

Oxy-dravite**Na(Al₂Mg)(Al₅Mg)(Si₆O₁₈)(BO₃)₃(OH)₃O****Crystal Data:** Hexagonal. *Point Group:* 3*m*. As prismatic crystals to 15 mm.**Physical Properties:** *Cleavage:* [Poor/indistinct on {0001}.] *Fracture:* Conchoidal.
Tenacity: Brittle. *Hardness* = ~ 7 *D*(meas.) = n.d. *D*(calc.) = 3.073**Optical Properties:** Translucent. *Color:* Dark red. *Streak:* Pink. *Luster:* Vitreous.
Optical Class: Uniaxial (-). $\omega = 1.650(5)$ $\epsilon = 1.620(5)$ *Pleochroism:* *O* = orange; *E* = pink.**Cell Data:** *Space Group:* R3*m*. $a = 15.9273(2)$ $c = 7.2001(1)$ $Z = 3$ **X-ray Powder Pattern:** Osarara, Narok district, Kenya.
2.963 (100), 3.483 (84), 2.576 (68), 4.222 (67), 3.983 (64), 1.915 (52), 6.377 (44)

Chemistry:	(1)		(1)
SiO ₂	37.01	MgO	8.56
TiO ₂	0.14	Na ₂ O	2.65
B ₂ O ₃	[10.76]	K ₂ O	0.10
Al ₂ O ₃	33.11	<u>H₂O</u>	<u>[2.65]</u>
Fe ₂ O ₃	5.00	Total	101.58
FeO	0.19		

(1) Osarara, Narok district, Kenya; average of 10 electron microprobe analyses supplemented by Mössbauer spectrometry, B₂O₃ and H₂O calculated from stoichiometry; corresponds to $X(\text{Na}_{0.83}\square_{0.15}\text{K}_{0.02})_{\Sigma=1.00} Y(\text{Al}_{1.34}\text{Fe}^{3+}_{0.58}\text{Mg}_{1.03}\text{Fe}^{2+}_{0.03}\text{Ti}_{0.02})_{\Sigma=3.00} Z(\text{Al}_{4.95}\text{Mg}_{1.03}\text{Fe}^{3+}_{0.02})_{\Sigma=6.00} T(\text{Si}_{5.98}\text{Al}_{0.02}\text{O}_{18})_{\Sigma=6.00} B(\text{BO}_3)_3 V(\text{OH})_3 W[\text{O}_{0.76}(\text{OH})_{0.24}]_{\Sigma=1.00}$, which shows the Mg-Al order-disorder in the Y and Z sites.

Polymorphism & Series: Oxy-dravite is related to oxy-schorl, oxy-chromium-dravite, oxy-vanadium-dravite, and povondraite through the substitution of Mg²⁺ for Fe²⁺, Al³⁺ for Cr³⁺, Al³⁺ for V³⁺, and Al³⁺ for Fe³⁺, respectively.**Mineral Group:** Tourmaline supergroup, alkali-subgroup 3.**Occurrence:** In quartz-muscovite schist.**Association:** Quartz, muscovite.**Distribution:** From Osarara, Narok district, Kenya.**Name:** As a dravite with Al³⁺ + O²⁻ → Mg²⁺ + (OH)¹⁻ relative to the composition of dravite.**Type Material:** Museum of Mineralogy, Earth Sciences Department, Sapienza University of Rome, Italy (33066).**References:** (1) Bosi, F. and H. Skogby (2013) Oxy-dravite, Na(Al₂Mg)(Al₅Mg)(Si₆O₁₈)(BO₃)₃(OH)₃O, a new mineral species of the tourmaline supergroup. *Amer. Mineral.*, 98, 1442-1448.