

Accepted Manuscript

Title: On the specificity of different methods for neutral detergent fiber and related problems

Authors: Renata Soares Tavares da Silva, Alberto Magno Fernandes, Raphael dos Santos Gomes, Laila Cecília Ramos Bendia, Luciano da Costa e Silva, Ricardo Augusto Mendonça Vieira



PII: S0377-8401(17)31326-3
DOI: <https://doi.org/10.1016/j.anifeedsci.2018.04.003>
Reference: ANIFEE 13975

To appear in: *Animal Feed Science and Technology*

Received date: 24-10-2017
Revised date: 20-2-2018
Accepted date: 4-4-2018

Please cite this article as: da Silva RST, Fernandes AM, dos Santos Gomes R, Bendia LCR, da Costa e Silva L, Vieira RAM, On the specificity of different methods for neutral detergent fiber and related problems, *Animal Feed Science and Technology* (2010), <https://doi.org/10.1016/j.anifeedsci.2018.04.003>

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.

On the specificity of different methods for neutral detergent fiber and related problems

Renata Soares Tavares da Silva¹, Alberto Magno Fernandes², Raphael dos Santos Gomes¹,

Laila Cecília Ramos Bendia¹, Luciano da Costa e Silva³, Ricardo Augusto Mendonça

Vieira^{2,#}

¹ Graduate Program in Animal Science, Universidade Estadual do Norte Fluminense, Av. Alberto Lamego 2000, Campos dos Goytacazes, RJ, CEP 28013-602, Brazil

² Laboratório de Zootecnia, Universidade Estadual do Norte Fluminense, Av. Alberto Lamego 2000, Campos dos Goytacazes, RJ, CEP 28013-602, Brazil

³ SAS Institute Inc., JMP Division, Cary, NC, 27513, USA

#Corresponding author: R.A.M. Vieira. E-mail: ramvieira@uenf.br

Highlights

- Alternative NDF methods lack specificity by not yielding comparable results
- Variances for NDF from different feeds and analytical methods are heteroscedastic
- Normal and Beta distributions both apply to observed variations in NDF analyses

Abstract

We compared alternative methods for analyzing Neutral Detergent Fiber with the reference AOAC 2002.04 method for specificity. We reported the chemical composition of major nutrients for the matrixes of 19 feeds and one non-feed (sawdust). Two independent matrixes were from animal origin: meat and bone meal, and milk powder. All fiber residues were ash and blank-corrected to yield values comparable to the reference aNDFom obtained with the reflux in crucibles (Fibertec, method 1) or in Berzelius beakers without spouts (method 2). The alternative fiber methods were as follow: reflux in Berzelius beakers with spouts (method 3), the ANKOM pressurized filter

Download English Version:

<https://daneshyari.com/en/article/8490969>

Download Persian Version:

<https://daneshyari.com/article/8490969>

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