

School of Food Science 2015 Publications

Charles Edwards
0522 & 0846

Journal Articles

1. Childs, B.C. J.C. Bohlscheid and **C.G. Edwards**. Impact of available nitrogen and sugar concentration in musts on alcoholic fermentation and subsequent wine spoilage by *Brettanomyces*. Food Microbiol. 46: 604-609 (2015).
2. Zuehlke, J.M., B.C. Childs, and **C.G. Edwards**. Evaluation of *Zygosaccharomyces bailii* to metabolize residual sugar present in partially-fermented red wines. Fermentation 1: 3-12 (2015).
3. Strickland, M.T., L.M. Scopp, **C.G. Edwards**, and J.P. Osborne. Effect of *Pediococcus* spp. on the chemical and sensory properties of Pinot noir wine. Am. J. Enol. Vitic. (accepted, 2015).
4. Petrova, B., Z.M. Cartwright and **C.G. Edwards**. Effectiveness of chitosan preparations against *Brettanomyces bruxellensis* grown in culture media and red wines. J. Int. Sci. Vigne Vin. (submitted, 2015).

Conferences, Papers & Presentations

1. Aplin, J. and **C.G. Edwards**. Characterization of Non-Saccharomyces yeasts found In Washington State vineyards. Washington Association of Wine Grape Growers annual meeting, Kennewick, WA. February 10-13 (2015).
2. Wang, X., **C.G. Edwards**, and D.A. Glawe. Persistence of indigenous grape yeast species during alcoholic fermentation. Washington Association of Wine Grape Growers annual meeting, Kennewick, WA. February 10-13 (2015).
3. Cartwright, Z.M. and **C.G. Edwards**. Evaluation of the survival of *Brettanomyces bruxellensis* in grape pomace. Washington Association of Wine Grape Growers annual meeting, Kennewick, WA. February 10-13 (2015).
4. Diako, C., Z. Cartwright, **C.G. Edwards**, and C.F. Ross. Application of the electronic tongue in the evaluation of wine faults. Washington Association of Wine Grape Growers annual meeting, Kennewick, WA. February 10-13 (2015).
5. Cartwright, Z.M. and **C.G. Edwards**. Evaluation of the survival of *Brettanomyces bruxellensis* in grape pomace. Dr. William R. Wiley Research Exposition, Washington State University, Pullman, WA. February 20 (2015).
6. Cartwright, Z.M. and **C.G. Edwards**. Examining *Brettanomyces bruxellensis* survival in grape pomace over time in Washington State vineyards. Annual meeting of the Institute of Food Technologists, Chicago, IL. July 11-14 (2015).
7. Diako, C., K. McMahon, M.A. Evans, **C.G. Edwards**, and C.F. Ross. Interactions among alcohol, tannins, and mannoproteins influence the sensory properties of commercial Merlot wines. To be

presented at the annual meeting of the Institute of Food Technologists, Chicago, IL. July 11-14 (2015).

8. **Edwards, C.G.** Nutritional needs of *Saccharomyces* and *Brettanomyces*. Presented at the British Columbia Wine Grape Council Annual Enology & Viticulture Conference. Penticton, BC, Canada, July 20-21 (2015).
9. **Edwards, C.G.** Management of *Brettanomyces*. Presented at the Ste. Michelle Wine Estates Winemaker Council meeting. Clore Wine Center, Prosser, WA, May 27 (2015).

Thesis/Dissertations

White, K.P. (M.S. in Food Science). Thesis title: Impact of non-Saccharomyces Yeasts on Fermentation and Aromatic Composition of Chardonnay Wines (2011-2015).

Carolyn Ross

0608 (Denise Smith & Barb Rasco also on this project)

