

**PRELIMINARY PHYSICOCHEMICAL AND PHYTOCHEMICAL ANALYSIS OF
SHRESHTA NIMBA PATOLA KASHAYA**

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Shalakya tantra, a branch of *Ashtanga Ayurveda*, encompasses the management of *Urdhawajathrugatha roga*, including eye, ear, nose, throat, and oral cavity disorders. For treating eye diseases, *Ayurveda* employs various internal and external medications, such as *Kashaya*, *Guli*, *Kalka*, *Churna*, and *Nethra kriyakalpa*. This study analyzed the physicochemical properties and phytochemical composition of *Shreshta Nimba Patola Kashaya*, a decoction used to treat diverse ailments, including eye diseases. This study analyzed the moisture content and total ash value as preliminary physicochemical parameters of the individual ingredients and phytochemical composition of the decoction, revealing a pH range of the decoction 5-6, refractive index of 1.5067, and density of 0.95 g/ml. Qualitative phytochemical screening of the decoction's water extract detected the presence of alkaloids, flavonoids, tannins, and saponins. Furthermore, methanolic extraction of the decoction followed by TLC and HPTLC analysis using a hexane-ethyl acetate solvent system (5:5 v/v) yielded five peaks with -0.05,0.01,0.15,0.70 and 0.85 R_f values of respectively. This study provides valuable insights into the physicochemical and phytochemical properties of *Shreshta nimba patola kashaya*, laying the groundwork for further research and product development. Future studies can focus on quantitative phytochemical analysis and elucidating the role of these phytochemicals in the decoction's therapeutic efficacy.

Keywords: Ayurveda, Eye diseases, *Shreshta nimba patola kashaya*