



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

DOES *UROCHLOA DECUMBENS* (STAPF) R. D. WEBSTER FORM A PERMANENT SOIL SEED BANK?

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Tema/Meio de apresentação: Ecologia de ecossistemas/Oral

Urochloa decumbens (Stapf) R. D. Webster (signal grass) is an African grass widely used in Brazil for pasture formation, with high potential for invading natural areas, mainly by vegetative reproduction. At the moment there is not much information about the formation of a permanent seed bank for this species. In this study, the longevity of *U. decumbens* seeds in the soil bank and the emergence of seedlings from different depths were evaluated. Ten samples of 100 seeds were sown at depths of 0, 1, 2 or 3 cm, in trays filled with sterile soil, to assess seedling emergence. Seedling emergence was observed for 30 days. Three days after sowing, seeds sown on the soil surface began to germinate. Seeds sown at 2 cm, and 3 cm germinated five days after sowing. Seedling emergence was no longer observed at the end of 15 days. The germination was $74 \pm 7\%$ without significant difference between the depths. According to these results, the burying depth of the longevity study was determined. Seed longevity was evaluated by burying, between 2 and 3 cm depth, 60 replicates of 100 seeds in a cerrado area at the IBGE Ecological Reserve, Brasília. Monthly, from September 2016 to April 2017, five samples were retrieved to assess viability. In September, the viability of the seeds in the field was 68%, reducing to 3% in October. In February the occurrence of viable seeds was no longer recorded. Management plans to control *U. decumbens* have to consider the existence of a transient seed bank, and that seeds up to 3 cm depth will contribute to the establishment of new individuals.

The authors thank the programs ProIC/DPP/UnB/FUB and CAPES-PAJT 88887.093793/2015-00 for the grants awarded to the first and second authors.