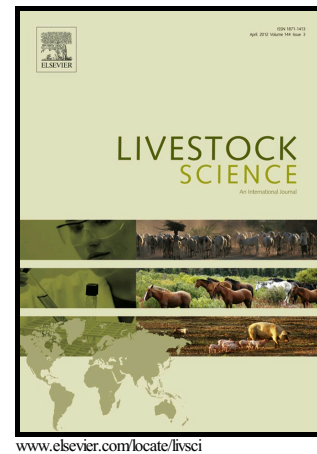


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Effect of tannins-rich extract from *Acacia mearnsii* or monensin as feed additives on ruminal fermentation efficiency in cattle

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Abstract

Methane, a powerful greenhouse gas, is considered to be a significant loss of productive potential in ruminants. The objective was to evaluate the effect of monensin and *Acacia mearnsii* tannins on ruminal fermentation efficiency in cattle. Six rumen-cannulated cows were distributed three diets, each of which differed in the additive used, in a replicated 3x3 Latin square experimental design. Treatments were the Control, Monensin (300 mg per animal and day or about 18 mg/kg of dry matter - DM) and a tannin-rich extract from *Acacia mearnsii* (100 g per animal and day or about 0.6% of DM). Each experimental period consisted of 21 days; the first 15 days were used for diet adaptation and the last 5 days for data collection. On experimental day 21, ruminal pH was analyzed by a continuous measurement probe. In order to quantify short-chain fatty acids (SCFA), methane (CH₄), NH₃-N (ammonia nitrogen)

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