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PRODUCTION CHARACTERISTICS OF EGYPTIAN WALKING ONION (Allium x proliferum) GROWN IN THE ŠUMADIJA AND BRANIČEVO REGION

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Abstract

Egyptian Walking Onion (Allium x proliferum) is a perennial species, member of the Alliaceae family. In Serbia and broader region, it is grown only locally on small areas along the edges of the gardens, vineyards and orchards, because it does not form large and compact bulbs that have market value. On the other hand, the key advantage of Walking Egyptian Onion is greater tolerance to low temperatures and frost, i.e. early ripening of young onions. This allows producers to appear on the market earlier and consumers to have a quality product from the second half of winter until early spring. A multi-year study was conducted with the aim to determine the possibility of growing the Egyptian Walking Onion and its production and nutritional characteristics in the Šumadija and Braničevo Regions. On the four experimental locations (Žabari, Smederevska Palanka, Velika Plana and Jagodina) 15 samples from sole crops and intercrops with wines (Vitis vinifera L.) were collected for further investigation. The average values of plant height, number of leaves per plant, plant mass and antioxidative activity were measured, and ranged from 45.5 to 67.2 cm, 5.0 to 5.67, 57.75 to 77.5 g and 0.033 to 0.705 mg/g of fresh matter, respectively, depending of which part of plant was analyzed (green leaves or etiolated parts of leaves bassis). Although, thanks to this preliminary research, significant data have been collected, it is necessary to continue further research, because it was not entirely possible to report clear conclusions.

Keywords: intercropping, locations, onion, vineyard