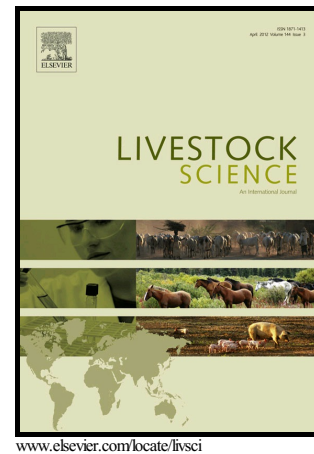


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Effects of *Acremonium terricola* culture on growth performance, antioxidant status and immune functions in weaned calves

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Abstract

This experiment was conducted to evaluate the effects of *Acremonium terricola* culture (CAT) on growth performance, antioxidant status and immune responses of weaned calves. Twenty-four weaned female Holstein calves of the same age and with a similar genetic background were randomly assigned to one of two treatments for a 40 d feeding period. Treatments consisted of feed supplemented with (1) nothing (i.e., the control group) or (2) 50 mg CAT/kg of body weight (BW). Feed, fecal and blood samples were collected on days 0, 20 and 40. The seventh day after weaning was defined as Day 0. The results demonstrated that CAT supplementation increased body weight, feed efficiency and average daily weight gain compared to the control group. Supplementation with 50 mg of CAT/kg of BW significantly increased concentrations of immunoglobulins A, M, and G, interleukin-4, as well as the ratio of soluble CD₄/soluble CD₈, activities of total antioxidant capacity, glutathione peroxidase and total superoxide dismutase in plasma. In contrast, CAT supplementation resulted in a

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