



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



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بعض الوثائق الأصلية تالفة



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بالرسالة صفحات
لم ترد بالأصل

**CHEMICAL AND TECHNOLOGICAL
STUDIES ON MUNG BEAN**
"Vigna radiata roxb."

BY

W A E L H E L M Y M O U S S A E L - R E F F A E I

B.Sc. (Food Science and Technology), Faculty of Agriculture,
Ain Shams University, 1992

A thesis submitted in partial fulfillment
of
the requirements for the degree of

MASTER OF SCIENCE
in
Agriculture
(Food Science and Technology)

Department of Food Science
Faculty of Agriculture
Ain Shams University

B9001

1998

Approval sheet

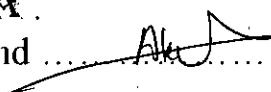
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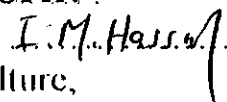
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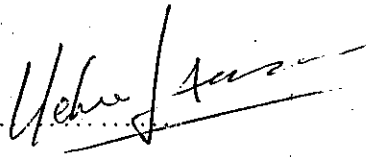
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ABSTRACT

Wael Helmy Moussa El-Reffaei, Chemical and Technological Studies on Mung bean (*Vigna radiata roxb.*). Unpublished Master of Science, Department of Food Science, Faculty of Agriculture, Ain Shams University (1998).

Mung bean (MB) is a newly introduced legume seeds cultivated by MOA to tests its productivity under the local conditions. The chemical composition of locally produced MB seeds and its defatted form (DWMM) as well as their flour (SMF and GMF), high protein content (SMFHP and GMFHP) and isolate (SMFPI and GMFPI) prepared from ungerminated and germinated MB seeds was carried out. Fatty acid composition and mineral contents of the 8 forms of MB were also investigated. The biological value of MB proteins was estimated by determining the amino acid composition of the different investigated prepared forms. On the other hand, a technological study was undertaken to elucidate the most promising products which could be produced from the different investigated 8 MB forms. However, the functional properties of the various prepared products of MB were studied by estimating the nitrogen solubility and foaming properties as well as water absorption and oil absorption capacities. The physical dough tests for blends of MB products and wheat flour were estimated by farinographs. Furthermore, the sensory evaluation of both cooked MB and

Egyptian baladi bread prepared from MB-wheat flour blends were evaluated.

Key words: Chemical composition, Mung bean, High protein content, Protein isolate, Fatty acid composition, Mineral contents, Amino acid composition, Functional properties, Farinograph, Sensory evaluation.

ACKNOWLEDGMENT

All praises are due to God, who blessed me with kind professors and colleagues, and gave me the support to produce this thesis.

My sincere appreciation and deepest gratitude to Prof. Dr. **I. M. Hassan**, Professor of Food Science and Technology, Faculty of Agriculture, Ain Shams University, for his direct supervision, great helps, valuable suggestions and his continuous encouragement during the whole course of this study.

Deepest thanks and sincere appreciations to Prof. Dr. **M. S. El-Habbal**, Professor of Agronomy, Faculty of Agriculture, Ain Shams University for his supervision, precious advice given throughout the whole study.

Thanks to Dr. **Y.A. Abd El-Daim**, Associate Professor of Food Science and Technology, Faculty of Agriculture, Ain Shams University for supervising this work, and his advice.

Thanks to all members of the Food Science Department, Faculty of Agriculture, Ain Shams University should be considered.

Finally, deepest gratitude for my family for their continuous help and encouragement through this work.

