**A comparative quality study and energy saving on intermittent heat pump drying of Malaysian edible bird's nest**

ABSTRACT

This paper aims to study the influence of temperature and relative humidity (RH) during intermittent heat pump drying at 28.6–40.6°C, 16.2–26.7% RH, $\alpha = 0.2–1.0$, and the comparison was made against fan drying (27°C, 39.7% RH, $\alpha = 1.00$). It was observed that the effects of temperature and RH on drying rate were significant when moisture content was high. Experimental results showed that intermittent heat pump drying at 28.6°C, 26.7% RH, $\alpha = 0.2$ of edible bird's nest greatly reduced effective drying time by 84.2% and color change compared to fan drying, and retained the good energy efficiency.

**Keyword:** Color change; Edible bird's nest; Energy saving; Fan drying; Intermittent heat pump drying; Nitrite content