

Anatomical and Phytochemical Screening of Leaves of *Vernonia cinerea* (L.) Less

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Abstract: *Vernonia cinerea* (L.) Less. belongs to the family Asteraceae and has medicinal properties. It is commonly known as 'little ironweed', 'ash-coloured Fleabane' in English, 'Neichette', 'Mukuthipundu' in Tamil and 'Monarakudumbia', 'Monerakudimbeya' in Sinhala. This is an erect annual herb growing up to 75 cm in height and is widely distributed in Sri Lanka, India, Bangladesh, and Malay Island. The leaves of the plant are ethno medicinally prescribed by physicians as a treatment for various disease conditions such as, intermittent fever, dysentery, tonsillitis, asthma, bronchitis, cold and indigestion. The aim of the study was to determine the anatomical properties and phytochemical constituents of the leaves of *Vernonia cinerea* (L.) Less. In the present study, anatomical investigations and quantitative microscopy were carried out on the leaves of *Vernonia cinerea* (L.) Less. Three types of trichomes were observed, namely regular T shaped, uniseriate and bilobed trichomes. All the trichomes, except uniseriate type, are glandular and more abundant on the abaxial surface than the adaxial surface of the leaf. Stomata are anomocytic and actinocytic type. The phytochemical screening revealed the presence of Flavanoids, Glycosides, Saponins, Triterpenoids, and Steroids and macronutrient analysis revealed the presence of Reducing sugar. The findings may provide useful information with regard to its identification and standardization in future.

Keywords: *Vernonia cinerea*, Phytochemical, Neichatti, Sahadevi