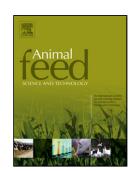
Accepted Manuscript

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

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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

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ACCEPTED MANUSCRIPT

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

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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

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