Abstract*

Deoiled tomato seed meal (DTSM) contained higher protein, fiber and lysine but lower fat than whole tomato seed meal (WTSM). Oil extraction from WTSM affected on DTSM had brighter color and lower density than WTSM. DTSM had oil-holding, water-holding and foaming capacity better than WTSM, and foaming stability of both was the highest at neutral pH. At pH 4, isoelectric point of tomato seed protein, WTSM had poor emulsion activity and stability, while it was not affected on DTSM. The pasting properties of wheat flour supplemented with WTSM or DTSM at 0, 5 and 10% were evaluated using Rapid Visco Analyser. Substitution of wheat flour with tomato seed meals (whole and deoiled) resulted in a decrease in the viscosity and DTSM was more effective than WTSM at the same level of substitution. In addition, the testing also reviewed that noodles replaced wheat flour by WTSM or DTSM had higher cooking weight, protein, fiber, moisture and lysine content but lower cutting force, L* color and sensory quality than the control (p<0.05).

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