

Preliminary phytochemical screening, physicochemical analysis and chromatographic fingerprint of *Avalgujagajalindhaji lepa*

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Standardization is an important modern tool of analysis used to ensure the quality of herbal drugs. Analytical methods and standardization can ensure the quality and consistency of active ingredients in herbal medicinal formulations. *Avalgujagajalindhaji lepa* is a classical formulation mentioned in *Chakradatta* under *kushta adikariya*. *Avalgujagajalindhaji lepa* consist of three ingredients, viz., *Bakuchi* Seed (*Psoralea corylifolia*), elephant dung, and elephant urine. The present study was designed to perform the physicochemical and phytochemical standardization with HPTLC finger printing of *Avalgujagajalindhaji lepa* according to standard protocol. The *Lepa* was analyzed for its organoleptic, physicochemical features and screened for its phyto-constituents. *Avalgujagajalindhaji lepa* appeared dark brown, with a sharp odour and a semi solid rough nature. Physicochemical analysis of *Avalgujagajalindhaji lepa* showed water soluble ash 0.27 ± 0.02 % w/w, acid insoluble ash 0.14 ± 0.01 % w/w, and total ash content 4.43 ± 0.21 % w/w, pH of 6.51 ± 0.32 and loss on drying of 9 ± 0.05 %w/w at 105 °C. Ethanol extract of *Avalgujagajalindhaji lepa* exhibited the presence of various phyto-constituents, viz. alkaloids, carbohydrates, protein, phenols, steroids, saponins, tannins, and flavonoids. The HPTLC reveals clear, good separation of components and consistent fingerprint patterns for the ethanolic extract of *Avalgujagajalindhaji lepa*. The analytical data and HPTLC fingerprint profiles can be considered as viable parameters which would further help in the establishment of quality standards.

Keywords: *Avalgujagajalindhaji lepa*, *Kushta adhikariya*, *Chakradatta*, *Standardization*, *Physicochemical*