Feed formulation based on local feed resources and its effects on nutritional-related blood profile in breeder goats

ABSTRACT

A comparative study was conducted to determine the nutrient composition of different feed formulations and its effect on nutritional related blood profile in breeder goats. Eighteen female adult goats, Capra aegagrus hircus (Boer cross) were selected and allocated into three different groups (n = 6) and assigned according to different feed formulations. Blood sampling was conducted before and after fourth weeks of feeding trial and analysed for selected parameters. Proximate analysis of diets was done and revealed comparable value of crude protein and crude fat. Glucose, total protein and calcium level in serum showed significant difference between groups (P-value <0.05) while cholesterol and fatty acid showed no significant difference (P-value >0.05). Fatty acid analysis of feed and serum showed polyunsaturated fatty acid was higher than satureated fatty acid. Overall, diet 3 shows the highest value of all blood parameters analysed in this study. Hence, it is very important to provide animal with nutrient according to production stages as sufficent protein and energy will improve the animal performance in terms breeding efficacy and quality of animal products. This study indicates that different feed formulation affects certain nutritional related blood profile in goat.

Keyword: Breeder goats; Blood profile; Proximate analysis; Fatty acid