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Determination of Heat Transfer Coefficient of Organic Chiangda Tea (Gymnema inodorum Lour.) under Hot Air Convection Drying

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Organic chiangda tea it's contains antioxidants which help to maintain balance in the body. The purpose of this research was to study the effects of drying temperature drying on the change of moisture content of organic chiangda tea drying. Additionally, the heat transfer coefficient and effective moisture diffusivity of organic chiangda was investigated under hot air convection drying. Experimental parameters for investigation were drying air temperature of 40-60°C and drying air velocity of 0.5 m/s. The results showed that the effective moisture diffusivity of organic chiangda was rapidly increased the increase of drying temperature. The heat transfer coefficients of organic chiangda were in a range of 26-1000 W/m2°C, 59-300 W/m2°C and 29-280 W/m2°C for drying air temperature at 40, 50, and 60°C, respectively.

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