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LIST OF ABBREVIATIONS

MC Microalgal consortium

GWP Global warming potential

Gt Giga tonnes

mL Milliliter

L Liter

 $g dw^{-1}$ Gram per dry weight $g L^{-1} d^{-1}$ Gram per liter per day

mg L⁻¹d⁻¹ Milligram per liter per day

L ha⁻¹ Liter per hectare

M ha Mega hectare

ATP Adenosine-5'-triphosphate

NADPH Nicotinamide adenine dinucleotide phosphate

TAG Triacylglycerols

μmol m⁻² s⁻¹ Micromol per square meter per second

mM Millimol

v/v Volume per volume

OD₆₆₅ Optical density at 665 nm

vvm Volume-to-volume per minute

Chl a Chlorophyll a

kHz Kilohertz

rpm Revolution per minute

ข้อความแห่งการริเริ่ม

1) วิทยานิพนธ์นี้ได้นำเสนอการศึกษาการเพาะเลี้ยงกลุ่มสาหร่ายขนาดเล็กที่ได้รับหัวเชื้อจาก อากาศ โดยใช้ก๊าซคาร์บอนไดออกไซด์เพื่อเพิ่มผลผลิตชีวมวล ลิพิค และการบรรเทาการ ปลดปล่อยก๊าซคาร์บอนไดออกไซด์

2) งานวิจัยที่อยู่ในวิทยานิพนธ์นี้ได้ทำการศึกษาระหว่างเดือนมิถุนายน 2554 ถึงเดือนกรกฎาคม 2558 งานวิจัยนี้ไม่เคยนำเสนอในระดับปริญญาหรืออนุปริญญาของสถาบันการศึกษาใดๆ มา ก่อน



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STATEMENT OF ORIGINALITY

 This thesis was conducted to study the cultivation of microalgal consortium using CO₂ for enhance biomass production, lipid production and CO₂ mitigation of microalgae.

2) The research work contained in this thesis was conducted between June 2011 and July 2015. It has not been previously submitted for a degree or diploma at any educational institution.

