

The content of trace elements in the muscle tissue of some species of aquatic organisms from the Sea of Okhotsk waters of Northeastern Sakhalin

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Abstract. The content of Fe, As, Cu, Mn, Cr, Ni, Pb and Cd in the muscles of some aquatic organism species from the Sea of Okhotsk waters of Northeastern Sakhalin was estimated: walleye pollack (*Gadus chalcogrammus* Pallas, 1814), longhead dab (*Limanda proboscidea* Gilbert, 1896) and Bering flounder (*Hippoglossoides robustus* Gill & Townsend, 1897), snow crab (*Chionoecetes opilio* (O.Fabricius, 1788)). The concentrations of Fe and Cu are reliably higher in the snow crab, in contrast to fish, and Pb concentration is higher in fish relative to the snow crab. There was no difference in the content of trace elements between the flounders and snow crab, and in relation to the walleye pollock, the snow crab has reliably higher concentrations of Fe, Cu, and Hg and lower ones of Pb. The content of Fe is higher in the flounders compared to the walleye pollack. The concentrations of Pb, Cd, As and Hg are safe according to the hygienic requirements for food products and may indirectly indicate a favorable environmental situation in terms of the content of regulated toxic elements in the waters of Northeastern Sakhalin.

Keywords:

trace elements, atomic absorption, aquatic organisms, muscles, Sea of Okhotsk

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