

ABSTRACT

The use of coconut shell charcoal had been studied in the determination of chlorpheniramin maleate tablet. The purpose of coconut shell charcoal was aimed to minimize the influence of colour substance in determination of chlorpheniramine maleate tablet.

This research was done by filtering chlorpheniramine maleate through double filter papers, which contained the active coconut shell charcoal. The absorption of filtrate was measured by UV-Vis spectrophotometer at λ 252; 262; and 272 nm.

The variables of this study were the particle size of charcoal i.e. mesh 40; 50 and 60, and the weight of charcoal i.e. 100 mg; 200 mg and 300 mg.

The result of the studied showed that mesh 50 and wight of 200 mg gave the best validity. The mean value of the recovery was 98,37 %, and the value of coefficient of variance was 0,55%. The validity test by the addition of chlorpheniramin maleate to a patent of chlorpheniramin maleate tablet showed a recovery value of 99,06 - 99,15% and coefficient of variance 0,43 - 0,74 % (<2%).

Aplications of this method, to determine the concentration of chlorpheniramine maleate in 3 samples of patent tablet, yielded the mean concentration of chlorpheniramine maleate tablet in sample I was 97,28%, sample II 93,25%, and sample III 100,39%.

Key words : coconut shell charcoal, particle size, chlorpheniramine maleate tablet, UV-Vis spectrofotometer, validity of analysis result.