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DOES MOWING REDUCE SEEDLING ESTABLISHMENT OF AFRICAN GRASSES IN CERRADO (BRAZILIAN SAVANNA)?

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The introduction of exotic grasses in Cerrado is a common practice to improve pastures. When introduced, they end up becoming invasive in Protected Areas, causing serious environmental problems. This work aims to analyze the effect of mowing as management for invasive grasses by monitoring the establishment of invasive and native seedlings in the field. The study was carried out in three Protected Areas located in Brasília (DF): Parque Nacional de Brasília, Reserva Ecológica do IBGE and Jardim Botânico de Brasília. Two areas infested by *Andropogon gayanus* Kunth., *Melinis minutiflora* P. Beauv., *Urochloa decunbes* Stapf. and *Hyparrhenia rufa* (Nees) Stapf. were selected in each park. One was maintained as a control, and the other was subjected to annual mowing (dry season of 2015 and 2016). The areas were divided into three sub-areas (“beginning”, “half-way”, and “end”) according to their distance from the edge. From the onset of the rainy season, the emerging seedlings (native grasses/dicots and invasive grasses) were counted monthly in triplicates in each sub-area. At the end of four months, mowed areas presented a maximum average of 12 seedlings/m² of *A. gayanus*, concentrated in the “beginning” sub-area. *Melinis minutiflora*, *U. decunbes* and *H. rufa* presented low densities of ca. 2 seedlings/m² in the control area and negligible values in the mowed area. The native grasses presented higher density in the mowed areas in comparison to control ones, reaching 19 seedlings/m². The dicots counted 55 seedlings/m² in control areas and 32 seedlings/m² in mowed areas, being evenly distributed within the sub-areas. We have concluded that mowing resulted in distinct effects on each species seed bank possibly favoring the establishment of native species.

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