

Independent Study Title	The Level of Curcuminoids in Thai Medical Herbs
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ABSTRACT

Curcuminoids, the principal natural yellow pigments comprising curcumin, demethoxycurcumin and bisdemethoxycurcumin. This study is undertaken to find out the level of curcuminoids content in Thai medicinal herbs. Six kind of plants were selected to study. Rhizomes of *Curcuma longa*, *Zingiber officinale*, *Kaempferia parviflora*, *Curcuma aromatic*, *Zingiber montanum* and *Curcuma xanthorrhiza* collected from Chonburi Province, Thailand were carried out to dried and powdered for determining curcuminoids content. The powdered samples were analyzed by UV-Visible spectrophotometry methods. It was complied with Thai Herbal Pharmacopeias 1995 Page 44. The methodology and data were verified for selectivity, linearity, accuracy and precision. Verification of UV-Visible spectrophotometric method verified according to the guidelines of International Conference on Harmonization (ICH). From the study, curcuminoids were found in *Curcuam longa* and *Curcuma aromatic*. The average of curcuminoids content in *Curcuma longa* and *Curcuma aromatic* were 8.45% w/w and 0.92% w/w , respectively. This method was found selective for determination of curcuminoids and showed a considerably high level of accuracy (94-104%). The data showed a good linear relationship with a correlation coefficient greater than 0.999 for curcumin standard and indicated that the method

had an excellent intraday precision and intermediate precision. The results of the study might be useful for further development in herbal pharmaceutical industry and drug development.

Keywords: Curcuminoids/*Curcuma longa*/*Curcuma aromatic*

