Prof Albert Mas research details:

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Research responsibilities:

Research Group leader (Oenological Biotechnology, 1995-2018). Leader of several European and National Grants and contracts with private industries. Editor of International Journal of Food Microbiology and Associate editor of Frontiers in Microbiology.

Articles:

Main indicators: H number: 43 (Scopus), 53 (Google Scholar)
Number of articles: 176

Most relevant articles (last ten years):

MJ Torija, E Mateo, JM Guillamón, A Mas. Identification and quantification of acetic acid bacteria in wine and vinegar by TaqMan-MGB probes. *Food Microbiology*, 27, 257-265, 2010.

I Andorrà, M Berradre, N Rozés, A Mas, JM Guillamón, B Esteve-Zarzoso. Effect of pure and mixed cultures of the main yeast species on grape must fermentations. *European Food Research and Technology* 231, 215-224, 2010.

I Andorrà, B Esteve-Zarzoso, JM Guillamón, A Mas: Determination of viable wine yeast using DNA binding dyes and quantitative PCR. *International Journal of Food Microbiology*,144, 257-262, 2010.

I Andorra, M Monteiro, B Esteve-Zarzoso, H Albergaria, A Mas. Analysis and direct quantification of *Saccharomyces cerevisiae* and *Hanseniaspora guilliermondii* populations during alcoholic fermentation by fluorescence *in situ* hybridisation, flow cytometry and quantitative PCR. *Food Microbiology* 28, 1483-1491, 2011.

MI Rodriguez -Naranjo, MJ Torija, A Mas, E Cantos-Villar, MC Garcia-Parrilla. Production of melatonin by *Saccharomyces* strains under growth and fermentation conditions. *Journal of Pineal Research* 53, 219-224, 2012.

MJ Valera, MJ Torija, A Mas, E Mateo. *Acetobacter malorum* and *Acetobacter cerevisiae* identification and quantification by Real-Time PCR with TaqMan-MGB probes. *Food Microbiology*, 36, 30-39, 2013.

C Wang, B Esteve-Zarzoso, A Mas. Monitoring of Saccharomyces cerevisiae, Hanseniaspora uvarum, and Starmarella bacillaris (synonim Candida zemplinina) populations during alcoholic fermentation by flurorescence in situ hybridisation. *International Journal of Food Microbiology*, 191, 1-9, 2014.

E González-Royo, O Pascual, N Kountoudakis, M Esteruelas, B Esteve-Zarzoso, A Mas, JM Canals, F Zamora. Oenological Consequences of Sequential Inoculation with Non-*Saccharomyces* Yeasts (*Torulaspora delbrueckii* or *Metschnikowia pulcherrima*) and *Saccharomyces cerevisiae* in Base Wine for Sparkling Wine Production. *European Food Research and Technology*, 240: 999-1012, 2015

C Wang, A Mas, B Esteve-Zarzoso. Interaction between *Saccharomyces cerevisiae* and *Hanseniaspora uvarum* during alcoholic fermentation. *International Journal of Food Microbiology*, 206, 67-74, 2015

C Wang, D García-Fernández, B Esteve-Zarzoso, A Mas. Fungal diversity in grape must and wine fermentation assessed by massive sequencing, quantitative PCR and DGGE. *Frontiers in Microbiology*, 6:1156. 2015

J Lleixà, V Martín, MC Portillo, F. Carrau, G Beltran, A. Mas. Comparison of the performances of *Hanseniaspora vineae* and *Saccahromyces cerevisiae* during winemaking. *Frontiers in Microbiology*, 7, 338, 2016.

C Wang, A Mas, B Esteve-Zarzoso. The Interaction between Saccharomyces cerevisiae and Non-Saccharomyces Yeast during Alcoholic Fermentation is Species and Strain Specific. *Frontiers in Microbiology*, 7, 502, 2016.

V Martín, A. Mas, F Carrau, E Dellacasa, E Boido. Effect of yeast assimilable nitrogen on the synthesis of phenolic aroma compounds by Hanseniaspora vineae strains. *Yeast*, 33: 323-328, 2016

C Jara, F Laurie, A Mas, J Romero. Microbial terroir in Chilean valleys. Diversity of non-conventional yeast. *Frontiers in Microbiology*, 7: 663, 2016

MC Portillo, A Mas. Analysis of microbial diversity and dynamics during wine fermentation of Grenache grape variety by high-throughput barcoding sequencing. *LWT-Food Science and Technology*, 72, 317-321, 2016

Lleixà J, Manzano M, Mas A and Portillo MC (2016) *Saccharomyces* and non-*Saccharomyces* Competition during Microvinification under Different Sugar and Nitrogen Conditions. *Frontiers in Microbiol*ogy 7:1959.

