

**ANALYSIS OF ANTI-MÜLLERIAN HORMONE
GENE POLYMORPHISM IN TEMPERATURE-
DEPENDENT SEX REVERSAL NILE TILAPIA
(*Oreochromis niloticus*)**



SAWICHAYA RUEANGSRI

**MASTER OF SCIENCE (AGRICULTURE)
IN ANIMAL SCIENCE**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright © by Chiang Mai University
All rights reserved

**GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
DECEMBER 2015**

**ANALYSIS OF ANTI-MÜLLERIAN HORMONE GENE
POLYMORPHISM IN TEMPERATURE-DEPENDENT
SEX REVERSAL NILE TILAPIA
(*Oreochromis niloticus*)**



SAWICHAYA RUEANGSRI

**A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE (AGRICULTURE)**

IN ANIMAL SCIENCE


**GRADUATE SCHOOL, CHIANG MAI UNIVERSITY
DECEMBER 2015**

**ANALYSIS OF ANTI-MÜLLERIAN HORMONE GENE
POLYMORPHISM IN TEMPERATURE-DEPENDENT
SEX REVERSAL NILE TILAPIA
(*Oreochromis niloticus*)**


SAWICHAYA RUEANGSRI

THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE (AGRICULTURE)
IN ANIMAL SCIENCE

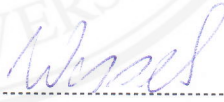
Examination Committee:

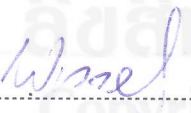

..... Chairman
(Prof. Dr. Christoph Knorr)

Advisory Committee:


..... Advisor
(Asst. Prof. Dr. Kesinee Gatphayak)


..... Member
(Asst. Prof. Dr. Kesinee Gatphayak)


..... Co-advisor
(Dr. Stephan Wessels)


..... Member
(Dr. Stephan Wessels)

18 December 2015

Copyright © by Chiang Mai University

ACKNOWLEDGEMENT

I would like to express my sincere gratitude and appreciation to my advisor, my co-advisor as well as the chairman of the thesis examining committee, Asst. Prof. Dr. Kesinee Gatphayak, Dr. Stephan Wessels and Prof. Christoph Knorr, for her and his invaluable guidance, kindness and always encourages and support me. Without them this thesis would not have been possible.

I am highly thankful to Dr. Liane Magdalena Lühmann, Institute of Veterinary Medicine (IVM), Georg-August- University Göttingen, Germany for her excellent technical assistance and all laboratory persons of the IVM for their friendships and support me during stay in Germany.

Furthermore, I would like to express my appreciation to Assoc. Prof. Dr. Boonlom Cheva-Isarakul for her supports and kindness suggestions. I also appreciate to all lecturers at Department of Animal and Aquatic Sciences, Faculty of Agricultural, Chiang Mai University for their assistance.

I am thankful to all friends of both at the Institute of Veterinary Medicine (IVM), Georg-August-University Göttingen, Germany and Department of Animal and Aquatic Sciences, Faculty of Agricultural, Chiang Mai University, Thailand as well as the other people, who are not mentioned here for their good friendship, supports and encouragement.

Finally, I want to appreciate my beloved family for their wonderful love, supports, encouragement, financial and the precious opportunity that they give me to reach a higher level of education. And I also thanks to all of my lovely friends for their supports and encouragement throughout my life.

Sawichaya Rueangsri