

E2-41: Camptothecin contents in *Ophiorrhiza mungos*

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Ophiorrhiza mungos (Datketiya) (Family - Rubiaceae) is a herbaceous undershrub occurring in India, Sri Lanka, Burma, Malaysia and Philippines. It is common in shady moist places in Sri Lanka. The root of this plant possesses laxative and sedative properties. It is used in snake-bite cures. A decoction of the leaves roots and bark is administered as a stomachic. The leaves are used for dressing ulcers.

Camptothecin and its derivatives have antitumor, antileukemic and antiviral properties. The plant contains alkaloids such as camptothecin, 9-methoxycamptothecin and 10-methoxycamptothecin and some steroids. The present study deals with the estimation of camptothecin in different parts of *O. mungos* at different stages of maturity.

O. mungos plants were separated into leaves, roots, stems and flowers, dried, powdered and defatted with petroleum ether (60 - 80°C). The residual plant materials were extracted with EtOH (70%) and ethanolic extracts were concentrated. The extracts were dissolved in MeOH and subjected to TLC chromatography to observe the fingerprint pattern. HPLC analysis was carried out using C-18 column and acetonitrile: water (1:3) solvent system. UV detector was set at 254 nm.

The content of camptothecin, in various extracts were calculated using standard sample.

The camptothecin contents in different parts of the plant varied from 0.01 - 0.1%. The callus contained 0.01% camptothecin. This is higher than previously reported value (0.0068%). No significant difference was found before and after flowering.

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