**Table S1.** Analysis of variance of variables studied in the experiment to investigate the effects of 112 essential oils concentrations on seed germination and seedling growth of lettuce

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Source** | **DF(G, D, L, H, R, VI)** | **DF (MGT)** | **Mean of Square (based on arcsin)** | | | | | | |
| **G b** | **MGT b** | **D b** | **L b** | **H b** | **R b** | **VI b** |
| **Essential oil** | 111 | 108 | 0.77 \*\* | 0.23 \*\* | 0.08 \*\* | 0.32 \*\* | 0.18 \*\* | 0.31 \*\* | 0.35 \*\* |
| **Concentration** | 1 | 1 | 0.00 ns | 0.04 \*\* | 0.00 ns | 0.00 ns | 0.00 ns | 0.01 ns | 0.01ns |
| **Essential Oil \* Concentration** | 111 | 108 | 0.27 \*\* | 0.00 \*\* | 0.04 \*\* | 0.20 \*\* | 0.02 \*\* | 0.04 \*\* | 0.05\*\* |
| **Error** | 672 | 654 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 |
| **Total** | 895 | 871 |  |  |  |  |  |  |  |
| \* , \*\*: indicate significant differences level in (p≤ 0.05) and (p ≤ 0.01) respectively.  ns: indicates not significant differences (p > 0.05)  b: The abbreviations of variables: G% (Germination percentage), MGT (Mean germination time), D% (Seed dormancy induction) L% (Lethal percentage of seed embryo), H% (Hypocotyl length compare to control), R% (Radicle length compare to control), VI (Vigor Index) | | | | | | | | | |