

ABSTRAK

Kopi adalah minuman dengan angka konsumsi yang kian meningkat. Seiring berkembangnya jaman, minuman kopi juga mengalami perubahan dengan tren *third wave coffee* yang mempelajari kualitas biji kopi, variasi tingkat sangrai serta berbagai metode penyeduhan alternatif. Analisis kadar kafein dan asam klorogenat pada kopi Arabika Gayo dan Flores Bajawa menggunakan Spektrofotometer UV-Visible dan *High-Performance Liquid Chromatography Diode Array Detector* (HPLC-DAD) telah dilakukan. Kandungan kafein dan asam klorogenat pada masing-masing kopi dibandingkan berdasarkan variasi tingkat penyangraian (*light, medium, dark*) dan metode penyeduhan (V60 dan *cold brew*). Hasil penelitian menunjukkan bahwa kadar kafein paling tinggi terdapat pada kopi Arabika Gayo Aceh dengan tingkat sangrai *light* dan metode penyeduhan V60 sebesar $20.608,69 \pm 0,00$ mg/kg bb atau 0,021% bb menggunakan Spektrofotometer UV-Vis dan HPLC-DAD $18.984,10 \pm 0,00$ mg/kg bb atau 0,019% bb. Sedangkan pada kopi Arabika Flores Bajawa, kadar asam klorogenat paling tinggi terdapat pada tingkat sangrai *light* pada metode penyeduhan V60 sebesar $31.485,15 \pm 0,00$ mg/kg bb atau 0,032% bb pada Spektrofotometer UV-Vis. Analisis statistik ANOVA menunjukkan bahwa kadar kafein antara metode penyeduhan dan kadar asam klorogenat antara metode penyangraian Gayo Aceh berbeda secara signifikan. Analisis statistik ANOVA pada Flores Bajawa menunjukkan kadar kafein antara metode penyeduhan terdapat perbedaan secara signifikan.

Kata kunci: Arabika, Asam Klorogenat, HPLC-DAD, Kafein, Spektrofotometer UV-Visible.

ABSTRACT

Coffee consumption increases over the years. As time progresses, coffee drinks also experience changes with the third wave coffee trend which studies the quality of coffee beans, variations in roast levels and various alternative brewing methods. Analysis of caffeine and chlorogenic acid levels in Arabica Gayo and Flores Bajawa using a UV-Visible Spectrophotometer and High-Performance Liquid Chromatography Diode Array Detector (HPLC-DAD) was carried out. The contents of caffeine and chlorogenic acid in each coffee were compared based on variations in roasting level (light, medium, dark) and brewing method (V60 and cold brew). The results showed that the highest caffeine content was found in Gayo Aceh Arabica coffee with a light roast level and the V60 brewing method of $20,608.69 \pm 0.00$ mg/kg wb or 0.021% wb using a UV-Vis Spectrophotometer and HPLC-DAD $18,984.10 \pm 0.00$ mg/kg wb or 0.019% wb. Meanwhile, the highest levels of chlorogenic acid were found in Arabica Flores Bajawa coffee with a light roast level on the V60 brewing method of $31,485.15 \pm 0.00$ mg/kg wb or 0.032% wb on the UV-Vis Spectrophotometer. ANOVA statistical analysis showed the caffeine content between the brewing methods and chlorogenic acid levels between roasting method for Gayo Aceh beans were significantly different. ANOVA statistical analysis on Flores Bajawa showed the caffeine content between brewing methods was significantly different.

Keywords: Arabica, Caffeine, Chlorogenic Acid, Chromatography, Spectrophotometer UV-Visible.