

## *Curriculum vitae*

**FAMILY NAME:** QUINTAS

**NAME:** CÉLIA

**BIRTH:** 10/ August/1962

**PLACE OF BIRTH:** Faro-Portugal

**NATIONALITY:** Portuguese

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### **EDUCATION**

#### **Doctor of Philosophy in Agro-Industrial Engineering (PhD) (2001)**

Faculty of Agriculture, Technical University of Lisbon, Portugal

#### **Master in Food Science and Technology (MSc) (1993)**

Laboratory of Microbiology in Gulbenkian Institute of Science, Oeiras, Portugal  
Technical University of Lisbon, Portugal

#### **Degree in Biology (BSc) (1988)**

Department of Biology, Faculty of Sciences, University of Lisbon

### **POSITIONS**

Coordinator Professor, University of Algarve, Institute of Engineering - Faro, Portugal, from March 2015

Adjunct Professor, University of Algarve, Institute of Engineering - Faro, Portugal, 1997 to 2015

Teaching Assistant, University of Algarve, Institute of Engineering - Faro, Portugal 1989-1997

### **TEACHING**

Food Microbiology (Food Engineering Degree-2<sup>nd</sup> Year)

Industrial Microbiology (Master in Food Technology)

Biology of Microorganisms II (Eucaryotes-Micology) (Master in Molecular Biology and Microbiology)

Food Fermentation (Food Engineering Degree -3<sup>rd</sup> Year)

Oenology (Master in Food Technology)

## MAIN AREA OF SCIENTIFIC ACTIVITY

Food Production

Food Fermentation

Mediterranean food production: Table olive production, Wine production, Bread production

Yeasts isolated from plant material

Emergent pathogens: *Cronobacter* spp. (*Enterobacter sakazakii*)

Microbiological quality of fresh cut fruit and vegetables

## RECENT PROJECTS

“Evaluation of the biological quality and nutritional characterization of crushed table olives of the Maçanilha cultivar”. QREN VI nº 23736 (2013-2014) (Principal Investigator).

“A novel approach to control pathogen contamination and enhance safety and quality on fresh-cut fruit” (SafeFCF). PTDC/AGR-ALI/111687/2009 (2011-2014) (Principal Investigator).

“Emerging postharvest technologies to enhance safety and quality of fresh fruits”. (TECHNOPOSTHARVEST) PTDC/AGR-ALI/64295/2006 (2007-2010) (Collaboration).

Remodelling Civil Engineering Laboratories into Microbiology/Biology Laboratories. Programa Operacional Ciência e Inovação 2010 (POCI) (Medida IV/ Acção IV. 4.1 “ Infra-Estruturas do Ensino Superior”. October 2006 – May 2007.

“Investigation of the Presence of the Emergent Pathogen *Enterobacter sakazakii* in Foods and Other Habitats: Implications in Food Safety”. Calouste Gulbenkian’s Foundation. (2004 – 2006).

## PUBLICATIONS

### Thesis

#### PhD in Agro-Industrial Engineering

Title of the thesis: “Aspects of cellular permeability involved in the tolerance to food preservatives in yeasts causing food deterioration” Instituto Superior de Agronomia, Universidade Técnica de Lisboa, 2001.

#### MSc in Food Science and Technology

Title of the thesis: “The effect of benzoic acid in the growth of *Zygosaccharomyces bailii*”

Instituto Superior de Agronomia, Universidade Técnica de Lisboa, 1993.

#### **PUBLICATIONS (ISI - JOURNALS)**

Graça, A., Esteves, E., Nunes, C., Abadias, M., Quintas, C. (2017) Microbiological quality and safety of minimally processed fruits in the marketplace of southern Portugal. *Food Control*. 73: 775-783. <http://dx.doi.org/10.1016/j.foodcont.2016.09.046>

Santo, D., Graça, A., Nunes, C., Quintas, C. (2016) Survival and growth of *Cronobacter sakazakii* on fresh-cut fruit and the effect of UV-C illumination and electrolyzed water in the reduction of its population. *International Journal of Food Microbiology*. 231 10–15. doi:10.1016/j.ijfoodmicro.2016.04.023

