Category	Rating	Comments	
Research Questions/Set-up	В	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	А	The literature included in the thesis is well organized and in line with the information at the topics of the project	
Methodology	В	Methodology is clear and complete, and methods are easily reproducible	
Analysis/Presentation of Results	В	Results are well interpreted and explained with clear tables and graphs	
Discussion/Implications	В	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	А	Overall, the thesis is well written and the ideas are expressed clearly.	
Overall Rating B		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 nutraceutics 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	А	Includes clear description of the issue, identifies gaps in scientific knowledge and/or provides justification for the current research study.
	В	Research questions clearly articulated and sufficient background information included.
	С	Lacks a focused research question and importance is not completely justified.
Literature Review	Α	Identifies relevant research and literature and accurately summarizes and integrates the information.
	В	Cites major works and places them in context.
	С	Fails to cite or assimilate previous works.
Methodology	Α	Demonstrates clear understanding and proper use of methodology, identifies relevant strengths and weaknesses of methods used.
	В	Demonstrates proficient knowledge of methodology and gives justification for selection of methods.
	С	The methodology is not well appropriate for study and understanding is not clearly demonstrated.

Analysis/ Presentation of Results	Α	Results interpreted in light of proposed research question and existing literature. Includes alternative explanations and instructional tables and graphs.
	В	Results clearly summarized, discussion of results focused and tied to research question.
	С	Presentation lacks focus, tables are unorganized, and results produce no insight into proposed question.
Discussion/ Implications	Α	Clearly summarizes the key information gained from the study and describes advancement of knowledge or new insights on an issue
	В	Discussion of results focused and connected to research questions. Implications for future research discussed.
	С	The new knowledge gained from the study and implications of the study are not clearly discussed.
Quality of Writing	Α	Ideas expressed with very good clarity, logic, and conciseness.
	В	Coherent presentation with limited typos and grammatical errors. Logical progression of thought within overall thesis and within each section.
	С	Significant parts difficult to understand, numerous errors. Repetition, poor organization of ideas, and poor writing hinders reader understanding.

Teramo, 20.02.2025

Prof. Giuseppe Martino