



**Animal manure and bio Fertilizer affected *Nigella (Nigella sativa)* Yield**

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*Nigella (Nigella sativa)* from Ranunculaceae family is a widely used medicinal plant throughout the world. It is very popular in various traditional systems of medicine like Iran. *Nigella* seed and oil have a long history of folklore usage in various systems of medicines and food. The seeds of *N. sativa* have been widely used in the treatment of different diseases and ailments. To study the effect of different animal manure and bio fertilizers on yield and yield components of *nigella*, a greenhouse experiment as factorial in complete block design was conducted with three replications. Treatments included of no fertilizer (control), animal manure (cattle manure, sheep manure and chicken manure), bio fertilizers (azetobacter, petabacter, and azetobacter with petabacter) and combinations of animal manures and bio fertilizers. Results showed that animal manures had significant effects on yield and yield components of *nigella* so that, chicken manure increased biomass, seed yield, harvest index, plant height, number of seed per capsule, and number of capsule per plant 21.2, 28.1, 12.5, 34.5, 25.1 and 19.9% compared to control, respectively. Interaction effect of animal and bio fertilizers showed that the highest seed yield (4.11 g/plant) and biomass (27.9 g/plant) observed in chicken manure with petabarvar treatment. Likewise, the heights capsule number and seed number per capsule was observed in chicken manure and chicken manure with petabarvar treatments. Overall, results showed that chicken manure alone or in combination whit petabarvar affected yield and yield components of *nigella* more than the treatments, significantly.

**Keywords:** Chicken manure, Petabarvar, Seed yield, Harvest index

**References**

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