Mateus, T., Santo, D., Saúde, C., Pires-Cabral, P., Quintas, C. (2016) The effect of NaCl reduction in the microbiological quality of cracked green table olives of the Maçanilha Algarvia cultivar. *International Journal of Food Microbiology*. 218: 57-65. doi:10.1016/j.ijfoodmicro.2015.11.008

Graça, A., Santo, D., Esteves, E., Nunes, C., Abadias, M., Quintas, C. (2015) Evaluation of microbial quality and yeast diversity in fresh-cut apple. *Food Microbiology*. 51: 179-185. DOI-10.1016/j.fm.2015.06.003

Alves, M, Esteves, E, Quintas, C. (2015) Effect of preservatives and acidifying agents on the shelf life of packed cracked green table olives from Maçanilha cultivar. *Food Packaging and Shelf live*. 5: 32-40 10.1016/j.fpsl.2015.05.001.

Rodrigues B, Peinado JM, Raposo S, Constantino A, Quintas C, Lima-Costa ME (2015) Kinetic and energetic parameters of carob wastes fermentation by *Saccharomyces cerevisiae*: Crabtree effect, ethanol toxicity and invertase repression. *Journal of Microbiology and Biotechnology*. 25 (6) 837-844.

Graça, A., Santo, D., Esteves, E., Nunes, C., Abadias, M., Quintas, C. (2015) Evaluation of microbial quality and yeast diversity in fresh-cut apple. *Food Microbiology*. 51: 179-185. DOI-10.1016/j.fm.2015.06.003

Alves, M, Esteves, E, Quintas, C. (2015) Effect of preservatives and acidifying agents on the shelf life of packed cracked green table olives from Maçanilha cultivar. *Food Packaging and Shelf live*. 5: 32-40 10.1016/j.fpsl.2015.05.001.

Rodrigues B, Peinado JM, Raposo S, Constantino A, Quintas C, Lima-Costa ME (2015) Kinetic and energetic parameters of carob wastes fermentation by *Saccharomyces cerevisiae*: Crabtree effect, ethanol toxicity and invertase repression. *Journal of Microbiology and Biotechnology*. 25 (6) 837-844.

Graça, A., Salazar, M., **Quintas, C.**, Nunes, C. (2013) Low dose UV-C illumination as an eco-innovative disinfection system on minimally processed apple. *Postharvest Biology and Technology*. 85:1-7 DOI: 10.1016/j.postharvbio.2013.04.013.

Grevenstuk, T., Gonçalves, A., Domingos, T., **Quintas, C.**, van der Hooft J.J.J., Vervoort, J., Romano, A. (2012) Inhibitory activity of plumbagin produced by *Drosera intermedia* on food spoilage fungi. *Journal of the Science of Food and Agriculture*. 92 (8): 1638–1642.

Anjos, J., Fernandes, C., **Quintas, C.**, Abrunheiro, A., Silva, B., Gow, N., Gonçalves, T. (2012)  $\beta(1,3)$ -Glucan synthase complex from *Alternaria infectoria*, a rare dematiaceous human pathogen". *Medical Mycology*. 50: 716-725 DOI:10.3109/13693786.2012.675525.

Santo, D, Galego, L., Gonçalves, T., **Quintas, C.** 2012. Yeast diversity in the Mediterranean strawberry tree (*Arbutus unedo* L.) fruits' fermentations. *Food Research International*. DOI: 10.1016/j.foodres.2012.01.009.

Alves, M., Gonçalves, T., **Quintas, C.** (2012). Microbial quality and yeast population dynamics in cracked green table olives' fermentations. *Food Control*. 23(2):363-368. doi:10.1016/j.foodcont.2011.07.033.

J. Chap, P. Jackson, R. Siqueira, N. Gaspar, **C. Quintas**, J. Park, T. Osaili, R. Shaker, Z. Jaradat, S.H.P. Hartantyo, N. Abdullah Sani, S. Estuningsih, S.J. Forsythe (2009). International survey of *Cronobacter sakazakii* and other *Cronobacter* spp. in follow up formulas and infant foods. *International Journal of Food Microbiology*. 136, 185-188. doi:10.1016/j.ijfoodmicro.2009.08.005.

