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# Effects of solid content and temperature on viscosity of tapioca meal

## Abstract

The effect of solid content (2.5–10%, w/v) and temperature (30–70°C) on the viscosity of tapioca meal from three cassava varieties was investigated in this study. Viscosity measurements were conducted using a digital rotational Brookfield viscometer. The viscosity of tapioca meal increased with increasing solid content and decreasing viscometer speeds. An empirical power-law equation fitted the viscosity data of the tapioca meals with correlation coefficients between 0.94 and 0.99. Our results indicated that tapioca meal can be characterized as a pseudo-plastic fluid and a mean value of  $0.32 \pm 0.18$  was proposed as the power law index of tapioca meal from the three cassava varieties used in this study. Neither solid content, temperature nor shear rate altered the rheological characteristics of tapioca meal.



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