MAJOR PRACTICE IN SWINE PRODUCTION

MARK DOM M. ESTERON

An Undergraduate Major Practice Report Submitted to the Faculty of the Department of
Animal Science, College of Agriculture, Central Luzon State University,
Science City of Muñoz, Nueva Ecija, Philippines
in Partial Fulfillment of the Requirements
for the Degree of

BACHELOR OF SCIENCE IN AGRICULTURE
(Animal Science)

FEBRUARY 2020

ACCEPTANCE SHEET

This major practice report entitled **"MAJOR PRACTICE IN SWINE PRODUCTION,"** prepared and submitted by **MARK DOM M. ESTERON,** in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN AGRICULTURE (ANIMAL SCIENCE),** is hereby accepted:

ERNESTO A. MARTIN, Ph.D.
Adviser

1-9-20
Date Signed

CASIMIRO C. LALUGAR Jr., BSA
Project Manager, CAG Native Pig Project

1-10-20
Date Signed

RANIEL A. VALENCIA, BSA
Department Major Practice Coordinator

01/16/20
Date Signed

Accepted as partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN AGRICULTURE (ANIMAL SCIENCE):**

RAMON CESAR SALAS, Ph.D.
Chair, Department of Animal Science

01/17/20
Date Signed

JOSEPH R. MENDOZA, M.Sc.
College Major Practice Coordinator

01/17/20
Date Signed

ARIEL G. MACTAL, Ph.D.
Dean, College of Agriculture

Jan 20, 2020
Date Signed

BIBLIOGRAPHICAL SKETCH

The author was born on the 17th day of July 1997 at Bonifacio, Cuyapo, Nueva Ecija. He is the youngest child of Mr. Dominador E. Esteron and Mrs. Juliet M. Esteron. He completed his education at Bonifacio Elementary School in 2011 with high honors during the graduation. In 2015, he graduated from his secondary education at Paitan Sur High School at Paitan Sur, Cuyapo, Nueva Ecija, being 2nd honorable mention.

To become a degree holder and a professional, he enrolled at Central Luzon State University and took up Bachelor of Science in Agriculture major in Animal Science with Swine production as field of specialization.

ACKNOWLEDGEMENT

Through the author's hard work he would like to take this opportunity to express his thanks to all who shared their kind and generous help that make this work possible.

Above all, the author extends highest praise to our Almighty God for giving his life, strength, faith, wisdom and blessings to pursue his studies.

The author wishes to express his heartfelt appreciation and deepest gratitude to the following persons for their valuable help toward the completion of this work.

To Dr. Ernesto A. Martin, former Dean of College of Agriculture and as his valuable mentor in native pig production; Dr. Ramon Cesar S. Salas, Chairperson of the Department of Animal Science; Mr. Raniel A. Valencia, College Major Practice Coordinator; and all the staff of Animal Science for sharing their knowledge and skills. To Mr. Casimiro C. Lalugar Jr., Farm manager who allowed him to conduct his major practice in the College of Agriculture Native Pig Project.

To the caretaker of the farm Mr. John Dela Cruz and to the duck research personnel Mr. Emilio Alcantara, Ate Mac, Tata Maxie and his fellow field practitioner, Ms. Beata Gabrielle S. Francisco for the practical knowledge and assistance during the conduct of his field practice and for the moments they shared together which made his stay in the project worthwhile.

To his beloved parents, Mr. Dominador E. Esteron and Mrs. Juliet M. Esteron, for all their sacrifices and hard works, support, guidance, care, unconditional love and encouragement. To his beloved sister Marites E. Manzano and family for their love and support.

Special thanks to his Agri-Dorm family, Mr. James Espiritu, Miguel Laconico, Mark Kenneth Joy Belo, Marvin Ronquilio, Joel Catbagan, Denzl Lomboy, Gelo Cabie, Gilbert Dela Cruz, Waren Casapao for giving comfort and happiness to his college life.

To others who were not mentioned, their contributions will never be forgotten. They are all part of his success.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDIX TABLES

LIST OF APPENDIX RECORDS

LIST OF APPENDIX FIGURES

ABSTRACT

ESTERON, MARK DOM M., Department of Animal Science, College of Agriculture, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines, **February 2020, MAJOR PRACTICE IN SWINE PRODUCTION**

Adviser: ERNESTO A. MARTIN, Ph.D.

The field practice program of the Department of Animal Science, College of Agriculture, Central Luzon State University, Science City of Muñoz, Nueva Ecija is offered to students as an option to the undergraduate major practice. The program aims to expose the students to actual field works and farming conditions.

The major practice was conducted at the College of Agriculture Native Pig Project from June to November 2019. The major practice student was exposed to the different management practices from breeding up to weaning. All farm inputs such as stocks, feeds, veterinary drugs, light water, supplements, housing facilities and equipment were provided by the project.

During the operation, the farm had a litter index of 1.70, average piglet born alive of 4.89 heads with an average birth weight of 0.66 kg and 80% farrowing rate. The project was able to generate a total sales of PhP 90,301.00. Total production expenses incurred was PhP 108,000.00 from feeds and veterinary drugs. Thus, the project incurred a loss of PhP 17,699.00 during the period.

