

Supplementary Material

Valorization of Cereal By-Products from the Milling Industry as a Source of Nutrients and Bioactive Compounds to Boost Resource-Use Efficiency

Rossana V.C. Cardoso, Ângela Fernandes, José Pinela, Maria Inês Dias, Carla Pereira, Tânia C.S. Pires, Márcio Carochó, Esteban Fernández Vasallo, Isabel C.F.R. Ferreira, Lillian Barros

Isolates Identification and Antimicrobial Susceptibility Testing

The microorganisms were clinical isolates from patients hospitalized in various departments of the Local Health Unit of Bragança and Hospital Center of Trás-os-Montes and Alto-Douro Vila Real, Northeast of Portugal. The isolation and characterization of strains, duly approved by the Ethics Committee, was conducted in the CHTMAD (Hospital Center of Trás-os-Montes and Alto-Douro, Chaves), a public institution located in Chaves, Portugal. Microorganisms' identification and susceptibility tests were performed using MicroScan panels (MicroScan®, Siemens Medical Solutions Diagnostics, West Sacramento, CA, USA) by the microdilution plate method. The interpretation criteria were based on Interpretive Breakpoints as indicated in Clinical and Laboratory Standards Institute (CLSI) Document M100-S18 [1] and the report of the *Committee of L'Antibiogramme de la Société Française de Microbiologie* (CA-SFM) [2]. The bacteria resistance profile is shown in Table S1.

Table S1. Resistance profile of the tested Gram-positive and Gram-negative bacteria to different antibiotics. Minimum inhibitory concentration (MIC) in µg/mL.

	Amoxicillin/ clavulanic acid	Amikacin	Ampicillin	Gentamicin	Tobramycin	Vancomycin
Gram-negative bacteria						
<i>Escherichia coli</i>	≤ 8/4 S	na		> 4 R	na	
<i>Klebsiella pneumoniae</i>	≤ 8/4 S	na		≤ 2 S	na	
<i>Morganella morganii</i>	> 16/8 R				≤ 2 S	
<i>Proteus mirabilis</i>						
<i>Pseudomonas aeruginosa</i>	na	≤ 8 S		> 4 R	> 4 R	
Gram-positive bacteria						
<i>Enterococcus faecalis</i>			≤ 4 S			≤ 2 S
<i>Listeria monocytogenes</i>			≤ 0.2 S			na
MRSA			na			≤ 2 S

MRSA- methicillin-resistant *Staphylococcus aureus*; S- Susceptible; I- Intermediate; R- Resistant: this classification was made according to the interpretative breakpoints suggested by Clinical and Laboratory Standards Institute (CLSI) and European Committee on Antimicrobial Susceptibility Testing (EUCAST); na- not applicable.

References

- [1] *Performance Standards for Antimicrobial Susceptibility Testing*; CLSI Document M100-S18; Clinical and Laboratory Standards Institute: Wayne, PA, USA, 2008.
- [2] *Comité de L'Antibiogramme De La Société Française de Microbiologie*; Communiqué 2008 (Edition de Janvier 2008); Société Française de Microbiologie: Paris, France, 2008. (In French)