Abstract

In order to investigate the effects of Iron Nanoparticles and Silver Nanoparticles spraying on quantitative and physiological characteristics of borage (*Borago officinalis*), an experiment was conducted as factorial based on randomized complete block design with three replications in in 2016 at the University of Zabol research farm. Treatments included Iron Nanoparticles at four levels and Silver Nanoparticles too at four levels; control, 40, 60, 80 ppm in form separatehy and mixed in twostages. Results indicated spraying Iron Nanoparticles and Silver Nanoparticles Each independntly had significant impact on soluble carbohydrates, Mucilage, chlorophyll index (SPAD), chlorophyll a, b, carotenoids, Leaf number, Branches number, Inflorescence height, flower number, dry and fresh flowers weight . The sever level (80 ppm) of Iron Nanoparticles and Silver Nanoparticles had gretest impact in measured traits .In all in measured traits Iron Nanoparticles was More effective than Silver Nanoparticles. except, chlorophyll index (SPAD) and Mucilage Silver Nanoparticles had More effective than Iron Nanoparticles. At the same time use of Iron Nanoparticles and Silver Nanoparticles were show different effects; So that in highest level of Iron Nanoparticles and Silver Nanoparticles,(80 ppm Iron Nanoparticles and 80 ppm Silver Nanoparticles) just Inflorescence height, chlorophyll a, b, carotenoids,showed the greatest impact.

Key words: *Borago officinalis* L,Yeild flower, Carbohydrate, chlorophyll, Nanoparticle,

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