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**EXCEPTIONAL PRESERVATION OF CORALS AND MOLLUSCS BY IRON OXIDE
REPLACEMENT IN HOLOCENE BEACH ROCK, PULAU SIBU, JOHORE,
PENINSULA MALAYSIA**

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ABSTRACT: Large tracts of coral that have been preserved by pseudomorphic replacement with goethite were found on beaches around Pulau Sibu, an island consisting of calc-alkaline tuffs off the coast of Johore in Peninsula Malaysia. The iron is brought to the sites of replacement by joints and fractures in the volcanics, and whether replacement takes place at a given locality may be controlled by the local flow regime of percolating groundwater through the pile of chemically unstable tuff. The actual replacement may be related to an increase in iron activity due to surface evaporation, since the layers of replaced coral resemble hard iron oxide crusts found in soils.