of Agricultural Diagnosis and Research, São Gabriel, Brazil; <sup>5</sup>National University of the Centre of the Province of Buenos Aires, Tandil, Argentina.

\*Corresponding author: *E-mail address:* jvsavian@gmail.com (J.V. Savian).

### Highlights

- Herbage intake by sheep grazing Italian ryegrass was studied
- Intake was measured using n-alkanes and faecal crude protein
- Faecal crude protein and n-alkanes are satisfactory predictors of herbage intake
- C<sub>31</sub>:C<sub>32</sub> n-alkane ratio is more accurate to estimate herbage intake

### Abstract

This paper has the following objectives: i) evaluate which of the two techniques, n-alkanes or faecal crude protein (fCP), and their equations had the highest accuracy in estimating DM intake by sheep; and ii) evaluate which ratio option of n-alkanes (C<sub>31</sub>:C<sub>32</sub> or C<sub>33</sub>:C<sub>32</sub>) was most accurate in estimating sheep DM intake. The experimental design was a randomised complete block with three replicates (paddocks) and repeated measures on time (periods), arranged in a two-level factorial design, with two stocking methods (continuous and rotational) and two grazing

Download English Version:

<https://daneshyari.com/en/article/8490918>

Download Persian Version:

<https://daneshyari.com/article/8490918>

[Daneshyari.com](https://daneshyari.com)