Stellenbosch, 12 February 2018

Submission of manuscript by Chidi *et al*. to the South African Journal of Enology and Viticulture.

Dear editor

We herewith submit our research note entitled “The impact of changes in environmental conditions on organic acid production by commercial wine yeast strains” to SAJEV for consideration.

This research note is intended as a dual submission, and is accompanied by a comprehensive review of organic acid metabolism and the impact of fermentation practices on wine acidity (SAJEV ID: 2826). The research note subsequently reports on the impact of sugar concentration, pH and temperature on the production of different organic acids (succinic, acetic and pyruvic acid) by two different wine yeast strains at different stages of alcoholic fermentation. Unique to our study is the fact that a large scale study was designed based on Box-Behnken multifactorial combinations of different pH, temperature and sugar settings. In this manner, the combinatorial impacts of these different factors on acid production could be assessed for different strains of yeast. To the best of our knowledge this is the most detailed study of organic acid production in different yeast strains in the context of multifactorial changes to must sugar content, temperature and pH. Taken together, we are convinced that the data should be of significant interest to readers of SAJEV, and are looking forward to hearing from you.

Kind regards



Debra Rossouw (on behalf of all authors)

Tel: +27 (0)21 8084346

Fax: +27 (0)21 8083771

e-mail: debra@sun.ac.za