



GC-MS analysis of chemical compounds from acetone extract of *Echium amoenum* Fisch.

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Abstract

Background and objectives: Plants play a significant role in the prevention and treatment of diseases and can even prevent and reduce the adverse effects of conventional treatments. *Echium amoenum* Fisch is one of the most commonly used medicinal plants, and has long been used as a traditional herbal medicine for many diseases in Iran. Gas chromatography-mass spectrometry (GC-MS) method can be an interesting tool for testing the amount of some active principles in herbs used in cosmetic, drugs, pharmaceutical or food industries. **Methods:** The flowers of *Echium amoenum* Fisch were collected, washed, shade dried, powdered and extracted with acetone using Soxhlet apparatus. The extract were concentrated and analyzed by GC-MS for the identification of chemical compounds present in the flowers of *Echium amoenum*. **Results:** The major compounds were pentacosane, tricosane, 2-pentanone-4-hydroxy-4-methyl and 3-hexene-2-one. **Conclusion:** Identification of these compounds in the plant serves as the basis in determining the possible health benefits of the plant leading to further biologic and pharmacologic studies.

Keywords: acetone extract, *Echium amoenum* Fisch, GC-MS
