
Anchialine Lava Tubes and Their Biota

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Abstract

The word "anchialine" was proposed by Professor Lipke B. Holthuis (1973) as a term for land-locked coastal saltwater pools with subterranean connections to the sea. The term has been broadened and is now commonly used to describe coastal caves that contain tidal phreatic water. There are many anchialine lava tubes throughout the world that have provided a window to the underwater crevicular habitat of volcanic islands. Access by cave explorers using SCUBA to the submerged sections of these lava tubes has resulted in biological collections of interest to taxonomy and biogeography. Two lava caves, Jameo del Agua, Lanzarote, Canary Islands and Lua o Palahemo, Hawaii Island, have produced cavernicolous invertebrates of great phylogenetic age that were previously known only from collections made in the Bahamas, Bermuda, and Ascension Island.