Abstract*

Bambara groundnut flour (BGF) contained 19.20-19.26% protein, 9.81-10.85% fat and 0.50-1.28% fiber. Boiling of bambara groundnut for 10-30 min reduced tannin and trypsin inhibitor for 76.26-77.63% and 91.81-92.65%, respectively. In addition, they increased water absorption and swelling power, but decreased foaming, emulsion and gel capacities, as well as decreased viscosity of Barberder viscoamylograph. On the other hand, increasing BGF in the blends of wheat or rice flour (0-30%) affected on increasing water absorption but decreasing viscosity of Barberder viscoamylograph (p<0.05). Bread, wheat noodle and rice noodle containing BGF had higher protein and fat, darker and more changing of texture when compared with the control (100% wheat or rice flour). Overall, 10% BGF of the blends demonstrated satisfied products.

*The research was supportive by University of the Thai Chamber of Commerce