Grevenstuk, T., Gonçalves S., Almeida S., Coelho N., **Quintas C.**, Gaspar M. N., Romano, A. (2009). Evaluation of the Antioxidant and Antimicrobial Properties of *in vitro* Cultured *Drosera intermedia* Extracts. *Natural Product Communications*. 4, 1063-1068.

Gonçalves S, **Quintas C**, Gaspar M. N., Nogueira, J. M. F., Romano A. (2009). Antimicrobial activity of *Drosophyllum lusitanicum* leaf extract, an endemic Mediterranean insectivorous plant. *Natural Product Research*. 23, 219-229. URL: <http://dx.doi.org/10.1080/14786410801972870>.

Cavaco, T; Longuinho, C; **Quintas, C.**; Carvalho, I., S. (2007). Chemical and Microbial Changes during natural fermentation of strawberry tree (*Arbutus unedo* L.) fruits. *Journal of Food Biochemistry*. 31, 715-725.

**Quintas, C.**; Sotoca, R.; Loureiro-Dias, M. C.; Peinado J. M. (2005). A Model of the specific growth rate inhibition by weak acids in yeasts based on energy requirements. *International Journal of Food Microbiology*. 100, 125-130.

**Quintas, C.**; Lima-Costa, E.; Loureiro-Dias, M. C. (2000). The effect of ethanol on the plasma membrane permeability of spoilage yeasts. *Food Technology and Biotechnology* 38, 47-51.

Almagro, A.; Prista, C.; Castro, S.; **Quintas, C.**; Madeira-Lopes, A.; Ramos, J.; Loureiro-Dias, M. C. (2000). Effects of salts on *Debaryomyces hansenii* and *Saccharomyces cerevisiae* under stress conditions. *International Journal of Food Microbiology* 56, 191-197.

## **Book Chapters**

Alves, M., **Quintas, C.** (2016) Traditional green table olives from the south of Portugal. In Kristbergsson, K. and Oliveira, J. (ed), *Traditional Foods - General and Consumer Aspects, Integrating Food Science and Engineering Knowledge Into the Food Chain* 10. Springer. ISEKI Food Series Volume 10, pp 367-375. Springer US New York. DOI 10.1007/978-1-4899-7648-2\_30; Print ISBN 978-1-4899-7646-8; Online ISBN 978-1-4899-7648-2,

Graça, A., Nunes, C., Santo, D., **Quintas, C.** (2012) Evaluación de la calidad microbiológica de la manzana mínimamente procesada en el Sur de Portugal. In Recasens, I., Graell, J., Echeverría, G. (eds). *Avances en poscosecha de frutas e hortalizas*, 307 - 311. Lleida: Ediciones de la Universitat de Lleida. ISBN: 978-84-695-4683-3.

Nunes, C., Lourenço, A., Graça, A., Salazar, M., Mendes, S., **Quintas, C.** (2012) Uso de iluminación UV-C en la reducción de la contaminación microbiológica de naranja mínimamente procesada. In Recasens, I., Graell, J., Echeverría, G. (eds) *Avances en poscosecha de frutas e hortalizas*, 265 - 269. Lleida: Ediciones de la Universitat de Lleida. ISBN: 978-84-695-4683-3.

Lourenço, A., Graça, A., Salazar, M., **Quintas, C.**, Nunes, C. (2012) Evaluación de la capacidad de sobrevivencia e crecimiento de patógenos de transmisión alimentaria en naranja mínimamente procesada. In Recasens, I., Graell, J., Echeverría, G. (eds) *Avances en poscosecha de frutas e hortalizas*, 259 - 263. Lleida: Ediciones de la Universitat de Lleida. ISBN: 978-84-695-4683-3.

**Quintas, C.** (2011). *Fruit and Vegetables: Microorganisms and Safety*. In Cruz, R. (ed) *Practical Food and Research*. New York: Nova Science Publishers, Inc.

