

Accepted Manuscript

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PII: S0377-8401(17)30332-2
DOI: <http://dx.doi.org/doi:10.1016/j.anifeedsci.2017.06.005>
Reference: ANIFEE 13804

To appear in: *Animal Feed Science and Technology*

Received date: 12-3-2017
Revised date: 4-6-2017
Accepted date: 7-6-2017

Please cite this article as: Rangubhet, K.T., Mangwe, M.C., Mlambo, V., Fan, Y.K., Chiang, H.I., Enteric methane emissions and protozoa populations in Holstein steers fed spent mushroom (*Flammulina velutipes*) substrate silage-based diets. *Animal Feed Science and Technology* <http://dx.doi.org/10.1016/j.anifeedsci.2017.06.005>

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Enteric methane emissions and protozoa populations in Holstein steers fed spent mushroom (*Flammulina velutipes*) substrate silage-based diets

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Highlights

- Ensiling spent mushroom substrate (SMS) releases phenolic compounds.
- Ensiling SMS with urea and whole crop corn enhances its nutrition value.
- Feeding ruminants SMS decreases rumen protozoa populations and methane emission.

Abstract

Direct modification of rumen microbial fermentation could provide universal and cost-effective solutions to reduce methane emissions from ruminant livestock. In this study, the effect

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