^{+h}World Congress of Food Science and Technology Greening the Global Food Supply Chain through Innovation in Food Science and Technology

Congress Programme



August 21st – 25th 2016 Royal Dublin Society, Ballsbridge, Dublin, Ireland

() www.iufost2016.com 💓 #IUFoST2016





supported by



Poster Presentations

Tuesday - Innovation in Food Quality and Processing

Board #	Paper	Sumame	Firstname	Title
191	532	Zhang	Jun Long	The evolution of protein structure and water distribution of meat batter under various phase transition temperature
192	1258	Zhang	Zhihang	Evaluation of NaCl diffusion coefficients during ultrasound assisted curing of pork loin under different ultrasonic conditions
193	124	ZHAO	L	Sensory and microbiological quantity evaluation of fried fish cakes using an electronic nose
194	926	Zhou Wei	Duan	"Effect of Vacuum Pre-cooling Treatment on Storage Quality of Mango"
195	974	Zúñiga	Pamela	Ohmic heating/vacuum treatments and cooled storage effect on polyphenols retention of osmodehydrated apples (cv. Fuji).
196	1279	Zuniga-Hansen	Maria Elvira	Effect of Solvent Concentration in the Extraction of Polyphenol Compounds from Artichoke Agro- Industrial Discards

Tuesday - Food Supply Chain and Distribution Systems

Board #	Paper	Surname	Firstname	Title
197	528	Alam	S. M. Nazmul	Safeguarding Safety and quality in shrimp distribution channel
198	980	Ariffin	Siti Hajar	Leaf Injuries and their Effects towards Shelf Life and Quality of Spinach
199	1074	Chung	Hyeseung	Production of Bacterial Cellulose from Various Fruit Juices with Acetate Buffer
200	790	El-Nemr	Israa	Assessment of Food Safety Practices in the Major Produce Market in Doha, Qatar
201	838	Franca	Adriana	Discrimination of coffees from different geographical origins by fluorescence spectroscopy
202	957	Gómez-Limia	Lucía	Proximal composition of the European eel (Anguilla anguilla)
203	890	Hwang	In Min	Mineral Characteristics Analysis of South Korea and China Cabbage Kimchi by ICP-MS and ICP-OES
204	1471	Ireland	Mary	An investigation into the impact of corrugated case base design on box compression strength
205	1473	Ireland	Mary	An investigation of factors affecting the respiration rate of mushrooms
206	1468	Ireland	Mary	Investigation into the viability of Reusing Die Cut Cases for supply of carton board from a Packaging Converter to a Packer Filler
207	666	Joshi	Kompal	Predicting Quality attributes of Strawberry packed under Modified Atmosphere throughout the Cold Chain
208	1221	Jung	Heeyong	Changes in colour and enzymatic activities involved in the browning of the 'Dejima' potato after storage and minimal processing
209	426	Kim	Byeong-Sam	Extending storability of ginger by nano vapor humidification
210	1222	NARAIN	NARENDRA	Bioproduction of aroma compounds using side-stream of soursop fruit
211	1227	Nunes	Maria Lúcia	Evaluation of aromatic and sensory potential of isolated yeasts from Passion Fruit (Passiflora edulis)
212	515	Porcu	Ornella	Comparing Quality Nutrition of Commercial Fruit Flours
213	1174	Ramalhosa	Elsa	Pāo Transmontano: the use of physicochemical characterization and chemometrics in order to achieve the PGI certification
214	904	Reid	Rachael	The microbiology of beef carcasses during chilling
215	1493	Rezaei	Shabnam	An investigation of the effect of storage temperature on proteolysis, sensory and textural properties of traditional tin-packed Lighvan sheep's yogurt
216	183	Sanz	Pedro D.	Impact of Magnetic Freezing in the physicochemical and functional properties of Egg White and Yolk
217	920	Taoukis	Petros	TTI smart labels for monitoring histamine formation in seafood
218	1378	Zhang	Yinglei	The Research on Vinegar Beverage Made of Germinated Black Rice and Black Soybean(GlycinemaxZLZmerr)
219	453	Zhou	Xiujuan	Differentially Characteristic Analysis in Expression and Function of two Homologous Salmonella Serogroup C1 Specific Genes

Pão Transmontano: the use of physicochemical characterization and chemometrics in order to achieve the PGI certification

A. MAGALHÃES¹, E. L. PEREIRA^{1,2}, C. PAWLAK³, R. MALHEIRO¹, E. FERREIRA⁴, J. A. PEREIRA¹ AND E. RAMALHOSA^{1,2}

¹School of Agriculture, Polytechnic Institute of Bragança, Campus de St^a Apolónia, 5300-253 Bragança, Portugal

²CIMO, Polytechnic Institute of Bragança, Campus de St^e Apolónia, 5300-253 Bragança, Portugal

³Universidade Tecnológica Federal do Paraná, Campus Medianeira, 85884-000 Medianeira - Paraná, Brasil

⁴Pão de Gimonde, Av. do Sabor, nº 2, 5300-553 Gimonde - Bragança, Portugal

The purpose of the present work was to perform the physicochemical characterization and chemometrics of a traditional Portuguese bread, called "Pão do Nordeste Transmontano", towards PGI certification application. This bread is typical of the Northeast region of Portugal and has distinguished characteristics. Twenty-four samples were randomly collected in the twelve municipalities that constitute the Northeast region of Portugal. In addition to the food quality parameters a survey was carried out per bakery to collect operational information on the production and marketing.

More than 50% of the bakeries used flours of the types 65 and 55, yeast, water (60-70 L/100 kg flour) and salt (1.2-1.4 kg/100 kg flour). The kneading, leavening and baking times ranged between 15-20, 60-90 and 50-60 min, respectively. The cooking temperature ranged between 220 and 250°C. Concerning marketing, the bread is sold with a weight of 0.5 and 2 Kg, unpackaged or packaged, sliced or whole. Concerning chemical properties, the breads analyzed showed a pH, moisture, ash, fat, protein, dietary fiber and salt contents between 5.0-6.0, 30.0-40.0%, 1.7-2.5% d.w., 2.3-3.1% d.w., 14.5-15.4% d.w., 3.2-4.7% d.w., 0.7-1.0% d.w., respectively. Regarding microbiological analysis, all samples were satisfactory and acceptable in terms of total mesophylls, and yeasts and molds. Moreover, when grouping the values obtained by the two areas that characterize Trás-os-Montes region, *Terra Fria* and *Terra Quente*, no significant differences were observed in almost all parameters of the breads produced in both areas, not being possible to differentiate them and allowing its PGI certification.