INFLUENCE OF EFFLUENT WATER FROM INTENSIVE FISH FARMING ON *PERILLA FRUTESCENS* (L.) BRITT. AND *SALVIA OFFICINALIS* (L.)

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The current study examined the effect of effluent water from intensive fish farming on *Perilla frutescens* (L.) Britt. and *Salvia officinalis* (L.) at the MATE IES ÖVKI Lysimeter Station in Szarvas, Hungary. The experiment was conducted in large lysimeters, each of them has a surface area of 1 m^2. Four plants were planted per vessels. Irrigation was performed with micro sprinklers. Three treatments were used: T1: effluent water; T2: diluted effluent water with gypsum supplementation; T3: Körös river water. Plant properties like plant height (cm), plant diameter (cm), shoot length (cm), number of shoots (n./plant), SPAD value and the yield of herbs (biomass (g/plant), fresh leaves weight (g/plant), dry leaves weight (g/plant), fresh stem weight (g/plant)) were studied in 16 replications. Despite high Na-content (~ 300 mg/ l), the application of effluent water caused the maximum plant height (36.4 cm) and yield (biomass: 384.1 g, fresh leaves weight: 263.2 g, dry leaves weight: 68.0 g, fresh stem weight: 120.9 g) on sage in our experiment. The differences were significant compared to the other two treatments. In contrast, quality of water had no significant effects on the yield parameters of *Perilla frutescens.* But all treatments can be used for irrigation in *Perilla* cultivation (e.g. dry leaves weight: T1: 59.6 g; T2: 64.7 g; T3: 57.6 g). We conclude that the irrigation with reused water is an excellent opportunity to grow herbs and to save freshwater resources.