

**EFFECTS OF MICROWAVE HEATING ON COMPOSITION  
AND OXIDATIVE STABILITY OF BLACK CUMIN  
(*Nigetta sativa* L.) SEED OIL**

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**ABSTRACT**

Black cumin microwave heated seed oil (SO) and oil extracted from microwave heated seeds (MSO) were analysed for peroxide, acid value, carbonyl, anisidine, thiobarbituric acid, diene% and fatty acid content. Exposing the samples to different heating times by microwave oven caused some hydrolysis of fatty acids. It also accelerated the formation of peroxides and secondary oxidation products. The chemical values indicate the deterioration, and oxidative degradation of fatty acids which is much more confirmed by Gas liquid chromatography.

**Key words:** *black cumin, fatty acids, microwave oven ,Oil*