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Supplementary Information

Differentiation Among Brazilian Wine Regions Based on Lead Isotopic Data

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Table 1. Lead isotope ratios in Brazilian red wine from four sub-regions

Wine	μg L^{-1} ± SD[a]	$^{206}Pb/^{204}Pb$	RSD[b] / %	$^{206}Pb/^{207}Pb$	RSD / %	$^{208}Pb/^{206}Pb$	RSD / %
V[c]1-1	3.52 ± 0.03	17.452	4.10	1.129	1.83	2.146	2.34
V1-2	37.8 ± 2.2	18.832	0.87	1.172	1.05	2.111	0.94
V1-3	18.2 ± 1.8	15.924	0.88	1.039	0.61	2.252	0.69
V1-4	19.8 ± 0.8	17.575	1.39	1.155	1.35	2.098	1.51
V1-5	13.9 ± 1.1	17.699	0.87	1.155	0.42	2.140	0.43
V1-6	5.40 ± 0.03	18.083	1.11	1.183	0.44	2.062	0.76
V1-7	8.04 ± 0.4	17.391	1.40	1.133	1.03	2.146	0.99
V2-1	3.0 ± 0.1	17.921	2.86	1.164	2.12	2.118	2.06
V2-2	4.05 ± 0.2	18.083	1.59	1.160	2.20	2.123	2.02
V2-3	2.38 ± 0.7	17.921	2.42	1.167	1.72	2.141	1.01
V2-4	7.8 ± 0.7	17.857	2.8	1.146	3.28	2.153	2.68
V2-5	4.35 ± 0.06	16.584	1.79	1.178	1.38	2.082	1.44
V2-6	15.2 ± 1.4	17.986	2.21	1.160	1.89	2.121	1.32
V3-1	31.1 ± 2.2	18.182	0.48	1.157	0.57	2.119	0.13
V3-2	3.6 ± 0.9	18.149	1.97	1.158	1.24	2.095	0.88
V3-3	4.0 ± 0.3	18.116	1.86	1.165	2.21	2.094	2.12
V4-1	18.1 ± 0.9	16.667	2.58	1.145	1.67	2.126	1.45
V5-1	13.0 ± 1.0	17.889	1.85	1.148	2.01	2.124	1.97
V6-1	38.7 ± 0.7	18.116	0.86	1.165	0.86	2.103	0.63
V6-2	14.3 ± 0.4	16.779	1.51	1.118	1.44	2.129	0.88
V6-3	66.4 ± 1.7	18.116	1.07	1.155	1.24	2.094	1.05
V6-4	34.9 ± 1.4	18.248	2.78	1.159	2.68	2.099	2.44
V7-1	0.57 ± 0.03	18.315	0.75	1.162	0.84	2.125	0.48
V7-2	16.6 ± 0.7	17.953	0.65	1.156	0.85	2.125	1.18
V7-3	18.1 ± 0.6	18.553	1,15	1.162	0.41	2.123	1.25
V7-4	7.27 ± 0.03	18.587	1.25	1.186	1.53	2.067	1.34

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Table 1. Lead isotope ratios in Brazilian red wine from four sub-regions (cont.)

