



Improvement of pea (*Pisum sativum L.*) Production by optimization of Cobalt under different organic Fertilizers

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Abstract : Field experiments were carried out, at Research and Production Station, NRC, El-Nobaria, Beheara Governorate, Egypt, in two successive seasons (2013-2014) to assess the elemental cobalt role companied with different organic fertilizers on nodules; growth characters, yield components and quality of pea plants.

The obtained results are summarized in the following:-

* Increased nitrogenase activity associated with Co treatments, which was parallel and related to enhancement nodules number and weights and its efficiency.

* The superior pea growth and yield parameters were attained in plants which supplied with cobalt at 8 ppm and chicken manure.

* Chicken manure was superior to improve all studied parameters followed by farm yard manure, while compost of wadi el-Nile was the lowest ones.

* Application Co at 8 ppm to all studied organic fertilizers enhancing pea growth, yield and its quality.

*Organic fertilizers had a positively decreases soil pH and increase so increasing availability of cobalt and micronutrients was expected, cobalt help plants to tolerate the newly reclaimed soil conditions

Keywords : Pea, Cobalt, organic fertilizers, growth characters, yield quality.

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