Jones R. (2007).*Farrowing and Lactation in the Sow and Gilt*. Retrieve from, http://www .Thepigs ite.com/articles/1101/farrowing-and-lactation-in-the-sow-and-gilt/o n March 13, 201 9.

King G. (2009). *The importance of Reproductive Performance*. Retrieve, March 26, 2019, from, http: //www.aps.uoguelph.ca/~gking/Ag_2350/pigrepro.htm

Krieg, K. (2015). *Recommended practices for raising pigs from birth to weaning*. Alaska livestock series, lpm- 00845. Page 1- 2 March 13, 2019

Mokokchung. (2012). *Care and Management of Pregnant Sow*. Retrieve, March 26, 20 19, from http://www.kvkmokokchung.in/index.php/2012-04-03-12-21-17/2012 - 04-03 -12-34-32/ leaflets/32-care-management-of-pregnant-sow

Machigan State University Extension (MSUE). (2014).*An inside look at pork processing*. Retrieved February 13, 2019, from, https://www.canr.msu.edu/news/an inside_look_at_pork_processing

National Animal Information Service (NADIS). (2012). *Coccidiosis in Piglets*. Retrieved, February 26, 2019, from, https://www.nadis.org.uk/disease-a-z/pigs /coccid iosis-in-piglets/

National hog farmer. (2019). *10 Steps To Successful Farrowing*. Retrieved February 12, 2019, from https://www.nationalhogfarmer.com/mag/farming_steps_succe ssful farrowing

National Center for Biotechnology Information (NCBI). (2018). *Quality and safety of meat products*. Retrieved February 13, 2019, from, https://www.ncbi.nlm.n ih.gov/pmc/articles/PMC61 11319/

Neovia Philippines. (2016). *A swine production that is significantly increasing in the philippines*. Retrieved February 06, 2019, from https:// www.ph.neovia-group.com/resources/market-insights/swine-production/

Philippine Council for Agriculture, Aquatic and Natural resources (PCCARD). (2007). *Artificial insemination in pigs*. Retrieve, March 26, 2019, from http://www .pcaarrd.dost.gov.ph/home/momentum/swine/index.php/featured-technologi es/124-artificial-insemination-in-pigs

Pig Progress. (2015). *Pig health*. Retrieved February 13, 2019, from, https: //www.pigprogress.net /Health/Articles/2015/10/Preventing-five-major-pig-diseases-in-the-breeding-herd-2685 176W/?Dossier=31548&widgetid=1

Pitcher, P. (2007). *Estrus in Swine*. Retrieve, March 26, 2019, from http://cal.vet.Upenn .edu/projects/swine/bio/fem/estr/hm.html

Pork Information Gateway. (2005). Energy sources for swine diets. Retrieved February 12 2019, from http://porkgateway.org/resource/energy-sources-for-swine-diets/

Pork Information Gateway. (2010). *Protein and Amino Acid Sources for Swine Diets*. Retrieved February 12, 2019, from http://porkgateway.org/resource/ protein-and-amino-acid-sour ces-for-swine-diets/

Philippine Statistic Authority (PSA). (2019). *Swine Situation Report, January - June 2019*. Retrieved, February 06, 2019, from https://psa.gov.ph/content/swine-situation-report-january-june-2017

Queensland Department of Agriculture and Fisheries,(2010). Nutrients and di cts. Retrieved from https://www.daf.qld.gov.au/animal-industries/pigs/feed nutrition/nu trients-diets/nutrient-needs on December 12, 2019.

Santiago, R.C. (2018). *Native Pig Raising*. Retrieved December 12, 2019. From. https://www.Agric ulture.com.ph/2018/10/25/native-pig-raising/

Sharma, M.C. (2013). *Record Keeping: Indian Institute of Veterinary Research,* Izatnaga-243 122, Barielly, Utter Pradesh, India. P. 54 April 19, 2019

Hoff, S. J. (2010). *Environment in swine Housing*. Retrieved, February 26, 2019, from, https://articles .exten sion. Org /page s/27 450/the-environment in-swine-housing

The Pig Site. (2003). Mastitis. Retrieved, February 27, 2019, from, https://thepigsite.Com /disease-guide/mastitis-inflammation-mammary-glands-udder-infection

United State Department of Agriculture (USDA). (2002). *Feed Management of Swine*. Retrieved February 12, 20019, from https://www.aphis .usda.gov/animal _health/nahms/swine/ downloads/swine 2000/Swine2000_is_feedmg mt.pdf

Vignola, M. (2012). *Sow feeding management during lactation*. Retrieved May 1, 2019, from, https://www.2-feeding-management-during-lactation-1-feeding-during -previous_5657/

Whitney, M. (2010). *Lactating Swine Nutrient Recommendations and Feeding Management*. Retrieve, March 26, 2019, from http://pork gateway.org/resou rce/lactating-swine-nutrient -recommendations-and-feeding-man agement/

Wolak, F. J. (1996). *Air Quality and Odor Control from Swine Production Facilities*. Retrieved M ay 1, 2019, from, https://www.heatstress.info/lostproduction /Wher efarmedanimalsbirdsa remostcomfortable/pigthi.aspx