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Determination of Caffeine Content of Indonesia Luwak Coffee (*Mongoose Coffee*)Using High Performance Liquid Chromatography (HPLC) Analysis

¹Rani Rubiyanti

¹Faculty of Pharmacy, PoliteknikKesehatanKementrianKesehatanTasikmalaya Jl. Cilolohan No.35, Kahuripan, Tawang, Tasikmalaya, 46115 West Java, Indonesia

Abstract : Analysis of caffeine in Luwak coffee with Solid Phase Extraction using High Performance Liquid Chromatography. Coffee were analysed for caffeine by HPLC with a UV detector at 274 nm and rate 1 ml/min. The column was a reversephase Enduro C-18G (250 x 4,6 mm) and the mobile phase consisted of water: methanol (70:30, v/v). A linear calibration curve was generated with caffeine concentration ranging from 1 to 200 ppm with correlation coefficient R2= 0,999. From sample of cultivated and luwak coffee beans, 20 μ l of solution were injected to the HPLC. The result showed that the elution or the retention time for caffeine for luwak cofee bean cultivated coffee sample to be 4,287 min and 4,280 min. At this retention time, the concentration of caffeine was determined to be 36,189 mg/L; 36,780 mg/L and 35,448 mg/L or 1,134 \pm 0.023% w/w in dry basis.

Keywords: Caffeine content; High Performance Liquid Chromatography, Luwak Coffee.

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