INTISARI

Prosedur baku untuk menetapkan kadar prokain-HCl dan kofein dalam campuran belum ada. Prokain-HCl dan kofein mempunyai spektrum serapan yang tumpang tindih pada daerah ultraviolet. Penelitian ini ditujukan untuk menetapkan kadar prokain-HCl dan kofein dalam campuran tanpa pemisahan tiap komponennya.

Penelitian ini termasuk non eksperimental deskriptif non analitik. Pada penetapan kadar prokain-HCl dan kofein dalam campuran digunakan metode spektrofotometri dengan aplikasi panjang gelombang berganda. Data dianalisis dengan prinsip persamaan regresi berganda (*multivariate regression*) melalui perhitungan operasi matriks.

Hasil yang diperoleh menunjukkan bahwa metode panjang gelombang berganda dapat digunakan untuk menetapkan kadar prokain-HCl dan kofein dalam campuran dengan akurasi dan presisi yang baik.

ABSTRACT

The standard procedure to determine the concentration of procaine hydrochloride and caffeine in mixture has yet been established. Procaine hydrochloride and caffeine has an overlapping absorption spectrum in ultraviolet area. This research was aimed to determine the concentration of procaine hydrochloride and caffeine in mixture without isolation or separation of each.

This research was non-experimental non-analytic descriptive. In order to determine the concentration of procaine hydrochloride and caffeine in mixture was used spectrophotometry method applying multiple wavelengths. The data were analyzed using multivariate regression equality principal through matrix operation counting.

The result suggested that multiple wavelengths method was applicable to determine procaine hydrochloride and caffeine with good accuracy and precision.

Key word : spectrofotometry, procaine hydrochloride, caffeine, and multiple wavelengths