

ABSTRACT

DETERMINATION OF EGCG IN GREEN TEA PRODUCTS USING HPLC METHOD

AKBAR SURYANANDA

Green tea is a popular drink consumed daily by millions of people around the world. Previous studies have shown that some polyphenol compounds from green tea possess anticancer activities. However, systemic evaluation was limited. High Performance Liquid Chromatography (HPLC) was one of analytical methods commonly used to determine the concentration of epigallocatechin gallate (EGCG) on green tea product. The method must be validated in order to fit its purpose. The aim of this research was to prove that the used method has selectivity, linearity, precise, and accurate is acceptable. Research show that method of analyse have selectivity with $R_s = 6,15 > 1,5$; linearity with $r = 0,9998$; precision intraday with $CV = 0,06\%$; precision interday with $CV = 0,03\%$; accuration with recovery $100,02\%$; and the value of EGCG concentration is $7,94\%$ on green tea product.

Keyword: EGCG, *Camellia sinensis*, HPLC, Tea product.