Colimaite K_3VS_4

Crystal Data: Orthorhombic. *Point Group*: 2/*m* 2/*m* 2/*m*. As 'hedgehog'-like spherical aggregates to 100 μm comprised of divergent fibrous crystals, to 50 μm.

Physical Properties: *Cleavage*: None. *Tenacity*: Brittle. *Fracture*: Splintery. Hardness = n.d. D(meas.) = n.d. D(calc.) = 2.235

Optical Properties: Qpaque. *Color*: Dark golden in reflected light. *Streak*: Yellow-green.
Luster: Resinous to greasy.
Optical Class: n.d. Nonpleochroic.

Cell Data: *Space Group*: *Pnma*. a = 9.139(5) b = 10.625(7) c = 9.135(3) Z = 4

X-Ray Diffraction Pattern: Colima volcano, Mexico.
2.806 (100), 3.463 (73), 2.785 (70), 2.928 (67), 2.677 (63), 3.229 (57), 3.237 (53)

Chemistry:

	(1)
S	43.29
K	39.36
V	17.41
Na	0.43
Total	100.49

(1) Colima volcano, Mexico; average electron microprobe analysis supplemented by Raman spectroscopy; corresponding to $(K_{2.95}Na_{0.06})_{\Sigma=3.01}V_{1.03}S_{3.97}$.

Occurrence: A sublimate found in an active volcanic fumarole.

Association: Cristobalite, arcanite, thenardite, barite, native gold, shcherbinaite, vanadium.

Distribution: From the Colima volcano crater, Mexico.

Name: For the discovery locality, the *Colima* volcano.

Type Material: Sociedad Mexicana de Mineralogía (Facultad de Ingeniería, Universidad Nacional Autónoma de México) (FIM 08/01).

References: (1) Ostrooumov, M., Y. Taran, M. Arellano-Jiménez, A. Ponce, and J. Reyes-Gasga (2009) Colimaite, K_3VS_4 - a new potassium-vanadium sulfide mineral from the Colima volcano, State of Colima (Mexico). Revista Mexicana de Ciencias Geológicas, 26, 600-608.