SEAMANITE Mn²⁺₃(PO₄)B(OH)₆

A very rare mineral first described from Michigan. Its name honors professor Arthur E. Seaman, founder of the A. E. Seaman Mineral Museum at Michigan Technological University. Northern Peninsula.

Iron County: 1. Chicagon mine 8 km east of Iron River (type locality): As prismatic, pink to clove brown crystals up to 24 mm long associated with sussexite in post-ore fractures cutting oxidized iron formation (Kraus et al., 1930; McConnell and Pondrom, 1941). 2. Bengal (Cannon) mine, Stambaugh: Seamanite has recently been identified on a single specimen of brecciated iron formation associated with shigaite (q.v.). Unlike the browner crystals from the Chicagon mine, seamanite from the Bengal mine is bright pink, and occurs in radial aggregates of prismatic crystals up to 2.5 mm Identification confirmed bv across. X-rav and diffraction energy dispersion X-ray spectroscopy (DeMark, 2000).

Marguette County: South Jackson mine, Negaunee: Seamanite has been identified on a single specimen (AES 609) from the South Jackson mine in the collection of the A. E. Seaman Mineral Museum (Michigan Technological University). The few crystals on this specimen are only 2 to 3 mm in length and resemble those from the Chicagon mine. They occur embedded in clay on fracture surfaces in iron formation. Associated minerals are rhodochrosite and an unidentified microscopic brown-black mineral containing Mn and Cl (by qualitative energy dispersion X-ray spectrometry). Identification of the seamanite has been confirmed by X-ray diffraction and energy dispersion X-ray spectrometry.



Figure 124: Originally labelled by A. E. Seaman as "koenigite (Mn borate)," these 1 cm seamanite crystals from the Chicagon mine, Chicagon, Iron County, are among the largest known. A. E. Seaman Mineral Museum specimen No. DM 23124, Jeffrey Scovil photograph.



Figure 125: A 3 mm spray of seamanite crystals from the Bengal (Cannon) mine, Stambaugh, Iron County. A. E. Seaman Mineral Museum specimen No. DM 23024, John Jaszczak photograph.

FROM: Robinson, G.W., 2004 Mineralogy of Michigan by E.W. Heinrich updated and revised: published by A.E. Seaman Mineral Museum, Houghton, MI, 252p.

UPDATE

Iron County: Iron River, Homer mine: As paleto-bright pink radial aggregates of prismatic crystals to 2.5 mm across; virtually identical in appearance to those known from the Bengal (Cannon) mine. This marks the fourth known occurrence for seamanite in Michigan, and the fifth, worldwide. 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.