Journal Articles

1. Tozer, P.*, Galinato, S.P., **Ross, C.F.**, Miles, C.A. and McCluskey, J. 2015. Sensory Analysis and Willingness to Pay for Craft Cider. *Journal of Wine Economics*. doi:10.1017/jwe.2015.30. Accepted
2. Shiroodi, S.G., Ovissipour, M., **Ross, C.F.** and Rasco, B. A*. 2016. Efficacy of electrolyzed oxidizing water as a pretreatment method for reducing *Listeria monocytogenes* contamination in cold-smoked Atlantic salmon (*Salmo salar*). *Food Control*. 60: 401-407. doi:10.1016/j.foodcont.2015.08.020. Accepted
3. Ovissipour, M., Al-Qadiri, H., Lu, X., Hu, Y., **Ross, C.F.**, Van Eenennaam, J.P. Doroshov, S and Rasco, B.R.* 2015. The effect of white sturgeon (*Acipenser transmontanus*) ovarian fat deposition on caviar yield and nutritional quality: introducing image processing method for sturgeon ovary fat determination. *International Aquatic Research*. DOI 10.1007/s40071-015-0111-0. Accepted
4. Castro, L.F. †, Vixie, K. and **Ross, C.F.*** 2015. Optimization of a solid phase dynamic extraction (SPDE) method for beer volatile profiling. *Food Analytical Methods*. 8: 2115-2124. DOI 10.1007/s12161-015-0104-z. Accepted
5. Betiku, O.C., Barrows, F., **Ross, C.F.** and Sealey, W.M.* 2015. The effect of total replacement of fish oil with DHA-Gold® and plant oils on growth and fillet quality of rainbow trout (*Oncorhynchus mykiss*) fed a plant-based diet. *Aquaculture Nutrition*. DOI: 10.1111/anu.12234. Accepted
6. Castro, L.F. † and **Ross, C.F.*** 2015. Determination of flavor compounds in beer using stir bar sorptive extraction and solid-phase microextraction. *Journal of the Institute of Brewing*. 121: 197-203. DOI: 10.1002/jib.219. Accepted
7. Aamir, M., Ovissipour, M., **Ross, C.F.**, Sablani, S. and Rasco, B*. Thermal kinetics of color, texture, β -carotene and sensory quality of baby carrot (*Daucus carota* L.) under pasteurization conditions. *Journal of Food Science*. Under Review
8. Baker, A.K., Castura, J.C. and **Ross, C.F.*** Temporal check-all-that-apply characterization and consumer acceptance of red wine finish. *Journal of Food Science*. Under Review
9. Craft, C., Myrick, C., **Ross, C.F.**, Sealey, W., Gaylord, G., Barrows, F. and Fornshell, G. Growth, Proximate Composition, and Sensory Characteristics of Rainbow Trout *Oncorhynchus mykiss* Consuming Alternative Proteins. Under Review
10. Diako, C. †, McMahon, K.M., Mattinson, D.S., Evans, M.A. and **Ross, C.F.*** Alcohol, tannins and mannoproteins and their interactions influence the sensory properties of commercial Merlot wines. *Journal of Wine Research*. Under Review
11. McMahon, K.M. †, Culver, C. and **Ross, C.F.*** The production and consumer perception of sparkling wines at different carbonation levels. *Journal of Wine Research*. Under Review

12. Nguyen, T., Kuchera, M., Smoot, K., Diako, C., Vixie, B. and **Ross, C.F.** Consumer acceptance of a polyphenolic enriched coffee beverage. *Journal of Food Science*. Under Review
13. Rosales-Soto, M., **Ross, C.F.**, Younce, F., Fellman, J., Mattinson, D., Huber, K. and Powers, J. Physico-chemical and sensory evaluation of cooked fermented protein fortified cassava (*Manihot esculenta Crantz*) flour. *Journal of the Science of Food and Agriculture*. Under Review

Conferences, Papers & Presentations

1. Castura, J.C.* , Baker, A.K. and **Ross, C.F.** September 2015. Characterizing wine finish using TCATA product contrails. Afrosense. Stellenbosch, South Africa. Accepted
2. McMahon, K. †, Culver, C. and **Ross, C.F.*** August 2015. The influence of sparkling wine carbonation level on sensory perception and consumer preference. Pangborn Sensory Science Symposium. Gothenburg, Sweden. Accepted
3. Baker, A.K. †, Castura, J. and **Ross, C.F.*** August 2015. Temporal check-all-that-apply characterization of wine finish. Pangborn Sensory Science Symposium. Gothenburg, Sweden. Accepted
4. Smoot K. †§, Baker, A., Diako, C., Kuchera, M. and **Ross, C.F.*** July 2015. Sensory and Chemical Analysis of a Grape Pomace Flour-Fortified Coffee Beverage. Institute of Food Technologists Annual Meeting. Chicago, IL. Accepted
5. Meredith, M. †§, Diako, C., Smoot, K. and **Ross, C.F.*** July 2015. Consumer Acceptance of a Polyphenol-Enriched Coffee Beverage. Institute of Food Technologists Annual Meeting. Chicago, IL. Accepted
6. Diako, C. †§ and **Ross, C.F.*** July 2015. Interactions Among Alcohol, Tannins, and Mannoproteins Influence the Sensory Properties of Commercial Merlot Wines. Institute of Food Technologists Annual Meeting. Chicago, IL. Accepted
7. McMahon, K. †§ and **Ross, C.F.*** July 2015. Temporal changes in carbonation perception in sparkling wine using quantitative descriptive analysis and temporal check-all-that-apply (TCATA). Institute of Food Technologists Annual Meeting. Chicago, IL. Accepted
8. Baker, A.K. † and **Ross, C.F.*** July 2015. Impact of wine composition on the sensory evaluation and consumer acceptance of Syrah wine finish. Institute of Food Technologists Annual Meeting. Chicago, IL. Accepted
9. Baker, A.K. †, Vixie, B., Rasco, B., Ovissipour, M., Van Eenennam, J. and **Ross, C.F.*** July 2015. Lexicon development and validation for caviar characterization and relationship to consumer preference. Institute of Food Technologists Annual Meeting. Chicago, IL. Accepted
10. Diako, C. †, Cartwright, Z., Edwards, C.G. and **Ross, C.F.*** February 2015. Application of the Electronic Tongue in the Evaluation of Wine Faults. Washington Association of Wine Grape Growers, Kennewick, WA. Accepted

