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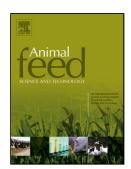
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ACCEPTED MANUSCRIPT

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 costeffective solutions to reduce methane emissions from ruminant livestock. In this study, the effect

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