

## Comparative pharmaceutical analysis of *Vajrakshara (Swethaparpati)* prepared using three variants of *Suryakshara*

S. M. K. S. Ranasinghe, U. R. S. R. K. Senarathne

*Department of Ayurveda Pharmacology, Pharmaceutics and Community Medicine,  
Faculty of Indigenous Medicine, University of Colombo, Sri Lanka*

*Vajrakshara* (VK), a formulation mentioned in Bhaishajya Rathnavali, is cited in the Sri Lankan Ayurveda Pharmacopeia, mainly used in urinary disorders. Since VK is manufactured using various types of *Wedi lunu (Surya kshara /KNO<sub>3</sub>)*, this study aimed to evaluate pharmaceutical properties to ensure consistency and efficacy. VK1 is prepared with normal *Suryakshara*, while VK2 uses *Nirmalikiritha suryakshara*, followed by shodhana with half the hot water. VK3 is prepared using *Nirmalikirutha suryakshara*, followed by three *Bhavana* with *Ela hima* (cold extract of *Elettaria cardamomum*). The organoleptic characteristics of VK1 were crystal white flakes, a very soft texture, a strong odour, and a pronounced pungent taste. VK2 consisted of white, fragile flakes with a soft texture, a mild odour, and a pungent taste. VK3 was grayish coloured powdered flakes, slightly coarse, having a pleasant aroma and a gentle pungent taste. The moisture contents of VK1, VK2, and VK3 were 1.096%, 0.229%, and 0.698%, respectively. Their ash values were 58.92%, 80.45%, and 72.2%, while acid-insoluble ash levels were 0.19%, 0.29%, and 0.20%, and water-soluble ash values were 58%, 80%, and 72%. Alkaloids and tannins were detected only in VK3. The results revealed that VK1 has organic impurities, VK2 is highly inorganic, and VK3 is a compound formulation of organic and inorganic. Observations suggest that the sequential improvement in attributes is favorable for human use, with VK3 exhibiting the highest, followed by VK2 and VK1. Further investigations, including quantitative analyses and clinical trials are recommended to substantiate the safety and therapeutic efficacy of the formulations.

**Keywords:** *Vajrakshara, Shwetha parpati, Nirmalikirutha suryakshara*