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## **ACTIVITY CONCENTRATION OF $^{40}\text{K}$ AND $^{137}\text{Cs}$ IN THE MUSCLE TISSUE AND LIVER OF THE GOLDEN JACKAL (*CANIS AUREUS*)**

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The aim of this study is to determine the activity concentration of  $^{40}\text{K}$  and  $^{137}\text{Cs}$  in muscle tissue and liver of the golden jackal (*Canis aureus*). In 2016 and 2017, five adult male golden jackals were hunted in the Bojčin forest, Surčin municipality, which is a suburban area of the Belgrade city, the Republic of Serbia. The dominant foodstuffs in the jackal diet are small mammals (mostly moles) and carcasses of domestic animals, but also fruits in the summer season. Hence, the golden jackal can be an indicator of the  $^{137}\text{Cs}$  migration through the food chain. The mean activity concentrations of  $^{137}\text{Cs}$  and  $^{40}\text{K}$  in the soil sampled from the Bojčin forest were 14 Bq/kg and 695 Bq/kg, respectively. The  $^{137}\text{Cs}$  specific activity in most of the muscle tissue and liver samples of the golden jackal is below the minimum detectable activity (<0.1 Bq/kg). Very low  $^{137}\text{Cs}$  activity concentration is detected in one muscle tissue (0.4 Bq/kg) and liver sample (0.2 Bq/kg). The mean activity concentration of  $^{40}\text{K}$  in the golden jackal muscle tissue and liver is 100 Bq/kg and 90 Bq/kg, respectively.

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