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ABSTRACTS



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Proceedings of the 2nd Symposium

**“One health for sustainable and healthy living of
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Abstracts

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Determination of drug safety of Ramabana Rasaya in the Sri Lankan herbal industry

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Herbo mineral drugs (Rasaushadhi) play a significant role in traditional Ayurveda medicine. Instant effectiveness due to its particle size, prolonged shelf life, small doses, and extensive therapeutic utility are considered inherent properties of Herbo mineral drugs. Stringent quality control of Rasaushadha is essential to ensure the safety and efficacy of the drugs. Due to the inclusion of heavy metals and metallic compounds in the raw materials, its manufacturing process is extremely complex. There is a clearly defined purification process in Ayurveda for metals and minerals to eliminate the toxic substances and to enhance the desired properties of the drugs. Therefore, it is necessary to follow intensive and carefully arranged processing steps to ensure the safety and efficacy of the metallic and mineral raw materials. Ramabana Rasaya is one of the beneficial drug formulas for gastrointestinal problems in Ayurveda. The raw materials are purified *Aconitum ferox*, *Syzygium aromaticum* flower buds, *Piper nigrum* L, *Myristica* fragrance kernel, and a mixture of purified Mercury and purified Sulphur. This study aimed to carry out a comparative analysis of three different market samples of Ramabana against an inhouse prepared sample by using physicochemical analysis, chromatogram analysis by High-Performance Liquid Chromatography (HPLC) and Thin Layer Chromatography (TLC) and finally XRD analysis for each drug, to ensure the safety and efficacy of the market samples. According to the outcome of the chromatography analysis, physio chemical properties, and XRD analysis, there were deviations shown in market samples compared to the inhouse samples. Reasons might be due to the usage of different formulas and processing methods. However, to ensure the safety and efficacy of Herbo mineral drugs it is imperative to standardize the Herbo mineral drugs by adopting standard operating procedures (SOPs).

Keywords: HPLC analysis, physicochemical analysis, Ramabana Rasaya, TLC analysis, XRD analysis

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