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### FIRE PROMOTED OPPORTUNITY FOR NATIVE GRASSES IN A GRASSLAND INVADDED BY *MELINIS MINUTIFLORA* P. BEAUV. (POACEAE)

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Alien grasses are a relevant threat to the Cerrado biodiversity, particularly because they exert a strong competitive pressure on the native flora. The African grass *Melinis minutiflora* is a very aggressive intruder and became a conservation problem in many protected areas of Brazil. To determine whether fire may affect the establishment of native and invasive species, we compared the flowering species of Poaceae family after a burning occurred in the grasslands of Serra da Canastra National Park (SCNP), MG. We distributed 22 plots of 1 m<sup>2</sup> along two 50m transects in a burned area and repeated this procedure in an adjacent unburned area (control), which covered 0.5 ha. Both areas were strongly invaded and dominated by *M. minutiflora*. The field surveys were carried out in 4 post-fire periods: 2nd (T.01), 6th (T.02), 10th (T.03), and 14th (T.04) month after the burning occurred in June/2015. The collected material was deposited in the following herbaria: SPSC-UFSCar/SP, HUFU-UFU/MG and ICN-UFRGS/RS. We recorded a total of 14 native grass species and 1 dominant alien species flowering in the study area. In T.01 post-fire period, there were no statistical differences in Shannon diversity index  $H'$  ( $t: -2,12$ ;  $df: 8,92$ ;  $p=0,06$ ) nor in Simpson's dominance  $D$  ( $t: 1,14$ ;  $df: 5,01$ ;  $p=0,3$ ) between burned and unburned areas. However, in T.02 the differences became evident with significantly higher diversity in burned area ( $t: 2,89$ ;  $df: 28,75$ ;  $p=0,007$ ) and higher dominance in unburned area ( $t: -2,25$ ;  $df: 18,19$ ;  $p=0,03$ ). The following periods showed no evidence of differences in all tests ( $p>0,05$ ). *Elionurus muticus*, *Eriochrysis holcooides*, *Paspalum erianthum* and *Steinchisma decipiens* were recorded only in burned area during T.1 and/or T.2 when *M. minutiflora* cover area was low. Differently, *Echinolaena inflexa* and *Loudetiopsis chrysothrix* flowered in areas totally covered by *M. minutiflora*. The fire promoted an opportunity for native grasses to complete their lifecycle and produce seeds, despite the alien grass dominated the burned area again.

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