BERTHIERINE

 $(Fe,Mg,Al)_3(Si,Al)_2O_5(OH)_4$

A member of the kaolinite-serpentine group, berthierine occurs chiefly in laterites, marine sediments, and some banded iron formations. It typically resembles a greenish clay or chlorite, with which it is easily confused, and from which it is best distinguished by X-ray diffraction analysis. Northern Peninsula.

Iron County: Sherwood mine, Iron River: As a gray-green, leafy, clay-like coating on botryoidal hematite. This represents the first verified occurrence of berthierine in the state of Michigan, and X-ray diffraction patterns of this material suggest it is probably the polytype berthierine 1-M.



Berthierine on botryoidal hematite from the Sherwood mine, Iron County; 4 x 5 cm area. A. E. Seaman Mineral Museum specimen DM 27460, George Robinson photograph.

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.