

Encontro Investigação Jovem da Universidade do Porto

**BOOK OF
ABSTRACTS**

**06 - 07 - 08
Maio 2026**

19.^a Edição



ORGANIZAÇÃO



APOIO



**Encontro
Investigação
Jovem da
Universidade
do Porto**

**YOUNG
RESEARCHERS
MEETING**

**06 - 07 - 08
Maio 2026**

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ORGANIZAÇÃO



APOIO



TÍTULO | *TITLE*

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Young Researchers Meeting of U.Porto

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Encontro Investigação Jovem da Universidade do Porto



PROGRAM

**06 - 07 - 08
Maio 2026**

19.^a EDIÇÃO

May, 6th

May, 7th

May, 8th

8H	Opening of the secretariat for all participants		
8H30 > 10H30	PARALLEL ORAL SESSIONS I A1 – Criminology and Law I A2 – Health Sciences I A3 – Sport Sciences I A4 – Architecture I A5 – Engineering I A6 – Biological Sciences I	PARALLEL ORAL SESSIONS IV A1 – AgroFood I A2 – Health Sciences IV A3 – Sport Sciences III A4 – Astronomy A5 – Chemistry I A6 – Biological Sciences IV	PARALLEL ORAL SESSIONS VII A1 – Arts I A2 – Health Sciences VII A3 – HSS IV – History, Archeology, Cultural Studies and Communication Sciences A4 – Physics I A5 – Chemistry III A6 – Biological Sciences VII
10H30 > 11H	Coffee Break		
11H > 13H	PARALLEL ORAL SESSIONS II A1 – Criminology and Law II A2 – Health Sciences II A3 – Sport Sciences II A4 – Architecture II A5 – Engineering II A6 – Biological Sciences II	PARALLEL ORAL SESSIONS V A1 – AgroFood II A2 – Health Sciences V A3 – Sport Sciences IV A4 – Maths & Physics A5 – Engineering IV A6 – Biological Sciences V	PARALLEL ORAL SESSIONS VIII A1 – Environment II A2 – Health Sciences VIII A3 – Psychology & Education Sciences III A4 – Physics II A5 – Chemistry IV A6 – Economics & Management
13H > 14H30	Lunch Break		
14H30 > 16H	POSTER SESSION I Architecture Biological Sciences I Criminology and Law Engineering I Health Sciences I Sport Sciences I	POSTER SESSION II AgroFood Biological Sciences II Chemistry Engineering II Health Sciences II Sport Sciences II	POSTER SESSION III Arts Astronomy, Physics & Maths Economics & Management Environment & Geology Health Sciences III History & Sociology Psychology & Education Sciences
16H > 16H30	Coffee Break		
16H30 > 18H30	PARALLEL ORAL SESSIONS III A1 – HSS I – Political Sciences A2 – Health Sciences III A3 – Psychology & Education Sciences I A4 – HSS II – Political Sciences, Sociology and Geography A5 – Engineering III A6 – Biological Sciences III	PARALLEL ORAL SESSIONS VI A1 – Environment I A2 – Health Sciences VI A3 – Psychology & Education Sciences II A4 – HSS III – History of Art A5 – Chemistry II A6 – Biological Sciences VI	PARALLEL ORAL SESSIONS IX A1 – Arts II A2 – Health Sciences IX A3 – Psychology & Education Sciences IV A4 – HSS V – History A5 – HSS VI – Literature and Philosophy A6 – Health Sciences X

24967 | From insect to table: What Bacteriological Hazards are on the Menu?

Isabel Faria¹, Patrícia Pereira¹, Luciana Marques¹, Viviana Oliveira¹, Lúcia Nova^{1,2,3}, Patrícia Antunes^{1,2,3}

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Background & Aim: Alternative proteins, including plant-based and insect-derived sources, are increasingly demanded due to environmental concerns, ethical issues related to animal protein consumption, and the need to sustainably meet the nutritional requirements of a growing global population (1). Edible insects have emerged as a promising solution, offering high protein content, essential vitamins and minerals, and lower greenhouse gas emissions compared to traditional livestock production (1). This study aims to identify and characterize the microbiological hazards associated with the production, processing and commercialization of insects for human consumption. **Methods:** A literature review was conducted using PubMed, Google Scholar, Scopus, Web of Science and guidelines from EFSA, FAO and the European Commission, focusing on the search terms “edible insects” and “microbial contamination”. **Results:** Analysis indicated that while the chitinous exoskeleton of insects may retain spores of *Bacillus* and *Clostridium*, or bacteria such as *Listeria monocytogenes* and *Escherichia coli*, as well as small debris, sieving substantially reduced their presence (2). Nevertheless, blanching and drying steps effectively decreased water activity to levels incompatible with the survival of pathogenic microorganisms (3). No specific pathogens were detected that could compromise the safety of insect-based food products, assuming feed complied with EFSA standards and hygiene practices are adequately applied throughout the production chain. **Conclusions:** This means that when produced under controlled hygienic conditions and following EFSA feed and processing standards, insect-based foods present a low microbiological risk to consumers. These findings reinforce the importance of strict safety and quality control and highlight the potential of edible insects as a sustainable, safe alternative protein source for human nutrition. However, further investigation is needed to clarify the currently available information.

Keywords: insects, alternative protein, microbiological risks

References:

- (1) Liceaga, A. M., Aguilar-Toalá, J. E., Vallejo-Cordoba, B., González-Córdova, A. F., & Hernández-Mendoza, A. (2022). Insects as an alternative protein source. **Annual Review of Food Science and Technology*, 13*(1), 19–34. <https://doi.org/10.1146/annurev-food-052720-112443>
- (2) Vercruysse, V., Janssen, F., Oevelen, D., et al. (2023). High hydrostatic pressure for decontamination of soluble insect proteins. *Innovative Food Science & Emerging Technologies*, 87, 103412. <https://doi.org/10.1016/j.ifset.2023.103412>
- (3) Wang, Y., Wang, Z., Jin, Y., et al. (2023). Edible insect as an alternative protein source: A review on the chemical composition, nutritional value, and applications in food. *Heliyon*, 9(4), e14735. <https://doi.org/10.1016/j.heliyon.2023.e14735>