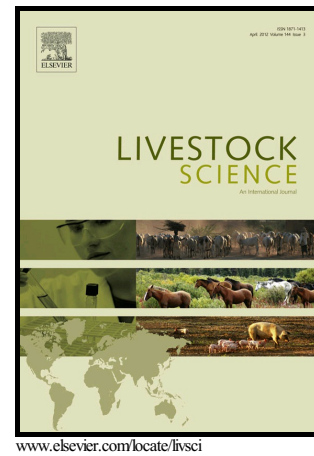


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Crambe meal subjected to chemical and physical treatments in sheep feeding

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Abstract

Two experiments were conducted to evaluate the effect of alkaline treatments (20, 40 or 60 g CaO/kg) or water extraction on glucosinolate (GIs) concentration in crambe meal (CM), and to determine effects of replacing soybean meal with CM on intake, digestibility and nitrogen balance in sheep. Twenty-five samples of CM (300 g each) were randomly assigned to one of the following treatments: Control (446 mg GI/kg dry matter (DM)); alkaline treatment (20, 40 or 60 g CaO); and water extraction. Alkaline treatment and water extraction of CM did not differ ($P > 0.05$) in GI concentration. In addition, the level of CaO added (20, 40 or 60 g/kg CM as feed) did not affect ($P = 0.47$) the GIs concentration. Eight Santa Inês male sheep (25.6 ± 2.6 kg body weight) were distributed to two 4 x 4 Latin squares with four periods of 15 days each (10 days of adaptation and 5 days of sample collection) and received one of the following four different isonitrogenous diets (160 g CP/kg dry matter), formulated by substituting soybean meal: Control (soybean meal); untreated CM; Alkaline-treated CM (40 g CaO/kg); and water extracted CM.

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