

USE OF TLC SCANNER AND GLC IN THE
STANDARDISATION OF AYURVEDA DRUGS

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A method was developed to estimate the umbelliferone content by measuring the fluorescence intensity using a TLC scanner. A linear standard curve was obtained for fluorescence intensity vs. umbelliferone content. Using this standard curve, the umbelliferone content of the 2.5 N HCl extracts of asafoetida and the standard reference sample of Navaratna Kalkaya were determined. The ranges of values obtained for asafoetida and the standard preparation of Navaratna Kalkaya were 4.52-6.39% and 0.02-0.03% respectively. Umbelliferone is present in asafoetida and hence can be used as a marker compound, for the preparation. The quantitative estimation can be used as a quality standard for the raw material and for the preparation.

The GLC profiles of the volatile oil distillates of 12 raw materials of Navaratana Kalkaya were compared with the GLC profile of the standard preparation of Navaratna Kalkaya. Despite being a test for identity and quality, these GLC profiles can be used to establish the presence or absence of some of the raw materials in the preparation. Also GLC profiles of three commercial products of Navaratna Kalkaya were compared with the profile obtained for the standard reference sample.

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