



Iran Golab



University of Kashan
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Rosa damascena 2021

The Third International Conference & Workshops on *Rosa damascena*
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Utilizing of analytical chemistry techniques for recognizing of cheats in Golab

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Introduction

Golab or *Rosa damascena* essential oil is an expensive natural food additives that is used in the kinds of traditional and industrial foods (1). The natural *Rose pelargonium* (Sweet-Rose geranium) essential oil is not only similar to *Rosa damascene* essential oil but also cheaper than it. Pakestanian Rose is the synthetic compound with the same characteristics too. Therefore, some speculators may adulterate the production of Golab or *Rosa damascena* essential oil. We decided to distinguish and control these scams (2,3).

Methods

pH, acidity index, Iodic index was measured and also methods of instrumental analytical chemistry GC, UV, GC/MS was used .

Reults and Discussion

Natural Golab had pH = 3.8-5, acidity index 1-5, high iodic index was the best index to distinguishe of natural Golab from synthetic or similarity natural compound. GC/MS results showed, the ratio of Citronelol/Geraniol was more than double in the fake Golab, there was the high amounts of Phenyl ethyl alcohol in the natural Golab and Nerol compound was in the natural Golab and was absent in the others (3).



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Keywords

Rosa damascena, Analysis, Essential oil, GC/MS, Phenyl ethyl alcohol

References

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