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An investigation of the antioxidant activity of some selected traditional Sri Lankan medicinal oils

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Antioxidant properties of medicinal oils enhance the quality of oil-based beauty care products. In addition, such antioxidant properties are also responsible for several beneficial health effects and the oxidative stability of edible oils. In the present study, antioxidant properties of the phenolic extracts of the oils extracted from the seeds of *Calophyllum inophyllum* (Domba), *Madhuca nerifolia* (Mee), *Brassica juncea* (Aba), *Ricinus calamus* (Endaru), *Sessamum indicum* (Thala) and *Canarium*

zeylanicum (Kekuna) were evaluated by chemical methods. The DPPH radical scavenging activity (DPPH RSA), inhibition of the deoxiribose degradation (IDD), and the reducing power (RP) in potassium ferricyanide system were studied as parameters of antioxidant activity. The total phenol contents (TPC) of the oils were determined by Folin-Denis colorimetric method. The results are given in Table 1.

Table 1. Antioxidant activity and total phenol content of the phenolic extracts of medicinal oils

	Domba	Aba	Mee	Kekuna	Thala	Endaru
RP (%)	368 ± 2	247 ± 3	189 ± 3	161 ± 1	126 ± 1	54 ± 5
DPPH RSA(%)	80 ± 1	69 ± 1	67 ± 1	55 ± 1	25 ± 1	21 ± 1
IDD (%)	56 ± 1	47 ± 1	45 ± 1	42 ± 1	39 ± 1	31 ± 1
TPC (mg/ kg)	111 ± 5	107± 7	98 ± 8	66 ± 6	43 ± 8	31 ± 3

Each data point represents the mean of three replicates ± S.E

The results indicate that the phenolic antioxidants present in the extracts of above oils are effective as antioxidants and the antioxidant capacities of these oils are directly related to the total phenol contents of the oils.

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