CHEMICAL-BROMATOLOGICAL COMPOSITION AND PRODUCTION OF COLD SEASONED INTERCROPPED PASTURES

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The constant use of cold grasses in the cold seasoned presents some limitations to the productive system, mainly in terms of chemical-bromatological bonding and the lack of crop rotation, since the use of legumes promotes the benefits like economy without use of minerals, nitrogen and nutrient recycling. In addition, it has limitations such as low production, high precision and rapid decomposition. In view of the above, the use of pasture consortium is an interesting alternative for the production systems of subtropical regions. That away, the objective of the authors with this work was to evaluate the production and chemical-bromatological composition of intercropped pastures of cold season. The treatments were black oats (Avena strigosa) fertilized with 200 kg ha⁻¹ (control), black oats + perennial peanuts (Arachis pintoi cv. Belmonte), black oats + vetch (Vicia sativa), black oats + red clover (Trifolium pratense) and black oat + white clover (Trifolium repens), arranged in a randomized block design, with four replicates. Each experimental area measured 80 m², the samples were collected in three cuts and the values added to obtain the total pasture production (t MS ha⁻¹). The productive and bromatological data were analyzed for normality and compared by the Tukey test at 5% probability. Black oats production (3.929 kg ha⁻¹) was higher than the other treatments, except for oats consorted with peanuts (2.839 kg ha⁻¹), which did not differ from the others. In terms of crude protein, the contents were similar between oats fertilized with N and oats intercropped with vetch (22.07 vs 21.15%). These results are interesting due to the possibility of fertilizer saving, the other intercropped pastures presented values different from those of cultures and were similar to each other (x 16.73%). The total digestible nutrients content of the five treatments were statistically the same, varying between 64.37 and 68.62%. Although the use of intercropped pastures is somewhat promising, the results observed in the use of dry manure oats are satisfactory in terms of dry matter production and chemical-bromatological quality, at least in relation to crude protein and total digestible nutrients.

Keywords: Arachis pintoi, Avena sativa, crop-livestock system.