FOITITE

$\Box [Fe^{2+}{}_{2}(Al,Fe^{3+})]_{\Sigma_{3}}Al_{6}(BO_{3})_{3}[Si_{6}O_{18}](OH)_{4}$

Foitite is member of the tourmaline group and may be more common than thought, since many specimens of ordinary black "schorl" tourmaline are actually found to be foitite when analyzed, the major difference being the amount of sodium present in each. Charge balance for the reduced Na⁺ in foitite is compensated by incorporating Al and Fe³⁺ substituting for Fe²⁺. A similar series exists between dravite and magnesiofoitite (q.v.). Like schorl, foitite is found in granitic pegmatites and other crystalline rocks. Northern Peninsula.

Marquette County: Champion iron mine: Wavelength dispersion electron microprobe analyses of some black tourmaline specimens from the Champion mine has shown that some are foitite.

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.