Identification Notes 1
for wildlife law enforcement

CATEGORY: INVERTEBRATES

Scientific Name/s: Melithaeidae: *Melithaea* species

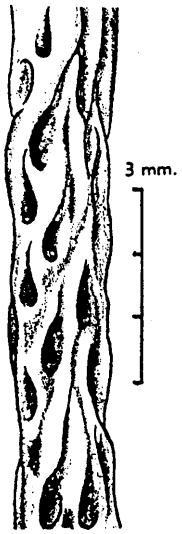
Common Name/s: Apple, red, or tiger coral; coral sea fan; red stone or limestone.

PROBLEM: Seashell jewelry imported from the Philippines contains unmarked and undeclared coral beads and inlay, and may violate Philippine laws. Many beads and inlays are made from skeletons (axis) of the red stony sea fan, *Melithaea* species. The axis is sponge-like with soft sections (nodes) composed of keratin. These nodes have microscopic spicules (see below) diagnostic of this family. This coral changes from red to pink, to yellow, and then to white when heat is applied.

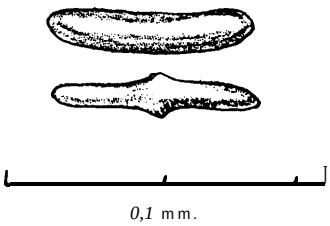
IDENTIFICATION PROCEDURE:

1. With a knife, scrape an area clean of dye and lacquer.
2. Scrape into the soft node with a nail or similar probe. Collect the dust on a microscope slide, carefuly add a drop of water, and apply a cover slip.
3. Examine the slide under a compound microscope (at 100x or 200x) for spicules as illustrated below (most large airports have USDA-PPQ insect examination stations equipped with a microscope).

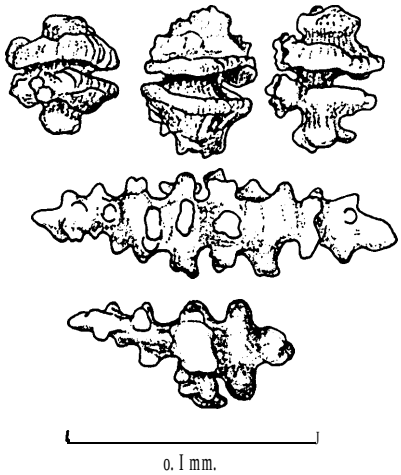
SECTION OF THE AXIS OF *MELITHAEA* (after Bayer, 1956)



NODAL SPICULES, *MELITHAEA* SPECIES (after Bayer, 1956)



AXIAL SPICULES, *MELITHAEA* SPECIES (after Bayer, 1956)



WATCH FOR. Invoices declaring seashell jewelry, red stone, or limestone items from the Philippines.

FROM Western Pacific Ocean and Indian Ocean.

REFERENCES:

Bayer, F. 1956. Octocorallia. pp. F200-201. In: Moore, R.C. (Ed.) Treatise on Invertebrate Paleontology, Vol. F, Coelenterata. University of Kansas Press, Lawrence.

Submitted by: Mike Coffey, Wildlife Inspector, Port of Chicago, IL

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Prepared in cooperation with the National Fish & Wildlife Forensics Laboratory, Ashland, OR, USA