

**COMPARISON OF QUANTITATIVE DIAGNOSTIC KIT and GAS
CHROMATOGRAPHY TECHNIQUE FOR DETERMINATION OF
METHANOL AT TRACE LEVELS IN HERBACEOUS DISTILLATES**

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Methanol occurs naturally in different herbal distillates and also formed when various plants are physically prepared for consumption. The objective of this study was comparison of determination efficiency of the trace levels of methanol in herbaceous distillates by using quantitative diagnostic kit and gas chromatography (GC) technique. In this study were taken 40 samples of various herbaceous distillates of Iran markets selected as representative types, by their production and origin. It was confirmed that methanol was present in all studied samples. The range of trace methanol in the studied samples was 23-300 ppm. There weren't any significant difference between GC and quantitative diagnostic kit results for determination of methanol levels. The GC procedure was found to be very tedious but the diagnostic kit, was found to be much simpler (easy application with no need to professional and expensive equipment) for the quantification of methanol and also the obtained results were shown, the kit sensitivity and accuracy were suitable (like GC) for exact measuring of herbal distillates methanol content.

Keywords: Methanol, gas chromatography, diagnostic kit, herbaceous distillates

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