Rodrigues N, Cavaco T, **Quintas C.** (2010). Cracked green table olive from the south of Portugal: the influence of different brining conditions. In. *Environmentally Friendly and*

Safe Technologies for Quality of Fruits and Vegetables. Nunes C (ed). Universidade do Algarve, Faro. pp: 232. ISBN: 978-989-8472-01-4

## ABSTRACTS IN CONFERENCES

### Oral Communications

Santo, D., Graça, A., Quintas, C. (2014) *Cronobacter sakazakii* in fresh cut melon: the effect of UV-C illumination and electrolyzed water as disinfection systems. International Food Congress-Novel Approaches in Food Industry (NAFI 2014) Kusadasi, Turquia, (26-29 May 2014).

Graça, A., Santo, D., Quintas, C., Salazar, M., Nunes C. (2013) Electrolyzed water and UV-C illumination as eco-innovative disinfection systems for minimally-processed pears. 2013 EFFoST Annual Meeting: Bio-based Technologies in the Context of European Food Innovation Systems. Bologna, Italy, (12-15 November).

Graça, A., Quintas, C., Abadias, M., Usall, J., Salazar, M., Nunes, C. (2010) Efficacy of electrolyzed water to inactivate foodborne pathogens on fresh-cut apples. 28th International Horticultural Congress (IHCC2010). Lisbon, Portugal, 22-27 August.

Quintas, C., Alves, M. C. (2011) Elaboración de la aceituna verde y madura en el Algarve, "Jornada La Cadena de Valor Agroalimentaria: La Aceituna de Mesa" La Fundación para el Fomento y Promoción de Aceituna de Mesa, Seville.

Graça, A., Quintas, C., Abadias, M., Usall, J., Salazar, M., Nunes, C. (2010) Efficacy of electrolyzed water to inactivate foodborne pathogens on fresh-cut apples, 28th International Horticultural Congress (IHCC2010). Lisbon, Agosto.

Alves, M. C., Quintas, C. (2010) Azeitona de mesa no Algarve, "Jornada en torno a la Aceituna de Mesa Puesta en común de experiencias Algarve-Andalucía" La Fundación para el Fomento y Promoción de Aceituna de Mesa, Sevilha.

Santo, D.; Diniz, A.; Quintas, C.; Gaspar, N. (2007) Isolation of *Enterobacter sakazakii* from various sources. *Experimental Pathology and Health Sciences*, 1: 62.

Quintas, C.; Sotoca, R.; Loureiro-Dias, M. C.; Peinado J. M. (2003) A model of the specific growth rate inhibition by weak acids in yeasts based on energy requirements. *Predictive Modeling in Foods*. 4th International Conference. Conference Proceedings. Quimper, France. p.78-80.

Quintas, C.; Sotoca, R.; Loureiro-Dias, M. C.; Peinado, J. M. (2001) Modelo matemático da inibição do crescimento de leveduras por ácidos fracos. Alcochete: 9<sup>as</sup> Jornadas de Biologia de Leveduras.

Quintas, C.; Ludovico, P.; Prudêncio, C.; Sousa, M. J.; Sansonetty, F; Loureiro-Dias, M. C.; Corte-Real, M. (2000) The efflux of fluorescein and benzoate is mediated by an active extrusion system in *Zygosaccharomyces bailii*. Madrid: 8<sup>as</sup> Jornadas de Biologia de Levaduras.

Quintas, C.; Loureiro-Dias, M. C. (1999) Efeito do etanol na permeabilidade da membrana plasmática de leveduras de contaminação alimentar. Lisboa: 7<sup>as</sup> Jornadas de Biologia de Leveduras.

## Posters

T. Mateus, P. Pires-Cabral, C. Quintas (2016) Microbiological quality of split green table olives' fermentation of the cultivar Cobrançosa. 25th International ICFMH Conference-FoodMicro 2016, Dublin, Irlanda, 19-22 de julho.

