

## **EFFECT OF BEEKEEPING PRODUCTS ON CONSISTENCY AND ACIDITY OF YOGURT**

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Honey, royal jelly, bee pollen – a unique sources of natural bioactive compounds. They are unique in nature. The use of bee products, possible, will allow to expand assortment, increase of the biological and probiotal value. However, the formation of consumer characteristics, it is equally important. In this connection, it is necessary to check the influence of bee products on the yogurt consistence and acidity.

The raw materials used to produce yogurt were: normalized milk base, starters of sublimation drying *Str. Thermophilus*, *Lbm. Acidophilum* and *Lbm.bulgaricum* series of DVS-culture, acacia honey, frozen royal jelly, bee pollen crushed to a particle size of 5-10 microns.

The study of effective viscosity of the samples showed that the addition of honey to yogurt (5%) increases the effective viscosity during a slight fracture of the bunch ( $28 \pm 1\%$ ) and decreases during the high fracture (at  $72,5 \pm 2,5\%$  ). Samples with honey (5%) and royal jelly (0,2%) had destroyed the fastest and had the highest degree of fluidity (0,451), but their thixotropic ability was higher than in controls. Adding honey (5%) to yogurt, royal jelly (0,2%) and pollen (0,2%) helps to stabilize the viscosity and accelerate recovery after the destruction of its structure. This will help improve the consistency after pouring by the reservoir way of production.

The least resistance to moisture exchange had samples with a mixture of honey (5%) and royal jelly (0,2%) – 42 ml WRC = 52%. The highest – with 5% of honey (39 ml, = 55%).

The sample containing honey (5%), royal jelly (0,2%) and pollen (0,2%) had a not the highest properties syneresis of the studied samples yogurt (40ml, WRC = 54,5%), but all parameters exceeded the control.

Titration acidity of the yogurt samples with five percent of honey grew faster during 9 days compared with the control and other samples. On the sixth day of storage, it was more than 150° T. This is above the allowed level for 10° T.

Yogurt made with the addition of bee products and their combinations, acquired new physical and chemical properties and properties of consistency. The best performance had a prototype, which was composed of honey, royal jelly, pollen in number – 5; 0,2 and 0,15%, respectively. The combination of honey (5%), royal jelly (0,2%) and pollen (0,2%) stabilized the acidity of investigated yogurt specimen for nine days held it within the standard documents of Ukraine