



ORIGINAL ARTICLE

EFFECT OF FOLIAR SPRAYING AND EXTRACTION METHOD IN DILL (*ANETHUM GRAVEOLENS* L.) SEEDS CONTENT FROM SOME MEDICALLY ACTIVE COMPOUNDS

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Abstract: The experiment was conducted at Al-Mussaib Technical College to study the effect of foliar spraying and the extraction method for the active compounds of Dill plant, where the factorial experiment was conducted according to Randomized complete block design (RCBD) with three replicates. Two factors were used, the first included the use of three concentrations of PRO.SOL, which are (0, 1, 1.5) g.L⁻¹, the second factor is the method of extraction (aqueous and alcoholic). The results showed that the treatment of spraying PRO.SOL at a concentration of 1.5 g.L⁻¹ significantly excelled the values of the compounds for (Ocimene, a-pinene Mereene, a-phllanderene, Limonene, Dill ether, Myristin) where it reached (45.17, 32.47, 37.12 125.47, 100.75, 82.04, 65.47) µg.ml. The alcohol extraction method also significantly excelled and gave the highest values for the compounds (Ocimene, a-pinene Mereene, a-phllanderene, Limonene, Dill ether, Myristin), reaching 42.58, 29.32, 32.14, 101.25, 98.23, 77.56, 60.25)µg.ml, respectively. Whereas, the bi-interaction treatment (spraying PRO.SOL at a concentration of 1.5 g / L + alcohol extraction) gave the highest values for the compounds (Ocimene, a-pinene Mereene, a-phllanderene, Limonene, Dill ether, Myristin) where it reached (55.76, 39.71, 44.71, 146.90, 123.99, 107.44, 82.52) µg.ml, respectively.

Key words: Dill plant, Active compounds, Foliar spraying, Hplc.

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