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Integrated production factors and chemical-bromatological quality of *Brachiaria brizantha* cv. Marandu intercropped with *Stylosanthes* spp. under organic management

Luiz Henrique X. Silva[3], Eliane S. M. Okada[3], Euclides R. Oliveira[1], Andrea M. A. Gabriel[1], João Paulo G. Soares[2], Juaci V. Malaquias[2], Jefferson R. Gandra[1] , Elaine B. Muniz[4]

[1]*Universidade Federal da Grande Dourados- Faculdade de Ciências Agrarias. Dourados MS. Brazil*
[2]*EMBRAPA. Empresa Brasileira de Pesquisa Agropecuária. Embrapa Cerrados, Planaltina DF. Brazil*
[3]*Universidade Federal de Goiás. Escola de Medicina Veterinária e Zootecnia. Goiânia GO. Brazil*
[4]*Universidade Estadual do Oeste do Paraná Toledo- PR. Brazil*
Corresponding author: jeffersongandra@ufgd.edu.br

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1 ABSTRACT

This study aimed to evaluate by principal component analysis the relationship among chemical-bromatological composition, fractionation of carbohydrate and protein content, *in vitro* dry matter digestibility (IVDMD), and dry matter (DM) production of *Brachiaria brizantha* cv. Marandu intercropped with *Stylosanthes* spp. under organic and conventional fertilization. Forage chemical quality patterns were assessed for each fertilization management by multivariate analyses. The discriminatory capacity was higher for variables resulting from *B. brizantha* cv. Marandu analyses than from *Stylosanthes* spp. However, the expressiveness of these variables had a high similarity with multivariate analyses, mainly when comparing carbohydrate fractionation and IVDMD. In terms of chemical quality and production variables, a principal component analysis proved to be effective for evaluations of different fertilization management types, being more expressive for samples of *B. brizantha* cv. Marandu.