



XIII Congresso de ECOLOGIA

III International Symposium of Ecology and Evolution

Múltiplas ecologias: evolução e diversidade

08 a 12 de outubro de 2017 • UFV - VIÇOSA | MG

CLIPPING AS A MANAGEMENT TOOL OF THE INVASIVE GRASS, *ANDROPOGON GAYANUS* KUNTH IN CONSERVATION UNITS

Danillo de Melo Rodrigues*, Mariana Aragão de Macedo, Niquele Nunes Almeida, Maria Eduarda Moreira, Salomon Camargo, Juca Dorea de Castro Chaves, Heloisa Sinatora Miranda, Carolina Musso

1. Departamento de Ecologia, Instituto de Ciências Biológicas, Universidade de Brasília, 70910-900, Brasília, DF. *danielomelo41@gmail.com

Ecology of ecosystems/Poster

Cerrado (Brazilian savanna) is the second largest biome in Brazil, and biological invasions are a concerning environmental issue in the region. Invasive species can alter fire behavior, ecosystem functioning and reduce local biodiversity. African grasses are common invaders in Cerrado, and park managers lack efficient management tools to control them. This work aims to assess the effect of clipping as a possible management technique for the grass *Andropogon gayanus* (Kunth). Twenty tussocks were selected in two reserves in Distrito Federal: Reserva Ecológica do IBGE e Jardim Botânico de Brasília. The clipping was applied in 10 individuals during their dispersion period. This timing aimed to cause maximum damage, by interrupting the reproductive cycle and the translocation of nutrients. Several parameters were assessed: aerial biomass partition, height, basal circumference, the number of tillers and Specific Leaf Area (SLA). One inflorescence per unclipped tussocks was covered with a fine mesh bag for seed collection. Collected seeds were counted, and their viability quantified. Clipping did not alter the assessed parameters. Dead biomass remained at 40%, an average of 20 tillers per individual and SLA of 0,18 cm²/mg. Each inflorescence produces from 170 a 1400 seeds with an average viability of 20%. We conclude that this species presents a fast recovery even when its reproductive cycle is impaired. The effect measured for these selected parameters suggests clipping is not efficient to control this species.

The authors thank CAPES-PAJT 88887.093793/2015-00 project by providing economic assistance.