

## Clarification of Taxonomic Confusions among Adulterated Drugs Coffee Seena and Seena Weed through Systematic and Pharmaceutical Markers

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**Abstract :** Coffee Senna is pharmaceutically very important and used for multiple health disorders such as gastric pains, indigestion, snakebites, asthma and fever, tuberculosis and menstrual problems. However, its immense medicinal value and great demand lead to adulteration issue which could be injurious for users. Some times its adulterant Seena weed (*Senna occidentalis* L.) is used as its substitute which definitely not as effective as Coffee Senna. Hence, the present study was undertaken to provide some tools for systematic and pharmaceutical authentication of a shrubby plant Coffee Senna (*Cassia occidentalis* Linn.). These parameters included macro and micro morphological characters, anatomical and palynomorph characterization, solubility, fluorescence and phytochemical analysis. By the application of these parameters acquired results revealed that, these two plants are distinct from each other. The Coffee Seena was found to be an annual shrub with trilobed pollen, diacytic, paracytic and anisocytic stomata whereas the Seena weed stands out as an annual or perennial herb with spheroidal and circular pollen and paracytic type of stomata. The powdered drug of Coffee seena is dark grayish green whereas the powdered drug of Seena weed is light green in color. These findings are constructive in authentic identification of these plants.

**Keywords :** coffee senna, Senna weed, taxonomic evaluation, pharmaceutical markers

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