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Management Alternatives for Urochloa decumbens Stapf. (Poaceae) Biological Invasion in Brazilian Savannas

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P-02-26: Management Alternatives for Urochloa decumbens Stapf. (Poaceae) Biological Invasion in Brazilian Savannas

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Urochloa decumbens is an African grass, highly competitive and aggressive that was introduced in Brazil for cattle feeding and became one of the most serious invasive species in Brazilian savannas - Cerrado -, threatening the native biodiversity. The objective of this study was to evaluate the efficiency of different management techniques to control the invasive grass Urochloa decumbens. The study was conducted in two Cerrado reserves in São Paulo State, Brazil, from July/2007 toJuly/2009. Six cerrado patches infested by U. decumbens were selected, and a randomized block design was applied with the treatments: clipping once a year (CRI) and twice a year (CRII), clipping and soil grubbing once a year (CRSI) and twice a year (CRSII), shading with nylon mesh (SOM), and smothering by covering with canvas (ABF). After the treatments all biomass in the blocks was cut and separated into categories (U. decumbens, native grasses, and dicotyledonous species), in July/2008 (first year) and July/2009 (second year). The analyses followed permutation tests. In the first year the treatments ABF, CRII and CRSII statistically differed from control, showing to be the most effective to manage U. decumbens, however in the second year the treatments CRI and CRSI also showed to be effective. Therefore, in two years of management U. decumbens can be controlled by smothering and grubbing once a year (with or without soil digging) in areas where the invasion is not very extensive, as edges or small isolated patches inside the native fragments.