Tewite $(K_{1.5}\square_{0.5})_{\Sigma=2}(Te_{1.25}W_{0.25}\square_{0.5})_{\Sigma=2}W_5O_{19}$

Crystal Data: Orthorhombic. *Point Group*: 2/*m* 2/*m* 2/*m*. As platy columnar crystals to 0.5 mm.

Physical Properties: *Cleavage*: Perfect on {100}, {001}, and {010}. *Fracture*: n.d.
Tenacity: Brittle. Hardness = 3.5-4 D(meas.) = n.d. D(calc.) = 6.903

Optical Properties: Translucent to transparent. *Color*: Greenish yellow. *Streak*: Light yellow to white. *Luster*: Adamantine.
Optical Class: Biaxial (+). *n*(calc.) = 2.04 2V(meas.) = 70°

Cell Data: *Space Group*: *Pban.* *a* = 7.2585(4) *b* = 25.8099(15) *c* = 3.8177(2) Z = 2

X-ray Powder Pattern: Near Nanyang village, Huaping County, Panzhihua-Xichang region, China. 3.833 (100), 3.198 (65), 1.574 (55), 6.486 (50), 2.454 (50), 3.621 (30), 1.844 (30)

Chemistry:

	(1)
Na_2O	0.13
K_2O	5.08
WO_3	83.34
TeO_2	11.32
Total	99.86

(1) Near Nanyang village, Huaping County, Panzhihua-Xichang region, China; average electron microprobe analysis; corresponds to $(K_{1.61}Na_{0.06}\square_{0.33})_{\Sigma=2.00}(Te_{1.06}W_{0.35}\square_{0.59})_{\Sigma=2.00}W_5O_{19}$.

Occurrence: In a biotite-quartz monzonite pluton near the contact zone with gabbro and nearby quartz-vein-type Au mineralization. Formed by metasomatic reaction of high-temperature fluids rich in W and Te with potassium feldspar in the monzonite.

Association: Wumuite, scheelite, alkali feldspar, biotite, clinoamphibole, ilmenite, zircon, zoisite, tourmaline, monazite-(Ce), allanite-(Ce), tellurite.

Distribution: From near Nanyang village, Huaping County, Panzhihua-Xichang region, on the border between Yunnan and Sichuan Provinces, China.

Name: Combination of the chemical symbols for two of its essential components Te and W.

Type Material: Geological Museum of China, Beijing, China (M13294).

References: (1) Li, G., Y. Xue, and M. Xiong (2019) Tewite: a K-Te-W new mineral species with a modified tungsten-bronze type structure, from the Panzhihua-Xichang region, southwest China. Eur. J. Mineral., 31(1), 145-152. (2) (2021) Amer. Mineral., 106, 1361 (abs. ref. 1).