

Fatty acids, tocopherols, minerals contents of *Nigella sativa* and *Trigonella foenum-graecum* seed and seed oils

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Some proximate properties, fatty acids, tocopherols, minerals of their seeds and seed oils of *N. sativa* and *T. foenum-graecum* were determined. Palmitic, oleic and linoleic acid contents of *N. sativa* ranged from 11.4% (Saudi Arabia) to 13.0% (Ethiopia), 22.4% (Ethiopia) to 23.3% (Saudi Arabia) and 56.2% (Ethiopia) to 56.8% (Turkey), respectively. In addition, palmitic, oleic, linoleic and linolenic acid contents of *T. foenum-graecum* changed between 9.5% (Saudi Arabia) and 11.5% (Turkey), 11.7% (Yemen) and 21.3% (Saudi Arabia) and 35.0% (Saudi Arabia) and 43.7% (Turkey) and 21.0% (Turkey) to 29.9% (Yemen), respectively. α -Tocopherol contents of fenugreek oil changed between 87.4% (Yemen) and 128.2% (Saudi Arabia); followed by p8 (plastochromanol), γ -tocopherol and β -tocopherol. As a total tocopherol contents, the total amount of fenugreek oils changed between 94.3% (Yemen) and 136.5% (Saudi Arabia), and was found to higher than the results for *N. sativa* oil. Ca contents of *N. sativa* seed changed between 4460 mg/Kg (Saudi Arabia) and 5133 mg/Kg (Ethiopia).

K contents of *N. sativa* ranged from 5948 mg/Kg (Ethiopia) to 7561 mg/Kg (Turkey). Such variation in nutrient contents may be related to variations in regions of cultivation, storage conditions and maturity stage, and climatic differences where the sample seeds were grown.

Keywords: *Nigella sativa*; *Trigonella foenum-graecum*; seed oil; fatty acid; tocopherol