Graça, A., Santo, D., Nunes, C., Quintas, C. (2016) Survival and growth of *Escherichia coli*, *Cronobacter sakazakii*, *Salmonella enterica* and *Listeria* spp., and their reduction using ultraviolet-C and electrolyzed water, on fresh-cut mangoes. 25th International ICFMH Conference-FoodMicro 2016, Dublin, Irlanda, 19-22 de julho.

Barros, T., Nunes, P., Pires-Cabral, P., Quintas, C. (2016) Microbiological characterization of table olives produced in South Portugal. 25th International ICFMH Conference-FoodMicro 2016, Dublin, Irlanda, 19-22 de julho.

Saúde, C., Quintas, C., Pires-Cabral, P (2014) Cracked Green Table Olives Produced with Low NaCl Content. International Food Congress - Novel Approaches in Food Industry (NAFI 2014), Kusadasi, Turquia. 26-29 May.

Lopes, J., Graça, A., Santo, D., Quintas, C. (2014) Microbial quality and spoilage of minimally processed fruit. International Food Congress - Novel Approaches in Food Industry (NAFI 2014) Kusadasi, Turquia. 26-29 May.

Barros, S., Quintas, C. (2014) Technological properties of yeasts isolated from table olives fermentations. International Food Congress - Novel Approaches in Food Industry (NAFI 2014) Kusadasi, Turquia. 26-29 May.

Graça, A., Santo, D., Nunes, C., Lopes, J., Esteves, E., Quintas C. (2013) Evaluation of microbial quality and yeast diversity in fresh cut apple sold in Southern Portugal. 2013

EFFoST Annual Meeting: Bio-based Technologies in the Context of European Food Innovation Systems, Bologna, Italy, 12 - 15 november.

Romão, H., Barros, S., Rodrigues, N., Quintas, C (2013) Biotechnological properties of yeasts isolated from fermentation processes. FaBE 2013 - INTERNATIONAL CONFERENCE on FOOD and BIOSYSTEMS ENGINEERING, Skiathos, Grecia, 30 maio - 2 junho.

Graça, A., Nunes, C., Quintas, C. (2012) Microbiological quality of fresh-cut fruit commercialized in the south of Portugal. 23rd International ICFMH Symposium FoodMicro (Global Issues in Food Microbiology), Istanbul, Turquia, 3 - 7 setembro.

Graça, A, Salazar, M., Quintas, C, Mendes, S., Nunes, C, (2012) UV-C illumination as an eco-innovative disinfection system for the fresh-cut industry. 23rd International ICFMH Symposium FoodMicro (Global Issues in Food Microbiology), Istambul, Turquia, 3 - 7 setembro.

Rodrigues, N., Quintas, C. (2012) Microbiological quality of cracked green table olives commercialized in the South of Portugal. IV International Table Olive Conference, Cordoba, Spain. (16 e 17 de Fevereiro de 2012)

Santo, D., Barros, S., Quintas, C. (2011) Killer activity and ethanol tolerance of *Saccharomyces cerevisiae* isolates. 2nd Iseki Conference. Milão, Italia 31 de Agosto a 2 de Setembro.

Rodrigues, N., Quintas, C. (2011). Yeast microbiota of natural green table olives from Portugal. Euro-mediterranean Symposium for Fruit & Vegetable Processing. Avignon, França.

Santo, D. E., Galego, L., Gaspar, M. N., Gonçalves, T., Quintas, C. (2010) Yeast population dynamics during the natural fermentation of the Portuguese spirit aguardente de medronho. Annual Meeting and Food Expo, Institute of Food Technologists. Book of Abstracts. Chicago, USA.

Alves, M., Huges, S., N. Gaspar, Esteves, E., Quintas, C. (2010) Effect of different additives in packed cracked green table olives. III International Table Olive Conference, SanLucar La Mayor, Sevilha, Espanha.

Gonçalves, S., Domingos T., Costa, P., Quintas, C., Romano, A. (2009) Antifungal and antioxidant activities of extracts from *Drosophyllum lusitanicum*. *Planta Medica* 75: 1058.

