ABSTRACT

Extracts are formed by the dried plant material of tomatoes (Lycopersiconesculentum) and carrots (Dacuscarota) when foliar application of Zn and Se solutions at various levels are applied. In this experiment 5 treatments are used for foliar application i.e T_0 = Control group, T_1 = 5ppm Zn, T_2 = 10ppm Zn, T_3 = 5ppm Se, T_4 = 10ppm Se. These treatments show different effects on both plants. For the determination of the effects of these metals on plants, different methods are utilized. For TPC, FolinCiocalteu method is used in which Folinciocalteu was operated as a reagent and calibration curve of gallic acid was used for the measurement. For TFC, Rutin standard calibration curve was used. By these methods the amount of phytochemicals after the impacts of zinc and selenium was determined through which the antioxidant properties of these vegetables were observed. The free radical scavenging activity of these plants was calculated by the use of DPPH radical. This is a stable free radical. The ability to scavenge this free radical was determined in the term of percentage. Yield attributes and extract yield were also measured. This study was used to determine the effects of heavy metals on all these characteristics.