

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

NUTRICIONAL VALUE OF DISTILLER'S DRIED GRAIN WITH SOLUBLE IN GOAT KIDS

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The coproducts of ethanol production from corn are identified as dry distilled grain with soluble (DDGS), which are obtained by the fermentation of starch by yeast and enzymes. The goal was to determine the intake and nutrient digestibility of diets containing different levels of DDGS. The experiment was performed using 21 goats Boer, with initial average weight of 27.62 kg, distributed in completely randomized design in factorial arrangement 3X2: three diets (0%, 50% and 100% of DDGS replacing soybean meal) and sex (uncastrated male and female). Daily, before feed, the leftovers were heavy for the control of dry matter intake (DMI). For determination of the digestibility samples of feces were collected during six consecutive days at the following times: 8, 10, 12, 14, 16 and 18 hours. The NDFi was used as an indicator. The inclusion of DDGS did not influence ($P>0.05$) intake of dry matter and nutrients, with means of DMI $0.786 \text{ kg}^{-1} \text{ day}$ and 2.86% live weight, organic matter $0.662 \text{ kg}^{-1} \text{ day}$, crude protein $0.114 \text{ kg}^{-1} \text{ day}$, ether extract $0.024 \text{ kg}^{-1} \text{ day}$, neutral detergent fiber $0.181 \text{ kg}^{-1} \text{ day}$, total carbohydrates $0.626 \text{ kg}^{-1} \text{ day}$, non-fibrous carbohydrate $0.444 \text{ kg}^{-1} \text{ day}$, and total digestible nutrient $0.574 \text{ kg}^{-1} \text{ day}$. The intake was also not influenced by males or females. However, the digestibility were lower ($P<0.05$) with soybean meal replacement by DDGS as dry matter (71.98%, 70.63% and 67%), organic matter (70.2%, 68.48% and 64.34%), ether extract (83.98%, 81.04% and 79.91%), neutral detergent fiber (51.19%, 48.33% and 47.36%), total carbohydrates (75.55%, 73.80% and 69.63%), and total digestible nutrient (74.92%, 73.71% and 70.50%). Only protein digestibility (64.41%) and non-fibrous carbohydrates (82.86%) were not influenced by inclusion of DDGS in the diet. Between males and females there were no differences in digestibility or total digestible nutrient (73.04%). In conclusion, the dry distilled grain with soluble does not alter intake of diets goat, but the energy value is reduced.

Keywords: intake, DDGS, NDFi, ruminant, total digestible nutrient

Promoção e Realização:



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