

Total phenolic content of leaf, stem, root and flower of *Daturametel*

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Daturametel is a medicinal plant used in indigenous system for treating bronchial asthma. In addition it is mentioned as a rejuvenating herb in Siddha texts. However there are no scientific studies carried out so far on *Daturametel*. This study was conducted to find the antioxidant potential of *Daturametel* by estimating the total phenolic content (TPC).

The plant was obtained from Government herbal garden and authenticated taxonomically by an authorized person. Leaf, stem, root and flower were separated from plant immediately after collection and washed thoroughly with tap water and dried in sun shade. Dried parts were powdered by multi fine grinder and stored air tight. For cold water extract, 10mg of powder of each part was crushed with 10mL distilled water and centrifuged for ten minutes at 5000rpm. Supernatant was taken carefully. Hot water extract was prepared in same manner, but additionally it was kept in a boiling water bath for 5 minutes. TPC was estimated by using Folin and Ciocalteu's phenol reagent. This study was carried out in six times with six different seasonal collection of *Daturametel*.

The total phenolic content in hot water extracts of leaf, stem, root and flower were 33.3mg ± 3.51, 30.67 mg± 2.1, 30.34mg ± 1.98 and 35.41mg ± 2.65 tannic acid equivalent/g dry weights respectively. It was little higher than that extracted with cold water extract (30.7mg ± 3.19, 26.26mg ± 1.77, 27.01mg ± 2.61, and 31.02mg ± 2.26 tannic acid equivalent/g dry weight) indicating a better extraction of phenolic compounds from the all parts at higher temperature. Flower showed highest TPC in µmol/g dry weight in cold as well as in hot water extract. All parts of the plant showed nearly equal TPC

Key words: Phenolic compound, Daturametel, Aqueous extract