ABSTRACT

PAMUNGKAS, P.R., 2014, ANALYSIS OF RHODAMIN B IN ARUM MANIS WITH THIN LAYER CROMATOGRAPHY AND UV–VIS SPECTROPHOTOMETRY IN SURAKARTA AREA, SCIENTIFIN JOURNAL, PHARMACY FACULTY, SETIA BUDI SURAKARTA UNIVERSITY.

Rhodamine B is a synthetic dye that has a function as a textile dye. Rhodamine B is often misused its function as a coloring agent in food though it was clear that Rhodamine B is prohibited for food uses by Regulation of the Minister of Health of Republic Indonesia No. 239/Menkes/Per/ V/85. This study aims to determine the presence of Rhodamine B on Arum Manis and know how levels of Rhodamine B in it .

The research was conducted by using the withdrawal color method in the wool for qualitative test purpose. Extraction with eter p.a followed by purification using HCl 0,1 N then followed by UV-Vis spectrophotometry in 555 nm wavelength. Extract readings calculated by linear regression equations and statistical tests.

The results showed that from the three samples studied contained one positive sample containing Rhodamine B, seen from the results of the TLC which showed Rf sample that nearly same as the standard. In reading with UV-Vis spectrophotometry generating uptake and after calculated using the linear regression equation and statistical tests was obtained Rhodamine B concentration of 0.02%.

~~Key words: Rhodamine B, Arum Manis, TLC, UV-Vis Spectrophotometry.~~

INTISARI

PAMUNGKAS, P.R., 2014, ANALISIS PEWARNA RHODAMIN B SECARA KROMATOGRAFI LAPIS TIPIS DAN SPEKTROFOTOMETRI UV – VIS DI DAERAH SOKOHARJO DAN SURAKARTA, KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Analisis Rhodamin B pada Arum Manis ini dilakukan terhadap sampel yang diambil di tiga tempat yang berbeda di wilayah Surakarta. Analisis ini dilakukan di laboratorium Universitas Setia Budi Surakarta, dalam analisis ini digunakan untuk mengetahui ada tidaknya Pewarna tekstil Rhodamin B di dalam Arum Manis, jika ada maka akan ditentukan pula berapa kadar Rhodamin B.

Metode yang digunakan dalam analisis kualitatif Rhodamin B yaitu KLT dengan menggunakan teknik penarikan warna dengan benang wool. Analisa kuantitatif Rhodamin B menggunakan metode ekstraksi dan pemurnian. Ekstraksi dengan eter p.a dilanjutkan pemurnian dengan HCl 0,1 N dan dilanjutkan dengan Spektrofotometri UV – Vis pada panjang gelombang 555 nm.

Berdasarkan analisis tersebut didapat hasil salah satu sampel dari ketiganya positif mengandung Rhodamin B. Sampel Arum Manis yang diambil di daerah Sukoharjo positif mengandung Rhodamin B dengan kadar 0,02%.

Kata kunci : Rhodamin B, Arum Manis, KLT, Spektrofotometri UV - Vis