MJ Valera, F. Sainz, A Mas, MJ Torija: Effect of chitosan and SO_2 on viability of Acetobacter strains in wine. *International Journal of Food Microbiology*, 246, 1-4, 2017

González B, Mas A, Beltran G, Cullen PJ and Torija MJ (2017) Role of Mitochondrial Retrograde Pathway in Regulating Ethanol-Inducible Filamentous Growth in Yeast. *Frontiers in Physiology* 8:148.

Vázquez J, González B, Sempere V, Mas A, Torija MJ, Beltran G (2017) Melatonin Reduces Oxidative Stress Damage Induced by Hydrogen Peroxide in Saccharomyces cerevisiae. *Frontiers in Microbiology* 8:1066.

Padilla B, Zulian L, Ferreres À, Pastor R, Esteve-Zarzoso, B Beltran G, Mas A (2017) Sequential Inoculation of Native Non-*Saccharomyces* and *Saccharomyces cerevisiae*, Strains for Wine Making. *Frontiers in Microbiology* 8:1293.

C Vendramini, G Beltran, Nadai C, Giacomini A, Mas A, Corich C (2017). The role of nitrogen uptake on the competition ability of three vineyard *Saccharomyces cerevisiae* strains. *International Journal of Food Microbiology*, 259, 1-11

Kioroglou D., LLeixá J., Mas A., Portillo M.C. (2018). Massive Sequencing: A New Tool for the Control of Alcoholic Fermentation in Wine? *Fermentation*, 4, 7;

Sunyer-Figueres M, Wang C, Mas A. Analysis of RNA stability for the detection and quantification of wine yeast by quantitative PCR. *International Journal of Food Microbiology*, 270, 1-4, 2018.

Lleixà J, Martín V, Giorello F, Portillo MC, Carrau F, Beltran G and Mas A (2019) Analysis of the NCR Mechanisms in *Hanseniaspora vineae* and *Saccharomyces cerevisiae* During Winemaking. *Frontiers in Genetics* 9:747doi: 10.3389/fgene.2018.00747

Morcillo-Parra MA, Beltran G., Mas A., Torija MJ (2019) Determination of melatonin by a whole cell bioassay in fermented beverages. *Scientific Reports*, 9:9120 | https://doi.org/10.1038/s41598-019-45645-7

Morcillo-Parra MA, Valera MJ, Beltran G, Mas A and Torija MJ (2019) Glycolytic Proteins Interact With Intracellular Melatonin in Saccharomyces cerevisiae. *Frontiers in Microbiology* 10:2424. doi: 10.3389/fmicb.2019.02424

Cibrario A, Avramova M, Dimopoulou M, Magani M, Cécile Miot-Sertier C, Mas A, Portillo MC, Ballestra P, Albertin W, Masneuf-Pomarede I, Dols-Lafargue M Brettanomyces bruxellensis wine isolates show high geographical dispersal and long persistence in cellars. *PlosOne* 14 (12): e0222749. https://doi.org/10.1371/journal.pone.0222749

Kioroglou D, Kraeva-Deloire E, Schmidtke L, Mas A, Portillo M (2019) Geographical Origin Has a Greater Impact on Grape Berry Fungal Community than Grape Variety and Maturation State. *Microorganisms*, 7(12), 669; https://doi.org/10.3390/microorganisms7120669

Morcillo-Parra MA, González, B, Beltran G, Mas A, Torija MJ (2020) Melatonin and glycolytic protein interaction are related to yeast fermentative capacity. *Food Microbiology* 87 103398. https://doi.org/10.1016/j.fm.2019.103398

Roca-Mesa H, Sendra S, Mas A, Beltran G, Torija MJ (2020). Nitrogen Preferences during Alcoholic Fermentation of Different Non-Saccharomyces Yeasts of Oenological Interest. *Microorganisms* 8, 157; doi:10.3390/microorganisms8020157

Zhu X, Navarro Y, Mas A, Torija MJ, Beltran G (2020) A rapid method for selecting Non-*Saccharomyces* strains with low ethanol yield. *Microorganisms*, 8, 658. https://doi/10.3390/microorganisms8050658

Morcillo-Parra MA, Beltran G, Mas A, Torija MJ (2020) Effect of several nutrients and environmental conditions on intracellular Melatonin synthesis in *Saccharomyces cerevisiae*. *Microorganisms*, 8, 853. https://doi.org/10.3390/microorganisms8060853

Kioroglou D, Mas A, Portillo M (2020) High throughput sequencing approach to analyze the effect of ageing time and barrel usage on the microbial communities composition of red wines. *Frontiers in Microbiology*, 11:562560. https://doi.org/10.3389/fmicb.2020.562560

Navarro Y, Torija MJ, Mas A, Beltran G (2020) Viability-PCR Allows Monitoring Yeast Population Dynamics in Mixed Fermentations Including Viable but Non-Culturable Yeast. *Foods*, 9, 1373; doi:10.3390/foods9101373.