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Microwave and Infrared Heat Processing of Honey and Its Quality
[Hangalore Umesh HEBBAR^{1\)}](#), [Kargodu Erananjappa NANDINI^{1\)}](#), [Mysore Chakrapani LAKSHMI^{1\)}](#) and [Rangaswamy SUBRAMANIAN^{1\)}](#)
1) Department of Food Engineering, Central Food Technological Research Institute

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Application of microwave and infrared radiation was explored for thermal processing of honey and its effect on the physico-chemical characteristics as well as the microbiological quality of honey were studied. Microwave heating provided a rapid means of achieving the desired level of yeast reduction with reduced thermal damage. Though different combinations of heating duration and microwave power intensity achieved the commercially acceptable level of yeast reduction in honey, heating for a shorter duration (15 s) at higher power intensity (16 W/g) was desirable in terms of lower hydroxymethylfurfural (HMF) value (3.8 mg/kg) and higher diastase activity (12.0). Infrared heating was not as rapid as microwave heating but achieved the desired results in a relatively shorter period (3–4 min) offering advantages over the conventional method.

Keywords: [diastase activity](#), [honey](#), [hydroxymethylfurfural \(HMF\)](#), [infrared heating](#), [microwave heating](#), [moisture reduction](#), [yeast](#)


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