Abstract

Today, Nanotechnology is forerunner of world scientific movement. In agriculture ground, Nano-bio-fertilizers in breeding, soil fertility enhancement, and increase nutrition absorb by plant, decrease the need to use chemical fertilizers and save nature also cost reduction and increase function of production has a significant role. In order to evaluate chemical and Nano- bio-fertilizer effects on quality and quantity function of treatment sesame types in agriculture year ۲۰۱۴-۲۰۱۵ as smashed clusters and in map of complete random block with ۳ repetition in research field of Agriculture college in Zabol University (Chah Nime). Main factor included ۳ sesame varietes (Ardakan, Isfahan and Sistan native types). In subplots (۱۰۰ percent of recommended volume of chemical fertilizers, ۷۵ percent of recommended volume of chemical fertilizers + Nano- bio-fertilizer in ۱,۵ K.g.ha $^{-۱}$ in hectare. ۵۰ percent of recommended volume of chemical fertilizers + Nano- bio-fertilizer in ۱,۵ Kilo in hectare. ۲۵ percent of recommended volume of chemical fertilizers + Nano- bio-fertilizer in ۱,۵ K.g. ha $^{-۱}$ in hectare, use Nano-bio-fertilizer in ۱,۵ K.g.ha $^{-۱}$ in hectare). Results showed using ۱۰۰ percent of recommended volume of chemical fertilizer cause significant increase in height, Capsule numbers in plant, ۱۰۰۰-grain weight, grain performance, plant bio function and oil percent. Results of this examination indicated that grain number in Capsule, ۱۰۰۰-seed weight, grain performance, plant bio function, Chlorophyll, harvest index and protein in native Sistan plant showed significant increase. Results also showed most seed performance obtained mean with ۱۴۲۸/۰۷ kilogram in hectare of native plant in Sistan. In addition, highest percent of oil optained mean ۵۵/۸ persentfrom Isfahan and nitrogen chemical function obtained. According to results, it indicated if the aim of sesame cultivation was use of its oil; it is better to cultivate Isfahan type. However, if the aim of cultivation is seed performance and traditional consumption (produce Arde, Cookie and sugar Halva), Sistan type is better than two other types.

Keyt words:oil present,Sistan.Yield,Sesam, N fertilizer,bio fertilizer.

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