Chap, J.; Jackson, P.; Siqueira, R.; Gaspar, N.; Quintas, C.; Park, J.; Osaili, T.; Shaker, R.; Jaradat, Z.; Hartantyo, S. H. P.; Abdullah Sani, N.; Estuningsih, S.; Forsythe, S. J. (2009) International Survey of *Cronobacter sakazakii* and other *Cronobacter* spp. In Follow up Formulas and other Infant Foods. 1st International Conference on *Cronobacter* (*Enterobacter sakazakii*). University College Dublin. Ireland. P12.



Lovric, H.; Rodrigues, N.; Quintas, C.; Gaspar, N. (2008) *Cronobacter (Enterobacter sakazakii)* in Baby Food. IAFP's Fourth European Symposium on Food Safety: Advancements in Food Safety. Lisbon, Portugal. P26.

Conceição, I.; Cristóvão D.; Teles, A.; Ferreira, N.; Cavaco, T.; Gaspar, N.; Quintas, C. (2008) Olives's fermentation: Study performed during Fermented Foods' laboratory sessions. 1st International ISEKI\_Food Conference: Bridging Training and Research for Industry and the Wider Community. Porto, Portugal. T2/P46. p. 118.

Quintas, C.; Oliveira, S.; Galego, L.; Gaspar, N. (2007) Effect of different processing and brining treatments on the fermentation of traditional green olives from the south of Portugal. II International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld-2007). Book of Abstracts. Seville, Spain, p.324.

Santo, D.; Diniz, A.; Quintas, C.; Gaspar, N. (2007) Isolation of *Enterobacter sakazakii* from various sources. Experimental Pathology and Health Sciences, 1: 62.

Paulo, C., Marques, J.M., Mourão, C., Nogueira, C., Alves, M., Meliço-Silvestre, A., Alves, A.F., Quintas, C., Gonçalves, T. (2007) Understanding yeast infections epidemiology: a revision of the diagnosis/identification procedures applied to the Portuguese population. Journal of Chemotherapy, 19 (suppl 3): 65.

Dinis, A.; Quintas, C.; Gaspar, M. (2006) *Enterobacter sakazakii* in carob and its subproducts used in the food industry. Annual Meeting and Food Expo, Institute of Food Technologists. Book of Abstracts. Orlando, Florida. 003A40 p. 12.

Santo, D.; Dinis, A.S.; Quintas, C.; Gaspar, M.N.. (2006) *Enterobacter sakazakii* in aromatic herbs. 2nd International Congress on Bioprocesses in the Food Industries. Congress Proceedings. Patras, Grécia, p. 140.

Oliveira, S. R.; Quintas, C.; Galego, L; Gaspar, M. N. (2006) Traditional processing of green olives from the south of Portugal. 1st Conference Traditional Food Processing and Technological Innovation, Faro, Portugal.

Peinado, J. M.; Leyva, J. S.; Sotoca, R.; Quintas, C.; Loureiro-Dias, M. C. (2005) Benzoic acid does not inhibit yeast growth by decreasing the glycolytic flux but enhancing death of sensitive cells. XXIVth International Specialized Symposium on Yeasts. Oropesa del Mar, Castellón, Spain, p. 172.

Quintas, C.; Loureiro-Dias, M.C. (1998) Comparison of the sensitivity to ethanol in some food spoilage yeasts. 19th ISSY – Yeast in the Production and Spoilage of Food and Beverages. Abstract Book. Braga, Portugal. P3.18, p. 134.

Almagro, A.; Prista, C.; Castro, S.; Quintas, C.; Ramos, J.; Madeira-Lopes, A.; Loureiro-Dias, M. C. (1998) Effect of salts on growth and thermal death of *Debaryomyces hansenii* and *Saccharomyces cerevisiae* under stress conditions. 19th ISSY – Yeast in the Production and Spoilage of Food and Beverages. Abstract Book. Braga, Portugal P6.2, p. 189.

Quintas, C.; Loureiro-Dias, M. C. (1992) The effect of Benzoic Acid on the Growth of *Zygosaccharomyces bailii*. Eighth International Symposium on Yeasts - Abstracts, Georgia State University, Atlanta.