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Improvement in Safety Profile of Semecarpus Anacardium Linn by Shodhana: An Ayurvedic Purification Method

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Abstract : Semecarpus anacardium shows the presence of bioflavonoids, phenolic compounds, bhilawanols, minerals, vitamins and amino acids. Detoxified S. anacardium and its oils are considered to have anti-inflammatory properties and used in nervous debility, neuritis, rheumatism and leprous modules. S. anacardium if used without purification causes toxic skin inflammation problem because it contains toxic phenolic oil. During this Shodhana Process - An ayurvedic purification method, toxic phenolic oil was removed, have marked effect on the concentration of the phytoconstituent & antioxidant activity of S. anacardium. Total phenolic content decreased up to 70 % (from 28.9 %w/w to 8.94 %w/w), while there is a negligible effect on the concentration of total flavonoid (7.51 %w/w to 7.43 %w/w) and total carbohydrate (0.907 %w/w to 0.853 % w/w) content. IC50& EC50 value of extract of S. anacardium before and after purification are 171.7 & 314.3 while EC50values are 280. μ g/ml & 304. μ g/ml, shows that antioxidant activity of S. anacardium is decreased but the safety profile of the drug is increased as the toxic phenolic oil was removed during Shodhana - An ayurvedic purification method.

Keywords: Semecarpus anacardium, Shodhana process, safety profile, improvement

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