Wine	μg L^{-1} ± SD[a]	$^{206}Pb/^{204}Pb$	RSD[b] / %	$^{206}Pb/^{207}Pb$	RSD / %	$^{208}Pb/^{206}Pb$	RSD / %
V8-1	6.20 ± 0.10	18.315	1.17	1.161	1.45	2.108	0.87
V8-2	14.8 ± 0.9	18.018	1.45	1.150	2.08	2.118	2.72
V9-1	7.06 ± 0.5	18.018	1.61	1.162	1.44	2.086	0.85
V9-2	11.5 ± 0.4	18.553	0.44	1.182	0.55	2.082	0.57
V10-1	5.0 ± 0.5	18.315	0.83	1.160	1.43	2.091	1.45
V10-2	6.3 ± 0.4	18.553	0.88	1.158	1.17	2.101	0.98
V10-3	5.4 ± 0.2	18.553	0.52	1.163	0.60	2.096	0.72
V10-4	28.6 ± 1.0	18.215	1.20	1.154	1.89	2.098	1.33
V10-5	5.4 ± 0.6	18.116	0.98	1.161	0.86	2.093	0.29
V10-6	14.6 ± 0.5	18.315	0.41	1.148	0.53	2.096	0.26
SG[d]1-1	10.0 ± 0.5	18.215	1.20	1.163	0.87	2.118	0.59
SG2-1	11.8 ± 0.2	18.315	1.64	1.164	0.98	2.121	1.59
SG2-2	14.6 ± 0.4	18.182	0.97	1.164	0.89	2.099	0.90
SG2-3	10.1 ± 0.9	18.215	1.81	1.154	2.00	2.123	1.82
SG2-4	10.7 ± 0.2	18.349	1.92	1.166	2.75	2.103	2.57
SG3-1	7.02 ± 0.3	18.315	0.84	1.145	0.80	2.124	0.69
SG4-1	111 ± 17	17.391	1.00	1.106	0.60	2.175	0.86
SG5-1	9.1 ± 0.7	18.248	0.64	1.184	1.20	2.100	1.01
SG6-1	12.2 ± 0.9	17.668	1.12	1.163	0.35	2.170	0.83
SG7-1	44.7 ± 1.4	18.484	1.26	1.160	1.14	2.104	1.03
SG8-1	21.9 ± 1.9	18.182	0.65	1.161	0.61	2.107	0.49
SG9-1	21.8 ± 1.7	17.986	2.07	1.124	1.14	2.163	2.54
SG10-1	10.5 ± 0.7	17.825	2.08	1.184	1.71	2.083	0.79
SG11-1	6.3 ± 0.4	17.730	1.69	1.187	1.72	2.049	1.10
SG12-1	10 ± 1.0	17.825	0.76	1.175	0.31	2.076	1.17
SG13-1	11.6 ± 0.7	17.668	1.23	1.148	1.52	2.042	1.59
SG13-2	6.7 ± 0.3	17.699	1.69	1.167	1.50	2.021	1.83
SG14-1	33.7 ± 1.1	17.889	1.66	1.145	0.92	2.120	1.19
SG15-1	10.5 ± 0.8	18.149	2.97	1.154	1.95	2.128	2.88
SG15-2	7.83 ± 0.7	17.699	1.30	1.162	0.82	2.079	1.41
SG16-1	9.9 ± 0.6	18.083	1.05	1.153	1.48	2.127	1.66
SG17-1	12.5 ± 0.9	18.622	1.41	1.185	0.59	2.084	0.78
SG17-2	13.0 ± 1.1	18.587	0.87	1.181	1.17	2.092	0.93
SG18-1	14.6 ± 0.8	18.051	0.85	1.150	0.99	2.129	0.82
SG18-2	7.63 ± 0.6	18.416	0.71	1.160	0.64	2.127	0.66
SG18-3	11.4 ± 1.0	17.094	1.12	1.156	2.47	2.099	2.10
SG18-4	50.2 ± 3.0	12.195	7.97	1.233	8.81	1.939	7.54
SG19-1	16.0 ± 0.7	17.825	0.56	1.155	0.57	2.100	0.30
SG19-2	62.7 ± 2.8	18.349	2.68	1.165	1.22	2.110	1.53
SG20-1	19 ± 1.1	17.825	1.64	1.172	2.19	2.108	2.73
SG21-1	9.4 ± 0.8	17.825	1.89	1.143	1.36	2.116	0.94
SG22-1	9.1 ± 0.5	18.051	0.87	1.173	1.17	2.072	0.93
SG22-2	14.3 ± 0.8	18.051	0.90	1.176	0.68	2.081	0.54

Table 1. Lead isotope ratios in Brazilian red wine from four sub-regions (cont.)

Wine	μg L^{-1} ± SD[a]	$^{206}Pb/^{204}Pb$	RSD[b] / %	$^{206}Pb/^{207}Pb$	RSD / %	$^{208}Pb/^{206}Pb$	RSD / %
SG23-1	10.7 ± 0.6	18.519	0.50	1.165	0.47	2.104	0.24
SG23-2	17.2 ± 0.7	18.484	1.91	1.173	2.04	2.070	1.60
SG23-3	20.7 ± 1.4	17.094	2.77	1.166	1.75	2.074	1.84
SG23-4	19.7 ± 0.9	17.094	1.33	1.156	0.77	2.102	0.98
SG23-5	21.8 ± 1.3	18.587	2.42	1.187	1.40	2.091	0.99
C[e]1-1	17.2 ± 1.2	18.097	1.35	1.151	1.00	2.124	1.04
C1-2	15.5 ± 0.7	15.198	0,21	1.135	0.39	2.157	0.41
C1-3	4.8 ± 0.8	18.110	1.04	1.153	0.63	2.123	0.59
C1-4	10.8 ± 1.2	18.334	0.27	1.189	0.21	2.092	0.26
C2-1	13.1 ± 0.9	18.450	0.34	1.163	0.40	2.120	0.51
C2-2	4.36 ± 0.5	17.699	0.48	1.155	0.45	2.091	0.47
C2-3	15.7 ± 1.1	16.447	0.44	1.072	0.49	2.197	0.61
C2-4	8.1 ± 0.3	18.727	1.83	1.172	1.53	2.087	1.36
C2-5	21.4 ± 1.4	18.450	0.59	1.163	0.61	2.120	0.61
C2-6	27.9 ± 1.3	18.336	0.72	1.161	0.88	2.118	0.44
VSF[f]1-1	33.5 ± 2.1	60.775	6.40	1.175	2.26	2.090	1.09
VSF1-2	11.0 ± 0.9	42.209	5.81	1.027	2.42	1.986	1.18
VSF1-3	11.7 ± 0.8	28.170	1.23	1.008	0.84	1.877	0.46
VSF2-1	9.4 ± 0.6	18.029	0.71	1.158	0.48	2.109	0.69
VSF2-2	10.9 ± 0.9	18.850	0.81	1.162	0.81	2.116	0.65
VSF3-1	9.4 ± 0.2	18.416	6.15	1.169	4.12	2.077	3.98
VSF3-2	115 ± 14	19.380	3.96	1.039	1.51	1.997	2.27
VSF3-3	27.4 ± 1.3	13.063	1.56	1.110	2.04	2.068	1.60
VSF4-1	9.3 ± 0.7	13.704	1.06	0.953	2.15	1.747	1.40
VSF5-1	12.6 ± 1.5	24.320	1.02	0.920	1.99	1.658	3.54

[a]SD = standard deviation; [b]RSD = relative standard deviation, [c]V = Vale dos Vinhedos; [d]SG = Serra Gaúcha; [e]C = Campanha; [f]VSF = Vale do São Francisco.