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SPECIFIC QUALITY INDICATORS OF MONOFLORAL LINDEN HONEY

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ABSTRACT

The research was aimed at developing a comprehensive approach and identifying criteria for assessing the quality of monofloral linden honey based on the determination of its organoleptic, physicochemical indicators, pollen analysis and establishing compliance with the requirements of quality standards. 32 samples of honey labeled as linden honey were analyzed. Evaluation criteria for monofloral linden honey in Ukraine have been established. The degree of monoflorality of linden honey can be from 30.0% of linden pollen and higher. According to organoleptic indicators, honey from linden is characterized by a peculiar delicate aroma of linden flowers, mainly has a color from light yellow to white shades, consistency depending on the season (liquid, viscous, very viscous, dense). According to physical and chemical parameters: moisture - 18.5%, proline - 308.12±34.18 mg/kg, electrical conductivity - 0.35± 0.04 M/cm, fructose to glucose ratio - not lower than 1.2, diastasis not less than 11.0 units. Gote, the content of reducing sugars is 85.6±2.47%; sucrose in the range of 2.8-3.9%. It has been established that the quality indicators of monofloral linden honey meet the requirements of the national standard of high-grade honey and the existing EU requirements; the content of dominant linden pollen should not be lower than 30%. It has been proven that the ratio of fructose to glucose for monofloral linden honey should not be lower than 1.2, the proline content is not less than 300.0 mg/kg, and the electrical conductivity is 0.63Ms/cm. A comprehensive approach to the identification and evaluation of the quality of monofloral linden honey has been developed and the main criteria for the degree of monoflorality, organoleptic and physicochemical indicators have been determined.

Keywords: linden honey, quality indicators, monofloracy, organoleptic indicators, proline, pollen analysis, electrical conductivity, diastase.