Kajian Sifat Fisika dan Kimia Tepung Daun Kelor (Moringa oleifera) Hasil Pengeringan Lampu Pijar (Study of Physical and Chemical Properties of Moringa Leaf Flour (Moringa oleifera) Results of Drying Incandescent Lamps) Supervisor : Dr. Ir. Budi Hariono, M. Si (Pembimbing I)

> Maula Tuffah Al Firdausiyah Study Program of Food Engineering Technology Majoring od Agriculture Technology Program Studi Teknologi Rekayasa Pangan Jurusan Teknologi Pertanian

ABSTRACT

The benefits of Moringa plants are still limited to only being used as a complement to consumption in the form of vegetables or as a fence plant or garden barrier. The Moringa plant is known as the Miracle Tree or the Magic Tree because it has great health benefits. Alternative processing of Moringa plants into products such as flour from Moringa leaves is important for further research. One of the critical processes in the manufacture of Moringa leaf flour is the drying process. Drying in this study was done using an oven with an incandescent lamp heater. The purpose of this study was to determine the physical and chemical properties of Moringa leaf flour (Moringa oleifera) from incandescent lamp drying and to determine the effect of differences in drying temperature and blanching process on the physical and chemical properties of Moringa oleifera leaf powder resulting from incandescent lamp drying. This research method uses two factors. The first factor is the drying temperature, which consists of 50 °C, 60 °C, and 70 °C with a drying time of 5 hours. The second factor is blanching, which consists of blanching (for 3 minutes at $85^{\circ}C$) and without blanching. The results obtained from this study were that each drying temperature and blanching treatment had a significant effect on yield, color, water absorption, degree of fineness, particle diameter, moisture content, and ash content. The interaction between drying temperature and blanching treatment had a significant effect on yield, water absorption, degree of fineness, moisture content, and ash content.

Key words: Chemical Properties, Drying Incandescent Lamps, Moringa Leaf Flour, Physical Properties.