CARPATHIAN JOURNAL OF FOOD SCIENCE AND TECHNOLOGY

journal homepage: **http://chimie-biologie.ubm.ro/carpathian_journal/index.html**

# EFFECT OF ORGANIC FERTILIZATION ON THE QUANTITY AND QUALITY OF MELON PRODUCTION

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https://doi.org/10.34302/crpjfst/2019.11.2.14

**Article history:**
Received:
14 March 2018
Accepted:
2 March 2019

**Keywords:**
*Cucumis melo L.;*
*Organic;*
*Production;*
*Biochemical composition;*
*Antioxidant activity.*

**ABSTRACT**

Growing environmental impact of conventional farming practices, gradually impacts soil structure and biological balance. This has forced the development of alternative practices to reduce and mitigate these effects. Types of fertilizers influence the quantity and quality of production. Following this idea, in 2016, in a crop of melon in a polyethylene tunnel, Lignohumat organic fertilizer was used, a granular humic product, which was applied during vegetation, in three stages and three fertilization doses: 100; 150 and 200 g/ha. Melon plants (Charentais variety) fertilized with Lignohumat at different doses showed positive results compared to the unfertilized variant. Results showed that application of the 150 g/ha dose significantly improved ($P \leq 0.05$) the average number of fruits/plants, their average weight, fruit/plant production and the production/$m^2$ but also the quality of fruits: soluble dry matter – 8.55%, total dry matter – 12.12%, reducing sugars – 3.40%, vitamin C - 21.12 mg/100 g, carotene - 36.42 mg/100 g f.m and antioxidant activity of 175.92 µMTE/100 g (ABTS method) and 228.16 µMTE/100 g (DPPH method). Antioxidant activity was evaluated using 2.2-diphenyl-1-picrylhydrazyl (DPPH) 2.2-azinobis (3-ethylbenzothiazoline-6-sulfonic acid (ABTS). Significant positive correlations were identified for very importants parameters.