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## Defining seasonal and fertilizer influences on bromatological aspects of *Brachiaria brizantha* cv. Xaraes with two cutting heights

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The study was conducted at FZEA-USP; for defining the seasonal influences (summer, autumn, winter and spring) in interaction with nitrogen doses (0, 150, 300 and 450 kg/ha) and cutting heights (15 and 30 cm) for analyzing the bromatological parameters of *Brachiaria brizantha* cv. Xaraes. The experimental arrangement was  $4 \times 2$  factorial in CRBD with repeated measures of seasons. Generally, no significant results were obtained by the H\*N interaction during all seasons for the parameters of dry matter (DM), acid detergent fiber (ADF), neutral detergent fiber (NDF), in-vitro dry matter digestibility (IVDMD) and in-vitro organic matter digestibility (IVOMD). All the said attributes declines linearly with increasing N doses. The lower reported DM% was obtained in winter (90.24) and highest in autumn (91.32). Crude protein (CP) was significantly ( $P>0.05$ ) effected by the N-H interaction, and at heights of 15 and 30 cm in winter (8.72 and 7.0) and autumn (6.49 and 5.46) CP decreases significantly. The lower CP% was at 0 kg N (4.78) and highest at 450 kg N (8.55). ADF were significantly effective by heights and nitrogen availability in winter only. The lower ADF production occurred at 450 kg N (35.98%) and highest in summer (0 kg N (42.36%). While lower NDF production (73.73) occurred at highest dose of N and highest (75.60) at lower dose of N. The lower in-vitro indexes for DMD and OMD were noted in spring (66.84 and 53.93) and higher were shown in winter (70.44) and autumn (59.35) respectively. Seasonality and nitrogen showed significant ( $P>0.05$ ) impact on the Xaraes nutritional value by improving the CP and reducing the (NDF) and acid detergent fiber (ADF). Nitrogen application showed positive results till increasing 300 kg/ha dose.

### Biography

Syeda Maryam Hussain is pursuing her PhD in Animal Production and Quality from University of Sao Paulo, Brazil. She has published three articles and 6 resumes.

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