

ABSTRAK

RAVENDHA DIKATORU. Analisis Kadar Kafein, Tanin, dan Total Fenol Daun Teh Perkebunan Sirah Kencong Blitar. Dibimbing oleh Elok Widayanti S.Si, M.Si.

Kafein, tanin, dan total fenol merupakan komponen kimia daun teh yang bermanfaat bagi tubuh. Kafein sebagai zat psikoaktif, tanin sebagai antidiare, dan senyawa fenol sebagai antioksidan penangkal radikal bebas. Tujuan dari penelitian ini yaitu menganalisis kadar kafein, tanin, dan total fenol daun teh Perkebunan Sirah Kencong Blitar. Penentuan kafein dilakukan pada serbuk daun teh dengan metode Spektrofotometri UV-Vis pada panjang gelombang 273,5 nm menggunakan standar kafein. Penentuan tanin dan total fenol dilakukan pada ekstrak etanol daun teh. Tanin ditentukan dengan metode Follin Denis secara Spektrofotometri UV-Vis pada panjang gelombang 649,9 menggunakan standar asam tanat. Sedangkan total fenol ditentukan dengan metode Follin Ciocalteu secara Spektrofotometri UV-Vis pada panjang gelombang 794 nm menggunakan standar asam galat. Berdasarkan hasil penelitian pada daun teh Perkebunan Sirah Kencong Blitar, kadar kafein yang dihasilkan sebesar 1,649%, tanin sebesar 7,095%, dan total fenol sebesar 34,142%.

Kata kunci : kafein, tanin, total fenol, daun teh

ABSTRACT

RAVENDHA DIKATORU. Analysis of Caffeine, Tannin, and Total Phenol Levels of Tea Leaves at Sirah Kencong Blitar Plantation. Supervised by Elok Widayanti S.Si, M.Si.

Caffeine, tannins, and total phenol are chemical components of tea leaves that have benefit components to the body. Caffeine as a psychoactive substance, tannin as anti-diarrhea, and phenol compounds as antioxidants that prevent free radicals. The purpose of this research was to analyze the levels of caffeine, tannin, and total phenol of tea leaves at Sirah Kencong Blitar Plantation. Determination of the caffeine level was carried out in tea leaves powder using UV-Vis Spectrophotometry method at 273.5 nm wavelength with caffeine standard. Determination of tannin and total phenol level were carried out in the ethanol extract of tea leaves. Tannin was determined by the *Follin Denis* method using UV-Vis spectrophotometry at 649.9 nm wavelength with tannic acid standard. While the total phenol was determined by the *Follin Ciocalteu* method using UV-Vis spectrophotometry at 794 nm wavelength with gallic acid standard. Based on the results of the research in tea leaves from the Sirah Kencong Blitar Plantation, the caffeine content was 1.649%, tannin was 7.095%, and total phenol was 34.142%.

Keywords: caffeine, tannin, total phenol, tea leaves