Radical Scavenging Activities of *Heracleum aquilegifolium* Wight (Apiaceae) Fruit Oils *in vitro*

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The fruits of *Heracleum aquilegifolium* Wight (Apiaceae) were collected from Western Ghats of the Indian Peninsula. The essential oils were extracted by hydrodistillation. The chemical composition of the essential oils was analysed by gas chromatography and gas chromatography-mass spectrometry (GC-MS). *b*-Pinene (22.3%), 1,8-cineole (20.3%), and *b*-phellandrene (12.4%) were the main components of *H. aquilegifolium* fruit oils. The antioxidant properties of essential oils of *H. aquilegifolium* were examined by different procedures namely reducing power ability, 1,1-diphenyl-2-picrylhydrazyl (DPPH) radical scavenging activity, nitric oxide radical scavenging activity, hydrogen peroxide scavenging activity, hydroxyl radical scavenging activity, superoxide anion scavenging activity, and metal chelating activity. The antioxidant activities were compared with those of synthetic antioxidants and standard drugs such as butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), ascorbic acid, Ŭ-tocopherol, curcumin, and quercetin. The study confirmed the possible antioxidant potential of essential oils tested with various *in vitro* antioxidant methods. The presence of monoterpenes in combination with other components in the oils could be responsible for the activity.

Key words: Heracleum aquilegifolium, Essential Oil Composition, Radical Scavenging Activity