

**A MATHEMATICAL MODEL OF INTER-COLONY  
SPREAD OF AMERICAN FOULBROOD IN EUROPEAN  
HONEYBEES (APIS MELLIFERA L.)**

KIEFFER PATANI SANTOS

A SPECIAL PROBLEM SUBMITTED TO  
THE FACULTY OF THE COLLEGE OF ARTS AND SCIENCES  
UNIVERSITY OF THE PHILIPPINES LOS BAÑOS  
IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE DEGREE OF

BACHELOR OF SCIENCE  
(Applied Mathematics)

June 2023

The Faculty of the Mathematics Division  
Institute of Mathematical Sciences and Physics  
College of Arts and Sciences U.P. Los Baños  
hereby accepts the Thesis entitled

**A MATHEMATICAL MODEL OF THE SPREAD AND  
CONTROL OF AFRICAN SWINE FEVER (ASF) IN THE  
PHILIPPINES**

by  
KIEFFER P. SANTOS

In Partial Fulfillment of the Requirements for the Degree of  
B.S. Applied Mathematics

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DR. EDUARDO O. JATULAN

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Date

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Head, Mathematics Division

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Date

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PROF. EDITHA C. JOSE

Director, Institute of Mathematical Sciences and Physics

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Date