

Tocols as a mean to identify the oils and fats

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Abstract

A large number of studies have reported various methods of detecting adulteration in vegetable oils, such as by methylation of fatty acids on GC-MS. However, the methods recognized time consuming and can be costly. The aim of this research is to validate an alternative method by determination of tocol content. Vegetable oils (sesame, olive, maize, canola and soya bean) were samples sourced from local industry and were tested for identification of tocol content. The α , β , γ and δ tocopherols contents were measured by HPLC-Fluorescence detector tested, one of the olive of the oils saw (olive oil A) differed in its significantly δ -tocopherol content as to what would be expected for this oil. The results indicated that this method of detection for adulteration can be regarded as a quick, reliable and less expensive method that is currently employed.

Keywords: Tochoferols, Tocols, HPLC, Fluorescence, Vegetable oils.

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