

**GENETIC TRANSFORMATION
OF CHLORELLA VULGARIS
(CHLOROPHYTA)**

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NOVEMBER 2009

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DISSERTATION SUBMITTED IN FULFILMENT
OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE

INSTITUTE OF BIOLOGICAL SCIENCES
FACULTY OF SCIENCE
UNIVERSITY OF MALAYA
KUALA LUMPUR

NOVEMBER 2009

UNIVERSITI MALAYA

ORIGINAL LITERARY WORK DECLARATION

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Name of Degree: Master of Science

Title of Dissertation ("this work"):

Genetic Transformation of *Chlorella vulgaris* (Chlorophyta)

Field of Study: Algal Biotechnology

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ACKNOWLEDGEMENTS

A number of people have made substantial contribution to the completion of this project and deserve special recognition. First and foremost, I would like to thank my project supervisor, Prof. Dr. Phang Siew Moi, for guiding and supporting me throughout this research. I would like to thank Dr. Gan Sook Yee for unsparingly enriching my knowledge in the field of molecular biology as well as, teaching me practical ways to handle laboratory experiments.

My utmost gratitude also goes out to my father for his courageous words, mother for her prayers and brother for being there when I needed him. It is all of your constant moral support, encouragement and unceasing prayers that have made this possible.

I thank all my friends, lab assistants and research assistants that have helped me when I encountered problems during my research. I would also like to thank Dr. Ng Ching Ching (UM), Prof. Dr. Norzulani Khalid (UM) and Prof. Dr. Qin Song (IOCAS, China) for helping me in my project.

Above all, I thank my Lord and Savior Jesus Christ for granting me wisdom, knowledge and understanding, so that this project could be accomplished successfully. He assured me that “I can do all things through Christ who strengthens me” (Philippians 4:13) and it is indeed true. Amen! Thank You Everyone!

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LIST OF ABBREVIATIONS, SYMBOLS AND UNITS

ANOVA	Analysis of Variance
AP	Alkaline phosphatase
BME	β -mercaptoethanol
bp	Base pair
BSA	Bovine serum albumin
CaCl ₂	Calcium chloride
CAT	Chloroamphenicol acetyl transferase
Co(NO ₃) ₂ .H ₂ O	Cobalt nitrate
CuSO ₄ .5H ₂ O	Cuprum sulphate
DEPC	Diethylene Pyrocarbonate
DIG	Digoxigenin
DNA	Deoxyribonucleic acid
dNTP	Deoxynucleotide triphosphate
DTT	Dithiothreitol
EDTA	Ethylenediaminetetraacetic acid
EDTA.Na ₂	Ethylenediaminetetraacetic acid disodium
FeSO ₄ .7H ₂ O	Ferum sulphate
GUS	β -glucuronidase gene
H ₃ BO ₄	Boric Acid
HBSAg	Hepatitis B surface antigen
HCL	Hydrochloric acid
He	Helium
Hr	Hour
IgG	Immunoglobulin G
K	Kilo

K_2HPO_4	Dipotassium phosphate
$K_3Fe(CN)_6$	Potassium ferricyanide
$K_4Fe(CN)_6$	Potassium ferrocyanide
KAc	Kalium acetate
Kb	Kilobase
kDa	Kilo Dalton
KH_2PO_4	Potassium dihydrogen phosphate
KOH	Kalium hydroxide
L	Liter
LB	Luria Bertani
LD50	Lethal dose (50%)
μ	micro
μs	micro second
m	mili
M	Molar
$MgSO_4 \cdot 7H_2O$	Magnesium sulphate
$MnCl_2$	Manganese chloride
MoO_3	Molybdenum trioxide
Na_2HPO_4	Sodium phosphate
NaCl	Sodium chloride
$NaNO_3$	Sodium nitrate
NBT	Nitro blue tetrazolium
Nm	Nano meter
OD	Optical density
PAGE	Polyacrylamide gel electrophoresis
PDS	Particle delivery system
pg	Piko gram

Psi	Pound force per square inch
PVDF	Polyvinylidene fluoride
RNA	Ribonucleic acid
SDS	Sodium dodecyl sulphate
TAE	Tris acetate EDTA
TBS	Tris buffer saline
TBST	Tris buffer saline with Tween 20
TE	Tris EDTA
Tris	Tris (hydromethyl) amino-methane
U	Unit
UHQ	Ultra high quality
V	Volt
ZnSO ₄	Zinc sulphate
B	Beta
Λ	Lamda

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