

Comment on "Multielement Analysis of Canadian  
Wines by Inductively Coupled Plasma Mass  
Spectrometry (ICP-MS) and Multivariate Statistics"  
[Taylor, Longerich, and Greenough, J. Agric. Food  
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*Sir:* Taylor et al. (1) reported on the trace element signatures in wines from the Okanagan Valley and Niagara regions of Canada. As part of their dataset, Table 2 in ref. (1) gives the mean±standard deviation of metals in 59 samples of Okanagan white wines, and these values are reproduced in this Comment below (see Table 1). An earlier work by this group of authors (2) reported the mean±standard deviation of metals in 52 samples of Okanagan white wines (right-hand columns of Table 4 in ref. (2)), and these values are also given below in Table 1. There is a striking similarity in the summary statistics of these two datasets, which suggested that the 52 Okanagan wine dataset from ref. (2) had been republished in ref. (1), except with the addition of 7 new Okanagan wine samples (to give a new total of 59 Okanagan wine samples) that appears to have only minimally changed the net geochemical signature. To readers of the literature, ref. (1) is written to suggest that the Okanagan wines data in Table 2 of ref. (1) is entirely new and previously unpublished data. In fact, ~90% of these Okanagan wine samples in ref. (1) appear to have been previously published in ref. (2). Thus, ref. (1) should have clearly cited ref. (2) (which was published in print form about one year before ref. (1)) as a prior partial publication of the dataset. As currently exists, and without this clarification, researchers in the field would otherwise be led to believe that ref. (1) and (2) have mutually exclusive sample datasets of metal concentrations in Okanagan wines, and that more new experimental work was performed for ref. (1) than was actually the case.

## LITERATURE CITED

(1) Taylor, V.F.; Longerich, H.P.; Greenough, J.D. Multielement analysis of Canadian wines by inductively coupled plasma mass spectrometry (ICP-MS) and multivariate statistics. *J. Agric. Food Chem.* **2003**, *51*, 856-860.

(2) Taylor, V.F.; Longerich, H.P.; Greenough, J.D. Geology and wine 5: Provenance of Okanagan Valley wines, British Columbia, using trace elements: Promise and limitations. *J. Agric. Food Chem.* **2002**, *32*, 129-137.

**Table 1.** Comparison of metal concentrations (mean±standard deviation) in Okanagan Valley white wines reported in ref. (1) and (2). Values are in µg/L for all elements with the exception of Mg, P, Cl, and Ca, which are in mg/L.

<b>Element</b>	<b>Taylor et al. (2003), n=59, ref. (1)</b>	<b>Taylor et al. (2002), n=52, ref. (2)</b>
Li	7.4±5.0	7.2±5.7
Be	0.27±0.27	0.27±0.27
Mg	61±24	60±24
Al	307±280	309±286
P	116±80	116±84
Cl	15±13	15±13
Ca	76±40	76±41
Ti	7.1±5	6.9±4.9
V	10±20	9±20
Mn	700±300	692±300
Fe	1080±800	1090±800
Co	2.3±1.2	2.2±1.2
Ni	21±28	22±29
Cu	55±80	56±80
Zn	463±300	457±311
As	3.0±2.7	2.9±2.7
Se	1.5±1.6	1.5±1.7
Br	179±70	182±72
Rb	446±190	451±194
Sr	766±320	761±329
Mo	8±9	8±9

Ag	0.01±0.01	0.01±0.01
Cd	0.5±0.9	0.5±0.9
Sb	0.4±0.3	0.4±0.3
I	2.3±1.5	2.3±1.5
Cs	1.3±0.8	1.3±0.8
Ba	140±100	140±97
La	0.4±0.5	0.4±0.5
Ce	0.8±1.0	0.7±1.0
Tl	0.11±0.00	0.11±0.09
Pb	12±9	12±9
Bi	0.2±0.4	0.2±0.2
Th	0.11±0.13	0.11±0.13
U	0.6±1.2	0.6±1.2

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