

Crystal Data: Monoclinic. *Point Group:* $2/m$. As bladed crystals, flattened on [001], striated and elongated parallel to [100] that display {110}, {012}, and {001}, to 2 mm. Typically in radial aggregates to 5 mm.

Physical Properties: *Cleavage:* Perfect on {001}. *Tenacity:* Flexible. *Fracture:* Curved. Hardness = 2.5 D(meas.) = 3.14(2) D(calc.) = 3.164 Soluble in dilute HCl.

Optical Properties: Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Vitreous to silky. *Optical Class:* Biaxial (-). $\alpha = 1.644(1)$ $\beta = 1.662(1)$ $\gamma = 1.667(1)$ $2V(\text{meas.}) = 57(1)^\circ$ $2V(\text{calc.}) = 55^\circ$ *Orientation:* $Y = b$, $Z \approx a$. *Dispersion:* Moderate, $r < v$. *Pleochroism:* None.

Cell Data: Space Group: $P2_1/n$. $a = 8.7565(8)$ $b = 13.4683(13)$ $c = 18.652(2)$ $\beta = 94.876(7)^\circ$ $Z = 8$

X-ray Powder Pattern: Monte Nero mine, Rocchetta Vara, La Spezia, Liguria, Italy. 10.90 (100), 3.043 (87), 2.656 (85), 9.27 (67), 3.323 (47), 2.165 (46), 6.97 (42)

Chemistry:	(1)	(2)
MnO	41.62	40.63
As ₂ O ₅	43.35	43.89
P ₂ O ₅	0.82	
H ₂ O	[15.69]	15.48
Total	100.48	100.00

(1) Monte Nero mine, Rocchetta Vara, La Spezia, Liguria, Italy; average of 28 electron microprobe analyses supplemented by Raman spectroscopy, H₂O from stoichiometry; corresponds to $\text{Mn}^{2+}_{3.02}(\text{As}_{1.94}\text{P}_{0.06})\Sigma=2.00\text{O}_{12.5}\text{H}_{8.96}$. (2) $\text{Mn}^{2+}_3(\text{AsO}_4)_2 \cdot 4.5\text{H}_2\text{O}$.

Occurrence: A secondary mineral precipitated from oxidizing hydrothermal fluids.

Association: Coralloite, manganohörmesite, rhodochrosite, sarkinite, sterlinghillite, strashimirite, wallkilldellite (Monte Nero mine); braccoite, hematite, manganberzeliite, orthoclase, tiragalloite (Valletta mine).

Distribution: In Italy, from the Monte Nero mine, Rocchetta Vara, La Spezia, Liguria, and the Valletta mine, near Canosio, Cuneo, Piedmont.

Name: Honors Fabrizio Castellaro (b. 1970), an Italian mineral collector specializing in the minerals of Liguria, who discovered the first specimens.

Type Material: Natural History Museum of Los Angeles County, Los Angeles, California, USA (65603 and 65604) and the Natural Science Museum, Torino, Italy (M/U 16950 and 16951).

References: (1) Kampf, A.R., F. Cámara, M.E. Ciriotti, B.P. Nash, C. Belestria, and L. Chiappino (2016) Castellaroite, $\text{Mn}^{2+}_3(\text{AsO}_4)_2 \cdot 4.5\text{H}_2\text{O}$, a new mineral from Italy related to metaswitzerite. Eur. J. Mineral., 28(3), 687-696. (2) (2017) Amer. Mineral., 102, 917-918 (abs. ref. 1).