

**ABSTRACT**

**ANALISIS PENGARUH PENGOLAHAN TERHADAP  
KANDUNGAN FITOSTEROL PADA KACANG TOLO  
(*Vigna unguiculata* (L.) Walp.) DENGAN METODE  
KROMATOGRAFI GAS FID DAN SPEKTROMETRI MASSA**

Miftakhul Rohmah Putri

The aims of this study was to determine the presence of phytosterol compounds in cowpea beans (*Vigna unguiculata* (L.) Walp.), and to determine the effect of boiling and frying on the phytosterol content of cowpea beans (*Vigna unguiculata* (L.) Walp). The cowpea beans that have been processed are then extracted with *n*-hexane, acetone, and chloroform. The extracts were analyzed using TLC, FTIR-ATR, GC-FID, and GC-MS. The GC-FID analysis results between raw, boiled and fried samples identified of cholesterol, campesterol, stigmasterol, and  $\beta$ -sitosterol. Statistical analysis using MANOVA. The results of the GC-MS SIM mode analysis on raw, boiled, and frying cowpea bean extract showed the content of phytosterols, namely cholesterol, campesterol, stigmasterol, and  $\beta$ -sitosterol.

Keywords : *Vigna unguiculata* (L.) Walp, cooking process, phytosterol, GC-FID, GC-MS