

**Crystal Data:** Orthorhombic. *Point Group:* 2/m 2/m 2/m. As lamellae to 100 μm thick.

**Physical Properties:** *Cleavage:* Perfect on {001}. *Fracture:* Irregular. *Tenacity:* Brittle. Hardness = 4.5 D(meas.) = n.d. D(calc.) = 3.65

**Optical Properties:** Transparent to translucent. *Color:* Pale to dark green, brownish if oxidized. *Streak:* Very pale grayish green. *Luster:* Greasy to vitreous. *Optical Class:* Biaxial (+). α = 1.701(2) β = 1.708(2) γ = 1.717(2) 2V(meas.) = 87(4)° 2V(calc.) = 41° *Orientation:* Z = b. *Pleochroism:* moderate; X = dark gray, Y = brown, Z = yellow.

**Cell Data:** *Space Group:* Pbnm. a = 4.882(1) b = 10.387(2) c = 6.091(1) Z = 4

**X-ray Powder Pattern:** Malpensata pegmatite, Colico commune, Lecco Province, Italy. 2.817 (100), 2.559 (100), 4.44 (90), 3.56 (90), 3.93 (80), 3.04 (80), 5.16 (50)

Chemistry:	(1)	(2)
P <sub>2</sub> O <sub>5</sub>	41.12	40.91
Fe <sub>2</sub> O <sub>3</sub>	[7.00]	
FeO	[25.82]	27.74
MgO	0.23	
ZnO	0.11	
MnO	9.31	13.49
CaO	0.10	
<u>Na<sub>2</sub>O</u>	<u>14.66</u>	<u>17.86</u>
Total	98.35	100.00

(1) Malpensata pegmatite, Colico commune, Lecco Province, Italy; average of 16 electron microprobe analyses, FeO:Fe<sub>2</sub>O<sub>3</sub> calculated for charge balance; corresponds to (Na<sub>0.817</sub>Ca<sub>0.003</sub>□<sub>0.180</sub>)<sub>Σ=1.000</sub>(Fe<sup>2+</sup><sub>0.622</sub>Mn<sup>2+</sup><sub>0.228</sub>Fe<sup>3+</sup><sub>0.151</sub>Mg<sub>0.010</sub>Zn<sub>0.002</sub>)<sub>Σ=1.013</sub>PO<sub>4</sub>. (2) Na(Fe<sup>2+</sup>,Mn<sup>2+</sup>)PO<sub>4</sub>.

**Mineral Group:** Triphylite group.

**Occurrence:** As late-magmatic exsolution lamellae hosted by graftonite in plagioclase within the central portion of a granitic pegmatite dike.

**Association:** Graftonite, Na-bearing ferrisicklerite.

**Distribution:** From the Malpensata pegmatite dike, Colico commune, Lecco Province, Italy.

**Name:** Honors Karen Louise Webber, Assistant Professor Research, in the Mineralogy, Petrology and Pegmatology Research Group, Department of Earth and Environmental Sciences, University of New Orleans, Louisiana, USA, for her contributions to the scientific understanding of the cooling and crystallization dynamics of granitic pegmatites.

**Type Material:** Museum of Natural History, Milan, Italy (M37902) and the Department of Geology, University of Liège, Belgium (20385).

**References:** (1) Vignola, P., F. Hatert, A.-M. Fransolet, O. Medenbach, V. Diella, and S. Andò (2013) Karenwebberite, Na(Fe<sup>2+</sup>,Mn<sup>2+</sup>)PO<sub>4</sub>, a new member of the triphylite group from the Malpensata pegmatite, Lecco Province, Italy. *Amer. Mineral.*, 98, 767-772.