***G&G* Data Depository: Representative electron-microprobe analyses of tourmaline from Muva, Mozambique.[a]**

From: B. M. Laurs et al. (2008) Tourmaline from Muzo, Mozambique, *Gems & Gemology*, Vol. 44, No. 3, pp. 273–275.

Sample no.	Stone 1	Stone 15	Stone 19	Stone 5	Stone 13	Stone 9
Color	Pale yellow	Yellow	Greenish yellow	Yellowish green	Pink	Pink
Species	Rossmanite	Elbaite	Elbaite	Rossmanite	Rossmanite	Elbaite
Oxides (wt.%)						
SiO_2	36.67	36.56	36.57	36.61	36.68	36.63
TiO_2	0.17	0.27	0.15	0.33	0.02	0.06
B_2O_3 calc	10.88	10.81	10.81	10.84	11.01	10.99
Al_2O_3	39.58	38.27	38.39	39.04	42.25	41.44
Bi_2O_3	nd	nd	0.02	nd	nd	nd
FeO	0.04	0.14	nd	0.30	0.03	nd
MnO	5.07	7.22	7.18	6.09	1.11	2.40
CaO	1.34	0.40	0.28	1.12	1.20	0.82
Li_2O calc	1.53	1.29	1.31	1.30	1.88	1.82
Na_2O	1.07	2.00	2.18	0.84	1.12	1.81
K_2O	nd	nd	0.02	nd	nd	0.02
H_2O calc	3.27	3.24	3.21	3.23	3.30	3.40
F	1.02	1.04	1.10	1.08	1.06	0.82
Subtotal	100.65	101.25	101.22	100.78	99.68	100.22
O=F	0.43	0.44	0.46	0.45	0.45	0.35
Total	100.22	100.81	100.75	100.33	99.23	99.87
Ions per 31 (O,OH,F)						
Si	5.855	5.878	5.879	5.870	5.789	5.792
T Al	0.145	0.122	0.121	0.130	0.211	0.208
Tet. sum	6.000	6.000	6.000	6.000	6.000	6.000
B	3.000	3.000	3.000	3.000	3.000	3.000
Al (Z)	6.000	6.000	6.000	6.000	6.000	6.000
Al	1.302	1.130	1.154	1.247	1.649	1.514
Bi^{3+}	nd	nd	0.001	nd	nd	nd
Ti	0.020	0.032	0.018	0.040	0.002	0.007
Fe^{2+}	0.006	0.019	nd	0.041	0.004	nd
Mn	0.685	0.983	0.977	0.827	0.148	0.321
Li	0.985	0.836	0.850	0.841	1.195	1.156
Y sum	2.998	2.999	3.000	2.997	2.999	2.998
Ca	0.228	0.069	0.048	0.192	0.203	0.140
Na	0.330	0.625	0.681	0.260	0.344	0.555
K	nd	nd	0.004	nd	nd	0.004
Vacancy	0.439	0.304	0.267	0.546	0.450	0.302
X sum	1.000	1.000	1.000	1.000	1.000	1.000
F	0.513	0.528	0.558	0.548	0.528	0.412
OH	3.486	3.471	3.441	3.452	3.472	3.588
Mol% tourmaline species						
Elbaite	33.1	62.6	68.3	26.0	34.5	55.7
Rossmanite	44.0	30.5	26.8	54.7	45.1	30.3
Liddicoatite	22.9	6.9	4.8	19.3	20.4	14.0

[a]Data represent average of five analyses of each sample. All iron reported as FeO. Li_2O, B_2O_3, and H_2O were calculated by stoichiometry: B = 3 apfu (atoms per formula unit), Li = 3-SumY, and OH + F = 4 apfu. Mg, Cr, V, Cu, Ba, Pb, Zn, and Cl were analyzed but not detected. Data were collected using an ARL-SEMQ electron microprobe with 15 kV (for sodium) and 25 kV accelerating voltages, 15 nA beam current, and 3 µm beam diameter. The measurements were calibrated with natural mineral and synthetic compound standards, and a ZAF correction procedure was applied to the data. Abbreviation: nd = not detected.