
**Studies on Nutritional and Processing
Properties of Storage Roots of Different
Yam Bean (*Pachyrhizus spp.*) and Wild
Mung Bean (*Vigna vexillata*) Species**



**Studies on Nutritional and Processing Properties of
Storage Roots of Different Yam Bean (*Pachyrhizus spp.*)
and Wild Mung Bean (*Vigna vexillata*) Species**

Doctoral Dissertation

**Submitted for the degree of Ph.D. of Agricultural Sciences
at the Faculty of Agricultural Sciences
Georg-August-University Göttingen
Germany**

by

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Born in Sumba - Indonesia

Göttingen, February 2006

Bibliografische Information Der Deutschen Bibliothek

Die Deutsche Bibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <http://dnb.ddb.de> abrufbar.

1. Aufl. - Göttingen : Cuvillier, 2006
Zugl.: Göttingen, Univ., Diss., 2006
ISBN 3-86537-786-6

D7

1. Referee : Prof. Dr. Elke Pawelzik
2. Co-referee : Prof. Dr. Heiko. C. Becker

Date of dissertation : February 02, 2006

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Nonnenstieg 8, 37075 Göttingen
Telefon: 0551-54724-0
Telefax: 0551-54724-21
www.cuvillier.de

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1. Auflage, 2006
Gedruckt auf säurefreiem Papier

ISBN 3-86537-786-6

Disertasi ini kupersembahkan untuk:

*Bapak Bin Oni Kale
&
Mama Maria Kale Fernandez*

Yang tersayang
*Christina Dando
Fany Permata Kale
Daniel BinOni Kale*

Gelar ini untuk * **Bu***

We can't solve problems
by using the same kind of thinking.....

we used when we create them...

A. Einstein

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Abbreviations, Symbols and Units

AA	Amino acid
Abs	Absorbance
ATP	Adenosine triphosphate
DIP	2,6-dichlorophenol indophenols
DM	Dry matter
FM	Fresh matter
FAO	Food and Agriculture Organization
Max	Maximum
Min	Minimum
MS	Mean square
R	Pearson's coefficient of correlation
R ²	Coefficient of determination
HPLC	High performance liquid chromatography
Stdv	Standard deviation

Amino acids

Ala	Alanine
Arg	Arginine
Asn	Asparagine
Asp	Aspartic acid
Gln	Glutamine
Glu	Glutamic acid
Gly	Glycine
His	Histidine
Ile	Isoleucine
Leu	Leucine
Lys	Lysine
Met	Methionine
Phe	Phenylalanine
Ser	Serine
Thr	Threonine
Tyr	Tyrosine
Val	Valine

Units

RVA	Rapid visco analyzer
RVU	Rapid visco unit
v/v	Volume per volume
v/w	Volume per weight
AU	Absorbance unit
EAAI	Essential amino acid index