

Optimization of Extraction Conditions for Phenolic Compounds from *Deverra Scoparia* Coss and Dur

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Abstract : The objective of this study was to optimise the extraction conditions for phenolic compounds from *Deverra scoparia* Coss and Dur. Apiaceae plant by ultrasound assisted extraction (UAE). The effects of solvent type (acetone, ethanol and methanol), solvent concentration (%), extraction time (mins) and extraction temperature (°C) on total phenolic content (TPC) were determined. The optimum extraction conditions were found to be acetone concentration of 80%, extraction time of 25 min and extraction temperature of 25°C. Under the optimized conditions, the value for TPC was 9.68 ± 1.05 mg GAE/g of extract. The study of the antioxidant power of these oils was performed by the method of DPPH. The results showed that antioxidant activity of the *Deverra scoparia* essential oil was more effective as compared to ascorbic acid and trolox.

Keywords : *Deverra scoparia*, phenolic compounds, ultrasound assisted extraction, total phenolic content, antioxidant activity

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