

The Drying Characteristics of Coffee Beans

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SUMMARY

Notwithstanding the importance of coffee as an international commodity, little work has been reported on the drying characteristics of green coffee beans. A programme of experimental work has therefore been carried out using a tray drier in order to investigate the mechanisms of moisture movement during the drying of coffee. The work has shown that the standard drying equation is valid over the initial drying period from the initial moisture content of 60 to 65% w.b. down to a moisture content of 30% w.b.. As expected the drying rate increased with increasing temperature, the rate constant in the initial drying period increasing from 0.00119 min^{-1} at 40°C to 0.0039 min^{-1} at 70°C . Separate measurements on the testa (outer skin) and nib (inner bean) moisture contents with time during drying are also used in order to gain an insight into the controlling mechanisms for moisture transfer during the drying process, this being detailed in the text.