## ZIRCON

## ZrSiO<sub>4</sub>

The only common zirconium mineral, zircon occurs as a widespread accessory species in many igneous, metamorphic, and clastic sedimentary rocks, including granite, granitic pegmatite, syenite, granodiorite, kimberlite, mica schist and gneiss, quartzite, and sandstone. Zircon is also a common detrital mineral (Kelly and Beutner (1930) for finds in the Parma sandstone, Saginaw Formation, and Ionia sandstone in South-central Michigan; Denning (1949) for occurrences in the Jacobsville sandstone; Stewart (1937) for occurrences in glaciofluvial sand; and Tyler et al. (1940) for Huronian metasediments, South shore, Lake Superior). "Hyacinth" is an obsolete name for pinkish-purple zircon; "malacon" and "cyrtolite" are obsolete names for altered, metamict U- and Th-bearing varieties of zircon. Because of its widespread occurrence, only a selected few can be cited here. Northern and Southern Peninsulas.

**Dickinson County: 1.** Metronite quarry 4 km east-northeast of Felch: In aplite-pegmatite dike (Heinrich, 1962b). **2.** Felch Mountain: Overgrowths of secondary zircon on rounded zircon grains in the Sturgeon Quartzite (Tyler et al., 1940).

**Gogebic County:** Central granite area of the Gogebic iron range: As "hyacinth" in the older granites that lie unconformably below the Palms Formation. The younger granites contain both "malacon" and "hyacinth" varieties (Tyler et al., 1949).

**Houghton and Keweenaw Counties**: **1.** In felsites (Butler and Burbank, 1929). **2.** Clark mine: As pale pink prismatic crystals to 1 mm, embedded in prehnite.

**Marquette County:** 1. Crockley pegmatite, section 22, T47N, R29W, (Heinrich, 1962a). 2. Northern complex of the Marquette iron range: The variety "hyacinth" occurs in granite and syenite in the western part of the district, and in the red granite northwest of Marquette. Granitoids of the southern complex contain "hyacinth" plus "malacon" varieties (Tyler et al., 1940).

**Menominee County:** Site 73 kimberlite north of Hermansville: Pale, honey-colored zircon fragments are common in various phases of this kimberlite. The zircons are typically anhedral and range up to 5 mm in size. Many appear resorbed and are mantled by fine-grained reaction products (S. M. Carlson, personal communication, 1996).

**Ontonagon County:** White Pine: In heavy mineral fraction of Nonesuch Shale (Doane, 1956).

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

**Dickinson County:** Abandoned pegmatite quarry near Randville, near center of N <sup>1</sup>/<sub>2</sub> NW <sup>1</sup>/<sub>4</sub> section 26, T42N, R30W: As sparse gray-brown terminated crystals up to 3 mm in pegmatite.

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.