#### Abstract

Mentha (also known as mint- Mentha longifolia) is one of the most important leafy herbs and drug plants in different parts of the world. This experiment was laid out in a factorial completely random design with three replications assigning the effect of five levels of salicylic acid concentration (control, 5, 10, 50 and 100 ppm) on the morphological characteristics of three different varieties of mint (Iranian, Canadensis and Pepper) in a research greenhouse of the Agriculture Faculty of Zabol University. After the foliar spray of different concentrations of acid salicylic acid, the morphological traits of the plant including height, internode length, number of nodes, leaf area, leaf weights, number of lateral branches and stem diameter were measured. Results showed that the foliar spraying of different concentrations of salicylic acid had a significant effect on the plant growth traits compared to the control treatment. So that the 100-ppm concentration of acidic acid had the highest effect of the studied traits and canadensis mint (Mentha canadensis) has a more appropriate response to the acid-salicylic treatment applied and as the top variety in this experiment introduced.

Keywords: Acid, Salicylic, Morphological traits, mint, foliar spray.



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## The Thesis Submitted for the Degree of M. Sc In the field of Agricultural biotechnology

### Title

# Effect of salicylic acid on morphological characteristics of mentha plant in Sistan

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