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LEAF CHARACTERISTICS AND ANTIOXIDATIVE ACTIVITY OF COLLECTED AND CULTIVATED RAMSON (*Allium ursinum* L.) IN ŠUMADIJA REGION

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Abstract

Ramson or bear garlic (*Allium ursinum* L.) is a perennial species that is most often collected in its natural habitat. There is a possible threat of endangering it due to the increased demands on market, interests of the pharmaceutical industry, as well as devastation of natural habitat. This trial is conducted with aim to examine some traits of cultivated and collected samples of Ramson and in order to investigate the perspective of its assisted propagation and spreading. After finding several locations where Ramson is already present (in the area of the villages of Vodice and Stojačak near Smederevska Palanka and in the area of the villages of Gornji and Donji Račnik, near Jagodina) a procedure was taken to establish micro plantations on the four selected locations (green spaces, cultivated and uncultivated agricultural areas). During the late April, the samples of 10 leaves of Ramson for each of three replication were taken on the six different locations (five naturally inhabited and one with successfully propagated Ramson). Average mass of fresh leaves and leaf area were measured. Also, the antioxidative activity was performed (DPPH test). Depending on location the average leaf mass varied from 1.44 to 1.95 g, average leaf area ranged from 43.413 to 71.363 cm² and average antioxidative activity ranged from 0.077 to 0.291 mg/g of fresh weight. According to collected results, sustainable and successful propagation was achieved in only one location.

Keywords: *bear garlic, natural habitat, cultivation,*