

HEAT EFFECT ON THE QUALITY OF HONEY

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Summary. It is natural for many types of honey to granulate or crystallize upon storage. Since the retail honey market largely favors liquid honey, some types of processing are necessary to maintain the liquid state. This is most commonly done by heating, staining or filtration. The objective of this work was to study the effect of heat treatment with Melitherm heater on quality of honey. In this investigation, five different types of honey: lime, raspberry, cockshead, buckwheat and forest were tested. The samples of natural capped honey were collected in 2008-2009 from honeybee colonies located in the different regions in Lithuania. The quality index of honey was estimated at the laboratories of the Department of Horticulture of Lithuanian University of Agriculture and of the National Food and Veterinary Risk Assessment Institute (Kaunas distr.).

The results of this study demonstrated that amount of water was lower in samples liquified with Melitherm heater compared to untreated samples. The activity of diastase before and after heating in raspberry and cockshead types of honey slightly increased and in lime and buckwheat honey was comparable. The amount of HMF stays the same after melting. In addition, the amount of hidroksimetilfurfurool after heating was significantly reduced only in cockshead type of honey.

Keywords: honey, type, heat, quality.