RIEBECKITE

$\square Na_2(Fe^{2+}{}_3Fe^{3+}{}_2)Si_8O_{22}(OH)_2$

(see also magnesioriebeckite, alkali amphibole)

One of the sodic amphiboles; forms a solid solution series with magnesioriebeckite, its Mg analog. It occurs primarily in alkalic granites and syenites, and in some iron formations. The fibrous-to-asbestiform variety is called "crocidolite." Northern Peninsula.

Dickinson County: Hawke (1976) states that riebeckite occurs "in pegmatites in Dickinson County." Unverified, and highly unlikely, inasmuch as riebeckite is restricted to alkalic pegmatites which do not occur in Michigan.

Gogebic County: Vicinity of Brush Lake, section 6, T45N, R39W: Biotite schists and gneisses, interlayered with amphibolite, locally riebeckite (Sims et al., 1984).

Marquette County: **1.** 325 paces north and 975 paces west of southeast corner of section 17, T49N, R25W: Microscopic fibrous overgrowths on hornblende in a syenite (Lane et al., 1891). **2.** In drill core from 3.2 km north of Empire mine, west-central part of section 7, T47N, R26W: With aegirine-augite, magnetite, and potash feldspar. Veinlets of coarse riebeckite cut the riebeckite-bearing rock. **3.** Humboldt mine: A thin, possibly discontinuous unit of riebeckite-bearing iron formation occurs near the top of the Negaunee Formation (Cannon, 1976). **4.** Republic iron mine (Morris, 1983). **5.** Empire Mine: With "aegirineaugite" in minor beds in magnetite-chert units of the Negaunee Iron Formation (Nordstrom, 1999).

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