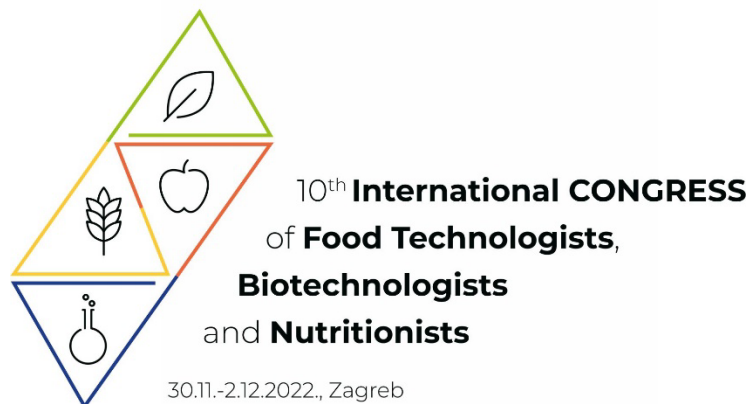


# BOOK OF ABSTRACTS

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## Quality characteristics of oils from selected edible seeds

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Many types of vegetable oils produce around the world. They are useful in nutrition, prevention and treatment of diseases. Some oils traditionally have been well known for a long time and have been shown many potential health benefits, such as, cardioprotective effect, effect on digestion, risk of some cancer and it is also used in the treatment of skin infections. This work was conducted to study some quality criteria of oil extracted from seven different raw seeds purchased in the Serbian market, namely: sunflowers, sesame seeds, black sesame seeds, tickles seeds, chia seeds, flax seeds and hemp seeds. Oils are essentially regarded in terms of quality based on their free fatty acid, iodine value and peroxides value. Oils were extracted from the seeds by cold extraction with petroleum ether. Quality characteristics, such as refractive index, acid value, peroxide value, iodine value and saponification value and unsaponifiable matter were determined. For the determination of these parameters, official methods (ISO 6320; ISO660; ISO 3960; ISO 3961; ISO 3657 and ISO 18609, respectively) were used. The contents of investigated parameters in seed samples were determined in the range of 1.467 to 1.485 nD for refractive index; 1.62 to 4.95 mg KOH/g for acid value; 5.21 to 7.45 for peroxide value; 118 to 197 for iodine value; 180 to 193 for saponification value and 3.14 to 7.26 g/kg for the unsaponifiable matter.

Data obtained in this investigation indicate that all quality parameters of the seed samples, except peroxide value , comply with the national and Codex standards.