

Research title: **The Study on Physical and Chemical Properties of
Mun Hua Yai Flour**

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ABSTRACT

The study was done in Mun-Hua-Yai flour. Non-bleaching Mun-Hua-Yai flour was freshly prepared using dry milling. Physical properties, including size and shape of the flour granule, yield percent, pH value, water adsorption, water holding capacity, energy, pasting temperature and viscosity, were studied. Through microscope, the size of the flour granules was varied. The shape of the granules was triangle, nearly sphere and oval. Yield percent was 56.48. The values of pH, water adsorption (g. water by 100 g. dry flour), water holding capacity (ml. water by g. dry flour) and energy (Kcal/g) were 6.35, 35.74, 5.46 and 3.89, respectively. The pasting temperature was 64 degree Celsius at 8 minutes peak time. The peak viscosity, holding strength, and final viscosity were 287.5, 280 and 338 *Rapid Visco* Units (RVU), breakdown and setback were 7.5 and 58 *Rapid Visco* Units (RVU), respectively. Chemical properties, including moisture, protein (Nx6.25), fat, ash, fiber, carbohydrate and amylopectin were 8.05, 3.39, 2.37, 6.11, 0.65, 79.43 and 43.98 % wet weight, respectively. Owing to several physical and chemical properties of Mun-Hua-Yai flour, it can be replaced sweet potato flour in food products.

Keywords: Flour, Mun-Hua-Yai