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## How signalgrass productive attributes are effected by the environmental factors and fertilizer application

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The availability of green herbage (GH) and dead herbage (DH) was evaluated in signalgrass (*Brachiaria decumbens*) during all the seasons and the highest GH was noted in summer (179.97 g) and three times lower (35.3 g) was reported in winter. The highest GH occurred at dose of 150 and 300 kg at 10 cm height (37.36 g and 25.94 g) in autumn and summer, respectively. While, the lowest GH was reported at 0 kg (2.53 g and 0.70 g) at sward heights of 20 and 10 cm in winter, respectively. The highest DH (14.28 g) was produced at 150 kg N at sward height of 20 cm while lowest at 0 kg N in autumn at 10 cm height (0.14 g). For GH, lower production was at 0 kg N (27.85) and highest in autumn 96.58. While amongst sward heights; in winter at 10 cm (24.4) gives lower values as to 20 cm (33.3). In summer the leaf to stem (L:S) proportions decreases significantly ( $1.45 \pm 0.0447$ ) while it's been highest in winter ( $11.41 \pm 1.7256$ ). In autumn, a significant difference was observed in L:S by the heights of 10 and 20 (3.1 vs. 1.7), respectively. In green to dead (G:D) proportion, the ratio lessened (13.63) significantly by 2.5 times, producing more green parts at 300 kg N as compare to the highest (32.34) at 0 kg N. For air dry matter (ADM) and G:D, no N\*H interactions were found, while for GM and L:S; significant interactions were found in winter and autumn. All the variable behaves quadratically with increase in N dose presenting an increase in ADM and GH, while L:S and G:D showed a decline. The average availability of ADM was 28.60%, green herbage 62.38 g, dead herbage 24.11 %, and L:S (4.7%) of the Signalgrass and ADM and GM increases from April till Jun and the lowest ADM production was reported in winter (23.66) and the highest in autumn (38.56). While the 300 kg N, enhance plants ADM production at its best.

### Biography

Syeda Maryam Hussain has completed his PhD in Animal production and Quality in 2016 from University of Sao Paulo, Brazil. She has published three articles and 6 resumes.

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