

Crystal Data: Hexagonal. *Point Group:* 3*m*. As a portion of a zoned prismatic crystal.

Physical Properties: *Cleavage:* Imperfect on {11 $\bar{2}$ 0} and {10 $\bar{1}$ 1}; parting on {0001}.
Fracture: Subconchoidal. *Tenacity:* Brittle. Hardness = ~7 D(meas.) = n.d. D(calc.) = 3.134

Optical Properties: Transparent. *Color:* Greenish yellow. *Streak:* White. *Luster:* Vitreous.
Optical Class: Uniaxial (-). $\omega = 1.645(5)$ $\epsilon = 1.625(5)$ *Pleochroism:* *O* = pale greenish yellow, *E* = very pale greenish yellow.

Cell Data: *Space Group:* *R*3*m*. $a = 15.9398(6)$ $c = 7.1363(3)$ $Z = 3$

X-ray Powder Pattern: Calculated pattern judged unsuitable for diagnostic purposes by the authors.

Chemistry:	(1)
SiO ₂	36.65
TiO ₂	0.33
B ₂ O ₃	[10.44]
Al ₂ O ₃	35.92
MnO	11.63
FeO	0.19
CaO	0.08
Na ₂ O	1.92
K ₂ O	0.02
Li ₂ O	[0.46]
F	0.66
H ₂ O	[2.97]
-O = F ₂	0.28
Total	100.00

(1) Grotta d'Oggi, San Piero in Campo, Elba island, Italy; average of 10 electron microprobe analyses, B₂O₃ and Li₂O by stoichiometry, H₂O from structure analysis; corresponds to $^{X}_{(\text{Na}_{0.69}\square_{0.29}\text{Ca}_{0.02})\Sigma=1.00}^{Y}(\text{Mn}^{2+}_{1.29}\text{Al}_{1.21}\text{Li}_{0.56}\text{Ti}_{0.03})\Sigma=6.00}^{Z}\text{Al}_6^{T}(\text{Si}_{5.98}\text{Al}_{0.03})\Sigma=6.01}\text{B}_{2.92}\text{O}_{27}^{V}(\text{OH})_3^{W}[\text{F}_{0.39}(\text{OH})_{0.25}\text{O}_{0.36}]\Sigma=1.00$.

Polymorphism & Series: Forms a series with tsilaisite and fluor-elbaite.

Mineral Group: Tourmaline supergroup, tsilaisite group.

Occurrence: As portion of a color-zoned tourmaline crystal in an aplitic dike of an LCT-type (lithium-, cesium- and tantalum-enriched) pegmatite body.

Association: Quartz, K-feldspar, plagioclase, elbaite, schorl, fluor-elbaite, tsilaisite.

Distribution: From Grotta d'Oggi, San Piero in Campo, Elba island, Italy.

Name: Represents the fluorine-dominant analog of *tsilaisite*.

Type Material: Carlo Lorenzo Garavelli Mineral Collection, Museum of Earth Sciences, University of Bari, Bari, Italy (NM16).

References: (1) Bosi, F., G.B. Andreozzi, G. Agrosi, and E. Scandale (2015) Fluor-tsilaisite, NaMn₃Al₆(Si₆O₁₈)(BO₃)₃(OH)₃F, a new tourmaline from San Piero in Campo (Elba, Italy) and new data on tsilaisitic tourmaline from the holotype specimen locality. *Mineral. Mag.*, 79(1), 89-101.
 (2) (2016) *Amer. Mineral.*, 101, 1714 (abs. ref. 1).