

TANTEUXENITE-(Y) (Y,Ce,Ca,U)(Ta,Nb,Ti)₂O₆

Tanteuxenite-(Y) is a rare mineral found in a few granitic pegmatites worldwide. It is believed that its occurrence in Michigan represents only the second thus far reported for the United States. Northern Peninsula.

Marquette County: Black River pegmatite, NE ¼ SE ¼ section 20, T47N, R29W: As scarce, pitchy, brown-black masses to 8 mm in pegmatite. The mineral is metamict, but recrystallizes upon heating to 1000°C for 24 hours. The heated material gives an X-ray powder diffraction pattern that matches well for a euxenite series mineral, and wavelength dispersion electron microprobe analyses show it is both Ta- and Y-dominant and somewhat enriched in both Ca and Si, thereby confirming its identity as tanteuxenite-(Y), (independently confirmed by Buchholz et al., 2013b).

UPDATE FROM: Robinson, G.W., and Carlson, S.M., 2013, *Mineralogy of Michigan Update*: published online by A.E. Seaman Mineral Museum, Houghton, MI, 46p.