11. McMahon, K. †, Culver, C. and **Ross, C.F.*** February 2015. Consumer evaluation of sparkling wines varying in carbonation content using paired comparison and preference testing. Washington Association of Wine Grape Growers, Kennewick, WA. Accepted

Theses/Dissertations

Fleischman, Emily. (M.S. in Food Science). Thesis title: Sensory, antioxidant and textural properties of extruded puffed snack products with added wheat bran. 2013 - 2015.

Baker, Allison. (Ph.D. in Food Science). Dissertation title: Sensory evaluation of the impact of wine matrix on red wine finish. 2012 - 2015.

Websites

A professional website to inform potential students and collaborators about research and teaching. <http://sfs.wsu.edu/facultystaff/ross/> Sensory Facility website to inform potential clients about the WSU Sensory Evaluation Service Center and recruit panelists. <http://sfs.wsu.edu/sensory/>

Meijun Zhu
0816

1. Zhang, H., M. Du, Q. Yang, and **M. J. Zhu**. (2016). Butyrate suppresses murine mast cell proliferation and cytokine production through inhibiting histone deacetylase. *Journal of Nutritional Biochemistry*, 2016, 27: 299-306.
2. Bibi, S., Y. Kang, G. Yang, and **M. J. Zhu**. (2016). Grape seed extract improves small intestinal morphology through suppressing inflammation and regulating alkaline phosphatase in IL10-deficient mice. *Journal of Functional Food*, 20: 245-252.
3. Wang, S., **M. J. Zhu**, and M. Du. (2015). Prevention of obesity by dietary resveratrol: how strong is the evidence? *Expert Review of Endocrinology and Metabolism*, 39:967-976.
4. Zhang, S., and **M. J. Zhu**. (2015). Characterization of polyphenolics in grape pomace extracts using ESI Q-TOF MS/MS. *HSOA Journal of Food Science and Nutrition*, 2015, 1:001.
5. Yang, G., Y. Xue, H. Zhang, M. Du, and **M. J. Zhu**. (2015). Favorable effects of GSE on intestinal epithelial differentiation and barrier function in IL10-deficient mice. *British Journal of Nutrition*, 2015:1-9.
6. Wang, S., X. Liang, Q. Yang, X. Fu, C. Rogers, **M. J. Zhu**, B.D. Rodgers, Q. Jiang, M. Dodson, M. Du. (2015). : Resveratrol induces brown-like adipocyte formation in white fat through activation of AMP-activated protein kinase (AMPK) α 1. *International Journal of Obesity*, 39:967-976.
7. **Zhu, M. J.**, S. A. Olsen, L. Sheng, Y. Xue, W. Yue. (2015). Antimicrobial efficacy of grape seed extract against *Escherichia coli* O157:H7 growth, motility and Shiga toxin production. *Food Control*, 51:177-182.

Barbara Rasco

Shiroodi, S.G., Ovissipour, M., Ross, C.F. and **Rasco, B. A***. 2016. Efficacy of electrolyzed oxidizing water as a pretreatment method for reducing *Listeria monocytogenes* contamination in cold-smoked Atlantic salmon (*Salmo salar*). *Food Control*. 60: 401-407. doi:10.1016/j.foodcont.2015.08.020. Accepted.

Ovissipour, M., Al-Qadiri, H., Lu, X., Hu, Y., Ross, C.F., Van Eenennaam, J.P. Doroshov, S and **Rasco, B.R.*** 2015. The effect of white sturgeon (*Acipenser transmontanus*) ovarian fat deposition on caviar yield and nutritional quality: introducing image processing method for sturgeon ovary fat determination. *International Aquatic Research*. DOI 10.1007/s40071-015-0111-0. Accepted

Aamir, M., Ovissipour, M., Ross, C.F., Sablani, S. and **Rasco, B***. Thermal kinetics of color, texture, β -carotene and sensory quality of baby carrot (*Daucus carota* L.) under pasteurization conditions. *Journal of Food Science*. Under Review

Baker, A.K. †, Vixie, B., **Rasco, B.**, Ovissipour, M., Van Eenennam, J. and Ross, C.F.* July 2015. Lexicon development and validation for caviar characterization and relationship to consumer preference. Institute of Food Technologists Annual Meeting. Chicago, IL. Accepted

Denise Smith