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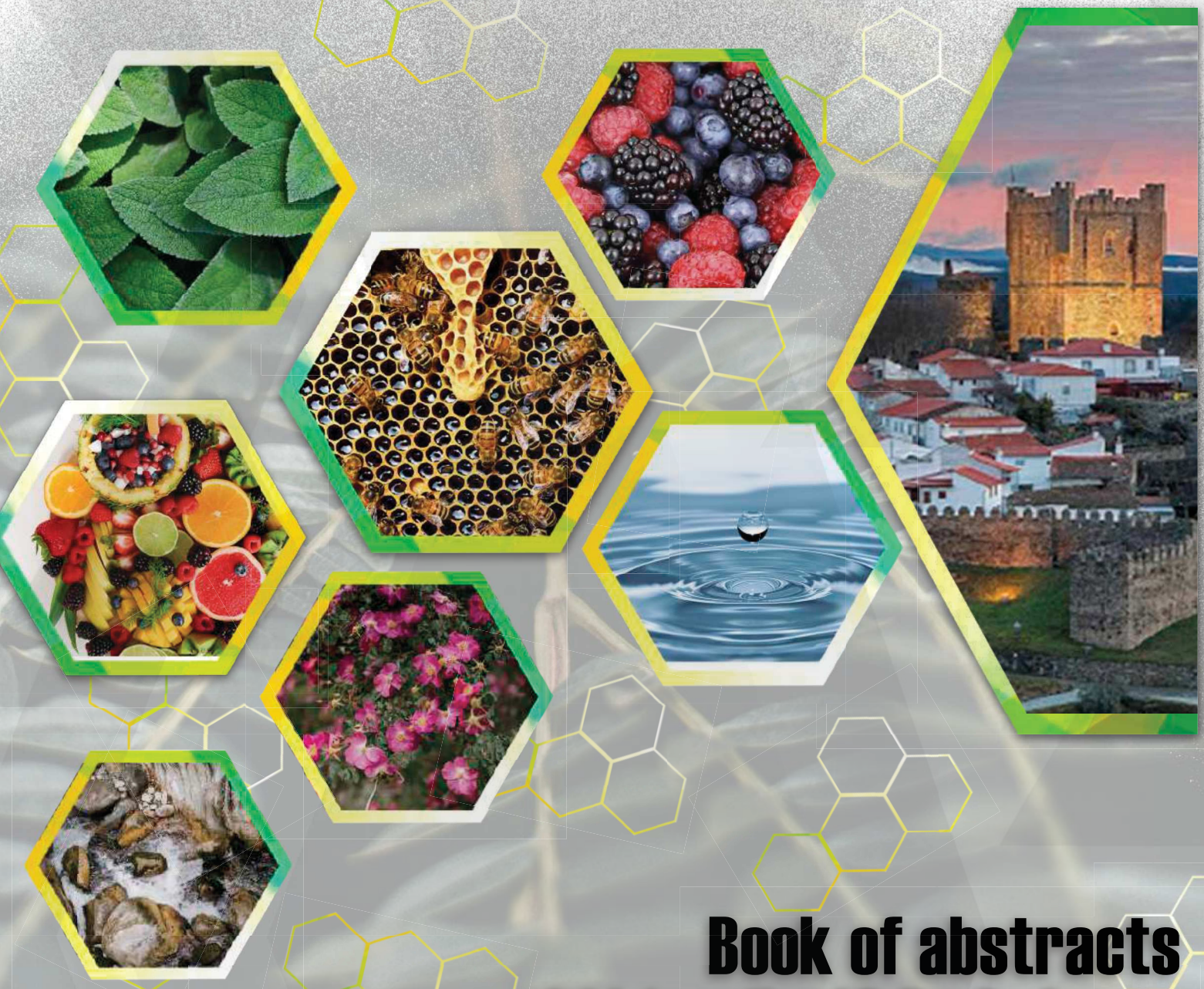

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EFFECT OF HIDROETHANOLIC EXTRACT OF *LAVANDULA PEDUNCULATA* (MILL.) CAV. ON MORPHOMETRIC PARAMETERS IN HPV-16 TRANGENIC MICE

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Lavandula penduculata (Mill.) Cav., common English name French lavender, belongs to the Lamiaceae family and has been used as a medicinal plant in infusions for respiratory and digestive systems and as a therapeutic agent with antiseptic action for cleaning wounds [1,2]. The K14HPV16 mice is a skin squamous carcinoma model that can be used to test the antitumoral properties of several chemical and natural products [3]. The aim of this work was to evaluate the effect of the hydroethanolic French lavender extract (FLE) on body weight, relative organs weights, food and water consumption in an HPV-16-transgenic mice model. The extract was obtained from a maceration with ethanol/water (80:20, *v/v*), and the phenolic composition was determined through HPLC-DAD-ESI/MS. Twenty-eight male mice were randomly divided into four groups (n=7/group) according to their genotype: group I (HPV16- control); II (HPV16- FLE); III (HPV16+ control) and IV (HPV16+ FLE). The FLE was administrated orally in drinking water at 6.8 mg/10mL/animal to animals from groups II and IV and changed every 4 days. The animals were kept under controlled conditions such as temperature, light and humidity. Food and water were kept *ad libitum* regime. Animals' body weight, food and water consumption were measured weekly as well as animal welfare. After twenty-nine days, all animals were sacrificed by anaesthetic overdose and blood was obtained from cardiac punction. The organs were collected and immediately weighted. Data was analysed using SPSS 25. The differences were considered statistically significant at $p<0.05$. A total of thirteen compounds were identified in the hydroethanolic extract, being salvianolic acid B and rosmarinic acid the main molecules present. Moreover, the compounds revealed to be stable in the drinking water during the 5 tested days. HPV animals exposed to FLE (group III) showed higher values of body weight variation than HPV animals not exposed to lavender in week 1, 2 and 3 ($p<0.05$), suggesting that the FLE was highly palatable. However, the values of food consumption were identical between groups and water intake was higher in transgenic animals as expected. The relative organ weight of heart, lung, kidneys, adrenals and liver did not demonstrate differences between groups ($p<0.05$). According to our results the consumption of French lavender demonstrated a favourable and safe toxicological profile using these experimental conditions.

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