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Title: Prediction of the digestibility and energy contents of non-conventional by-products for pigs from their chemical composition and *in vitro* digestibility

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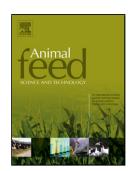
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Prediction of the digestibility and energy contents of non-conventional by-products

for pigs from their chemical composition and in vitro digestibility

Running head: Prediction of digestibility and energy content of by-products in swine

diets

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Highlights:

1) NDF and ADF are the most useful chemical fractions to predict in vivo OMd and DE

content of by-products.

2) In vitro OMd is the best predictor for in vivo OMd and also for DE content of low EE

by-products.

3) To better predict the DE content of high EE by-products, the *in vitro* OMd equation

must include the EE content.

Abstract

The objective of the present study was to determine some prediction equations of gross

energy content (GE), organic matter digestibility (OMd), gross energy digestibility (GEd)

and the content of digestible (DE) and metabolizable energy (ME) of agro-industrial by-

products for pigs, using the chemical composition and an *in vitro* digestibility method.

Mean values of chemical composition (dry matter, DM; organic matter, OM; gross

energy, GE; crude protein, CP; ether extract, EE; crude fiber, CF; neutral detergent fiber,

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