DEVELOPMENT AND VALIDATION OF A NOVEL HPTLC METHOD FOR QUANTITATIVE ESTIMATION OF VINCAMINE FROM *CATHARANTHUS ROSEUS* LINN. LEAVES EXTRACT

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ABSTRACT

Catharanthus roseus (Apocynaceae), commonly known as periwinkle, is a perennial plant that is mostly found in Southern Asia. Periwinkle is rich in indole alkaloids. This research work consists of the development and validation of one of the indole alkaloids, vincamine, by HPTLC. The chromatographic separation was achieved by using eluent chloroform, acetone, and formic acid in the ratio of 5:1:0.5 V/V/V at wavelength 222 nm. With an R_f value of 0.33±0.02, this method showed good separation of vincamine in the extract. Vincamine in the range of 200-1000 ng spot^{-1} showed a satisfactory linear relationship according to the regression analysis data, and the correlation coefficient (R^2) was found to be 0.9957. ICH Q2 (R1) guidelines were followed for validation.