

**PC-25**

**Evaluation of Genetic Characteristics and Essential oil Composition of Coriander (*Coriandrum sativum* L.)**

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**[Abstract]**

Coriander (*Coriandrum sativum* L.) belongs to the family Umbelliferae/Apiaceae. It is cultivated as a spice and medicinal herb around the world, including its leaves and seeds. Coriander leaves have soft and fragrant, so they can be used in cuisines such as China, Mexico, and, Southeast Asia. Coriander leaves contain a high amount of vitamin C, carotene, and multiple polyphenols. Coriander essential oils and extracts have various chemical components and are known to have antioxidant, antibacterial, and antifungal activities. This study was carried out for resource discovery, propagation, and DB construction of aromatic plants. In order to evaluate the genetic characteristics, 30 kinds of Coriander seeds were supplied from the Center for Genetic Resources. The evaluation of characteristics of the basal part leaf number, leaf shape, and plant height was investigated. Also, Essential oils extract from various parts of plants including the leaves, flowers, and steam isolated by simultaneous distillation extraction (SDE) apparatus. In the results, heights showed growing to 70 cm over and basal part leaf number 0 to 7. The leaves are variable, they are measured according to leaves incisions, and most of the included incision. The qualitative analysis of EOs was performed using gas chromatography-mass spectrometry. EOs had various chemical compositions. Major compounds were trans-2-Decenal, linalool, decanal, 2-Dodecenal, 13-Tetradecanal, 2-Undecenal.

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