

**STUDY ON ALKALOIDS CONTENTS OF SELETED PLANT MAERIALS BASED ON
*THIKTA RASA DRAVYA***

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Madhura, Amla, Lavana, Katu, Tikta and *Kashaya* are the six *Rasa* (tastes) mentioned in Ayurveda. Classifications based on the dominance of these *rasas* are discussed in the Ayurveda texts. This study focuses on *Tikta rasa* (bitter taste), which is known to act as an appetizer, digestive, anthelmintic, antipyretic and antitoxic agent. It pacifies *Pitta* and *Kapha dosha* while aggravating *Vata*. Phytochemicals are secondary plant metabolites that are biologically active compounds in plants used for medical treatments. Phytochemicals present in *Tikta rasa dravya* are also very important for therapeutic use in herbal products that help prevent or cure diseases. Twenty-five herbal materials were evaluated based on *Rasadipanchakaya* and their chemical composition. According to the findings from the study of these 25 *Tikta rasa* plants, the majority (23) were found to contain alkaloids. Therefore, this study prioritized the quantification of alkaloid content in these commonly available and therapeutically significant plants. The process involved extraction with 10% acetic acid in ethanol, followed by precipitation using ammonium hydroxide. The dried precipitates were weighed to determine alkaloid percentages. The highest percentage of alkaloids was observed in *Azadirachta indica* (41.385%). Other plants showed the following alkaloid content: *Justicia adhatoda* (14.885%), *Centella asiatica* (8.19%), *Coscinium fenestratum* (7.06%), *Tinospora cordifolia* (3.295%), and *Momordica charantia* (1.38%). These findings validate to correlate concepts of *Rasa* taste in Ayurveda pharmacology for chemical constituents in plants that gives the biological activities.

Keywords: *Tikta rasa*, Bitter taste, Phytochemicals, Alkaloids, Quantification