

UNIVERSITI PUTRA MALAYSIA

THERMAL AND HYDROTHERMAL TREATMENT EFFECTS ON ANTINUTRITIONAL AND FUNCTIONAL PROPERTIES OF DEFATTED WINGED BEAN (Psophocarpus tetragonolobus L. DC) SEED PROTEIN POWDERS

SAMI SAADI

FSTM 2015 31



THERMAL AND HYDROTHERMAL TREATMENT EFFECTS ON ANTINUTRITIONAL AND FUNCTIONAL PROPERTIES OF DEFATTED WINGED BEAN (PSOPHOCARPUS TETRAGONOLOBUS L. DC) SEED PROTEINS POWDERS

By SAMI SAADI

Thesis Submitted to School of Graduate Studies, Universiti Putra Malaysia in Fulfillment of the Requirement for the Doctor of Philosophy

December 2014

All material contained within the thesis, including without limitation text, logons, icons, photographs and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia





UNIVERSITI PUTRA MALAYSIA

STATUS CONFIRMATION FOR THESIS / PROJECT REPORT AND COPYRIGHT

ACADEMIC SESSION : TITLE OF THESIS / PROJECT REPORT :		
winged	bean (Psophocarpus t	etragonolobus L. DC) seed protein powders
NAME O	F STUDENT : Sami	Saadi
belonged	-	ight and other intellectual property in the thesis/project report aysia and I agree to allow this thesis/project report to be placed at rms:
1. This th	nesis/project report is th	e <mark>property of U</mark> niversiti Putra M <mark>a</mark> laysia.
2. The lik only.	orary of Universiti Put <mark>ra</mark>	Malaysia has the right to make copies for educational purposes
3. The lik		Malaysia is allowed to make copies of this thesis for academic
I declare	that this thesis is classi	fied as :
*Please ti	ck (V)	
/	CONFIDENTIAL	(Contain confidential information under Official Secret Act 1972).
	RESTRICTED	(Contains restricted information as specified by the organization/institution where research was done).
	OPEN ACCESS	I agree that my thesis/project report to be published as hard copy or online open access.
This thes	sis is submitted for :	
	PATENT	Embargo from until (date)
		Approved by:
	e of Student) o/ Passport No.:	(Signature of Chairman of Supervisory Committee) Name:

[Note: If the thesis is CONFIDENTIAL or RESTRICTED, please attach with the letter from the organization/institution with period and reasons for confidentially or restricted.]

Date:

Date: