



Effects of drying process on total phenolics, and flavonoids content of thyme vulgaris extract

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Abstract : The present study investigated the changes in total phenols (TPC), flavonoids (FC) content of thyme vulgaris (in Continuous infusion, Infusion (without boiling)) after three drying (air-shade, air sun and oven-drying) and compared to fresh. The Folin-Ciocalteu method was used to determine TPC, while FC was determined by the aluminum chloride method. . The results showed that total phenolics and flavonoids in continuous infusion are higher than infusion without boiling. Fresh thyme have the highest contents of total phenolics (291.23, 322.12 mg GAE/100 g) and flavonoids (210.11, 296.22 mg QE/ 100 g), whereas the lowest levels were found in oven dried (200.10, 231.30 mg GAE/100 g ,100.11, 111.42 mg QE/100g). Dry processing significantly decreased the phytochemical contents of thyme . The air shade drying contained more total phenolics, and flavonoids than air –sun drying of thyme.

Keywords: total phenols , drying process, flavonoids , Continuous infusion, Infusion (without boiling), Thyme vulgaris.

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