

Effect of Culture Media Type and Different Concentrations of Humic Acid on Yield Components and Some Biochemical Characteristics of *Fragaria × ananassa* Duch. cv. Aromas

A. Sharifi, N. Ghaderi, J. Khorshidi* and T. Javadi¹

Strawberry is one of the most popular and beneficial fruits in viewpoint of nutritional value which its production is increasing in greenhouse. In this study the effects of two culture media (perlite + cocopeat with 1:1 ratio or Pumice) and three concentrations of humic acid (0, 300, and 600 mg L⁻¹) as fertigation method, on yield, number of fruit per plant, fruit weight and some of biochemical characteristics of *Fragaria × ananassa* Duch. cv. Aromas were evaluated. The experiment was conducted as factorial based on completely randomized design. The highest number of fruit (18.42), single fruit weight (17.39 g) and yield (320.9 g) was observed in plants that were grown in cocopeat media. The highest content of soluble carbohydrate of leaf (36.7 mg/g fresh weight) and soluble protein of crown were observed in plants which grown in perlite + cocopeat media and received 600 and 300 mg L⁻¹ humic acid, respectively. The effect of culture media and humic acid on the amount of leaf nutrients was very different depend on nutrient type. In general, to obtain the highest fruit yield in strawberry (cv. Aromas), cocopeat media and the highest concentration of humic acid (600 mg L⁻¹) is recommended.

Keywords: Carbohydrate, Cocopeat, Perlite, Pumice.

1. Former M.Sc. Student, Associate, Assistant and Associate Professor, respectively, Department of Horticultural Science and Engineering, Research Center of Strawberry Breeding and Improvement, University of Kurdistan, Iran.

* Corresponding author, Email: (j.khorshidi@uok.ac.ir).