

EVALUATION REPORT OF DOCTORAL THESIS

Title of the thesis

Green strategies in the finishing pig diet: *in vitro* and *in vivo* studies on the use of an olive mill wastewater phenolic concentrate

Name of the PhD candidate

Flavia Ferlisi

Name and affiliation of the referee

Prof. Giuseppe Martino – Università degli Studi di Teramo

Category	Rating	Comments
Research Questions/Set-up		The research can be considered innovative because there is a gap in the current scientific literature regarding the potential positive effects of polyphenol extracts on swine cured products and intestinal ecosystem
Literature Review		The literature included in the thesis is well organized and in line with the information and the topics of the project
Methodology		Methodology is clear and complete, and methods are easily reproducible
Analysis/Presentation of Results		Results are well interpreted and explained with clear tables and graphs
Discussion/Implications		Results are clearly discussed and well-compared with the existing literature about both olive and other natural plant-derived polyphenols – Relevant implications for future research and possible impacts on human health are discussed as well.
Quality of Writing		Overall, the thesis is well written and the ideas are expressed clearly.
Overall Rating		The four chapters of the thesis are well organized and encompass a wide range of <i>in vitro</i> , <i>in vivo</i> and post-slaughtering analyses. Overall, the data obtained in the described experiments represent an interesting contribution to the scientific literature on nutraceuticals and quality of products of animal origin.

Additional comments:

The thesis describes a currently relevant research topic in the field of animal nutrition, focusing on the effects of natural phenolic compounds in swine diet. It includes innovative experiments, ranging from *in vitro* and *in vivo* studies to post-slaughtering outcomes (meat and meat-derived products). It is composed of two papers published in high-impact journals and a third paper which has been submitted. The last manuscript, which examines the effects of polyphenols on meat and meat-derived products, is presented as “in progress”. Therefore, any additional data could further improve the discussion and the understanding of the topic.

Please review the attached evaluation guidelines and provide your assessment below.

Criteria	Grade	Descriptive Anchors
Research Question/Set-up	B	Research questions clearly articulated and sufficient background information included.
Literature Review	A	Identifies relevant research and literature and accurately summarizes and integrates the information.
Methodology	B	Demonstrates proficient knowledge of methodology and gives justification for selection of methods.
Analysis/Presentation of Results	B	Results clearly summarized, discussion of results focused and tied to research question.
Discussion/Implications	B	Discussion of results focused and connected to research questions. Implications for future research discussed.
Quality of Writing	A	Ideas expressed with very good clarity, logic, and conciseness.

Teramo, 20.02.2025

Prof. Giuseppe Martino

