Australian Journal of Crop Science

AJCS 14(10):1563-1567 (2020) doi: 10.21475/ajcs.20.14.10.p2200



## Qualitative characterization of secondary metabolites of *Paspalum virgatum* weed under different water conditions

Paulo Cesar Laurindo Silva<sup>\*</sup>, Oscar Mitsuo Yamashita, Ivone Vieira da Silva, Adriano Maltezo da Rocha, Bruna Zonta de Brito, Vanessa de Andrade Royo, Keyla Laisa Araújo Saldanha, Marco Antonio Camillo de Carvalho, Aureane Cristina Teixeira Ferreira Cândido, Ricardo Adriano Felito, Maria Carolina da Silva Andrea, Ana Aparecida Bandini Rossi

Federal Institute of Mato Grosso, Campus of Confresa, MT, Brazil Postgraduate Program in Amazonian Biodiversity and Agroecosystems, Mato Grosso State University, Campus of Alta Floresta, MT, Brazil

Postgraduate Program in Biotechnology, Montes Claros State University, Montes Claros, MG, Brazil



## SUPPLEMENTARY FIGURES

**Supplementary Figure 1.** Identification tests of phenolic compounds, control, reaction with ferric chloride and reaction with NaOH, respectively. Flooding plants: Fig. A - root, B - stem and C - leaf; Plants in field capacity: Fig. D - root, E - stem and F - leaf; Plants in water deficit: Fig. G - root, H - stem and I - leaves.



**Supplementary Figure 2.** Tannin identification tests, control (tube left) and reaction with ferric chloride, respectively. Flooding plants: Fig. A - root, B - stem and C - leaf; Plants in field capacity: Fig. D - root, E - stem and F - leaf; Plants in water deficit: Fig. G - root, H - stem and I - leaves.



**Supplementary Figure 3.** Tannin identification tests, control (tube to the left) and reaction with gelatin, respectively. Flooding plants: Fig. A - root, B - stem and C - leaf; Plants in field capacity: Fig. D - root, E - stem and F - leaf; Plants in water deficit: Fig. G - root, H - stem and I - leaves.



**Supplementary Figure 4.** Tannin identification tests, control (tube to the left) and reaction with copper acetate, respectively. Flooding plants: Fig. A - root, B - stem and C - leaf; Plants in field capacity: Fig. D - root, E - stem and F - leaf; Plants in water deficit: Fig. G - root, H - stem and I - leaves.



**Supplementary Figure 5.** Steroid and terpene identification tests, Control (tube below) and Liberman-Bouchadart reaction, respectively. Flooding plants: Fig. A - root, B - stem and C - leaf; Plants in field capacity: Fig. D - root, E - stem and F - leaf; Plants in water deficit: Fig. G - root, H - stem and I - leaves.



**Supplementary Figure 6.** Steroid and terpene identification tests, steroid nucleus reaction, samples of plants in flooding 1 to 3, field capacity of 4 to 6 and water deficit of 7 to 9, root, stem and leaf respectively.



**Supplementary Figure 7.** Identification tests of steroid and terpene extraction B, samples of plants in flooding 1 to 3, field capacity of 4 to 6 and water deficit of 7 to 9, root, stem and leaf respectively.



**Supplementary Figure 8.** Identification tests of general alkaloids. Extraction A, portion I, reactions performed: Bouchadart, Bertrand, Drargendorff, Mayer and Control, respectively. Flooding plants: Fig. A - root, B - stem and C - leaf; Plants in field capacity: Fig. D - root, E - stem and F - leaf; Plants in water deficit: Fig. G - root, H - stem and I - leaves.



**Supplementary Figure 9.** Identification tests of general alkaloids. Extraction B, reactions performed: reagent from Mayer, Drargendorff, Bertrand and Bouchadart, respectively. Flooding plants: Fig. A - root, B - stem and C - leaf; Plants in field capacity: Fig. D - root, E - stem and F - leaf; Plants in water deficit: Fig. G - root, H - stem and I - leaves.