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Evaluation of diet containing Lactobacilli on performance, Fecal Coliform, and Lactobacilli of young dairy calves

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Abstract

Twenty-four Holstein bull calves were used in this study. Eight calves per treatment were assigned randomly to one of three treatments: 1) control, 50% whole pasteurized milk added to 50% milk replacer; 2) whole pasteurized milk and milk replacer treated with commercial culture of lactobacilli (*Lactobacillus acidophilus* plus *L. plantarum*); or 3) culture containing *Lactobacillus acidophilus* 27SC added to the same milk in treatments 1 and 2. Water and starter ration were offered for ad libitum intake throughout the trial. Calves were weaned abruptly at week 10 and received only water and starter during the postweaning period.

Fecal counts of lactobacilli were higher than those for coliforms for healthy calves but lower than fecal coliforms for calves suffering from scours. Incidence of diarrhoea decreased after week 1 in calves fed diets in treatments 1 and 2. Lactobacilli increased in feces of calves fed the liquid diet treated with *L. acidophilus* 27SC.

Performance of calves was not significantly affected by treatments, although body weight (BW) increased most during weeks 7–9 for calves fed the mixed lactobacilli and in weeks 10–12 for calves fed *L. acidophilus* 27SC.

Keywords: Cattle—calf; Lactobacilli

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