

Effect of Compost and Titanium Dioxide Application on the Vegetative Yield and Essential Oil Composition of Coriander

Rania M.R. Khater ¹, Reham M. Sabry ², Luisa Pistelli ³, Ahmed M. Abd-ElGawad ^{4,5,*}, Walid Soufan ⁵ and Abdel Nasser G. El-Gendy ^{2,*}

¹ Medicinal and Aromatic Plants Department, Desert Research Center, El-Matareya, Cairo 11753, Egypt; dr.raniakhater@yahoo.com

² Medicinal and Aromatic Plants Research Department, Pharmaceutical and Drug Industries Research Institute, National Research Centre, P.C. 12622 EL-Behouth St., Dokki, Giza, Egypt; rehamsabry2000@hotmail.com

³ Department of Pharmacy, University of Pisa, Via Bonanno 33, 56126 Pisa, Italy; luisa.pistelli@farm.unipi.it

⁴ Department of Botany, Faculty of Science, Mansoura University, Mansoura 35516, Egypt

⁵ Plant Production Department, College of Food and Agriculture Sciences, King Saud University, P.O. Box 2460, Riyadh 11451, Saudi Arabia; wsoufan@ksu.edu.sa

* Correspondence: aibrahim2@ksu.edu.sa (A.M.A.-E.); ag.el-gendy@nrc.sci.eg (A.N.G.E.-G.); Tel.: +966-562680864 (A.M.A.-E.); +20-1090077136 (A.N.G.E.-G.)

Supplementary Materials

Table S1. Physical and chemical properties of the experimental soil at Baluza Research Station, Desert Research Center, North Sinai Governorates, Egypt.

| Parameters | Concentration |
|---|---------------|
| Sand (%) | 90.00 |
| Silt (%) | 5.00 |
| Clay (%) | 5.00 |
| EC (dS m ⁻¹) | 1.37 |
| pH | 8.20 |
| N | 60.00 |
| P | 3.65 |
| K | 144.00 |
| Soluble Cations (meq L⁻¹) | |
| Ca ⁺² | 1.80 |
| Mg ⁺² | 2.10 |
| Na ⁺¹ | 1.50 |
| Na ⁺¹ | 0.09 |
| Soluble Anions (meq L⁻¹) | |
| CO ₃ ⁻ | 0.00 |
| HCO ₃ ⁻ | 3.50 |
| SO ₄ ⁻ | 0.84 |
| Cl ⁻¹ | 1.51 |

Table S2. Chemical analysis of the compost used in the experiment.

| Parameters | Concentration |
|--------------------|---------------|
| Organic matter (%) | 65.37 |
| Organic carbon (%) | 37.91 |
| C/N ratio | 25.5:1 |
| N (%) | 2.21 |
| P (%) | 0.95 |
| K (%) | 1.52 |
| Fe (ppm) | 260.18 |
| Cu (ppm) | 21.85 |
| Zn (ppm) | 155.28 |
| Mn (ppm) | 114.90 |