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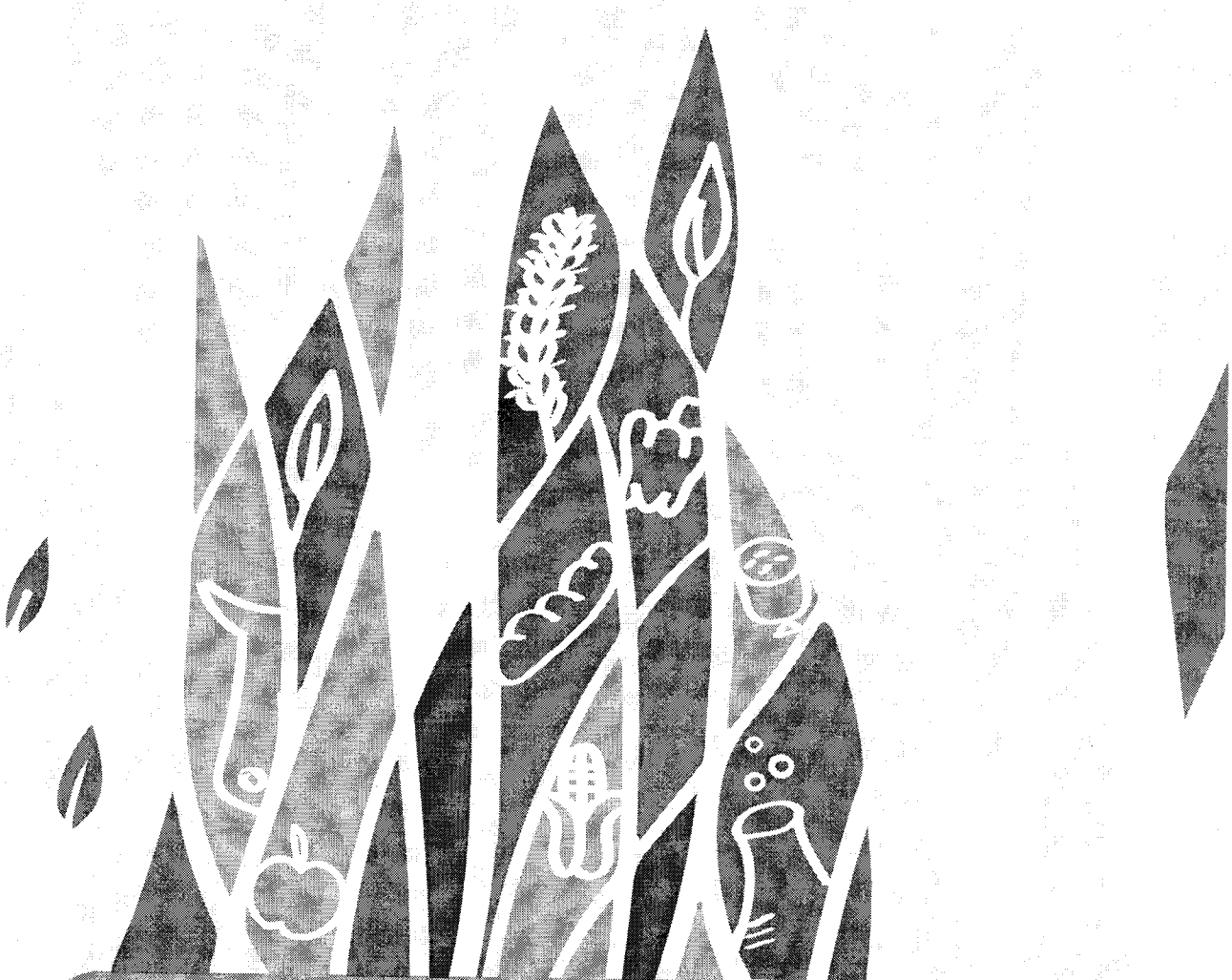

ABSTRACT BOOK

THE ASSESSMENT OF THE SANITARY INDICATORS OF THE SPICY-AROMATIC RAW MATERIALS AND THEIR OIL MIXTURES

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The spicy-aromatic raw materials, which are used in food technologies, contain substances that show both as an antibiotic so an antioxidant activity.
The authors suggested carrying through the oil extraction of spices to accumulate their fat-soluble components in the unrefined sunflower salad oil.
In this work the sanitary quality indicators of the spicy-aromatic raw materials and their oil mixtures are explored. A black pepper (Piper nigrum), a coriander (Coriandrum sativum), a cardamoms (Ellettaria cardamomum), a garlic (Allium sativum), a fragrant basil (Ocimum basilicum), a capsicum (Cápsicum ánnuum), a bay leaf (Láurus nóbilis) have been investigated as the spicy-aromatic raw materials.
The initial semination by the microorganisms of the spicy-aromatic raw materials and the spicy-oil mixtures after the extraction is examined. It was very high in all selected spices except the garlic.
High semination of the spicy-aromatic raw materials has an influence on the initial semination of the spicy-oil mixtures. Therefore it was studied several ways to prepare spices before carrying in unrefined oil: washing raw material, followed by drying in natural air-cooling, convective drying at the temperature of +100 ^{0}C and processing of ultrahigh frequency waves.
The antibiotic effect of the mixture is expressed slightly when the concentration of the raw material was up to 1.5%. The number of the microbial cells after the extraction is close to the original value.
The stabilization of the microorganisms' growth and the suppression of their activity is observed with the increasing of the content of the spices in the source systems in the ready spicy-oil mixtures. This indicates that the fat-soluble components of the spicy- oil mixtures, which are moving from the spicy-aromatic raw materials, have the antibiotic action against the microorganisms, which are caught in the oil with the spices. The manifested antibiotic effect corresponds to the concentration of the spicy-aromatic raw materials in a mixture of 2% and more.

***Keywords**: spicy-aromatic raw materials, spicy-oil mixtures, antibiotic activity*