HAWAII UNDERSEA RESEARCH LABORATORY QUICK LOOK REPORT MISSION NO. P5-100

MISSION STATUS

Location:

Kona, Hawaii

Mission Date:

Aug 26, 1988

Maximum Depth:

790 m.

Project Title:

Secondary Metabolites of Deep Sea Invertebrates

Project Leader:

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Scientific Data Acquired: Prepare an abstract outlining your objectives, techniques, findings, etc.

In order to answer the question whether genetic or environmental factors determine the make-up and chemistry of invertebrate secondary metabolites we attempt to collect a broad spectrum of soft-bodied animals, sponges, mollusks, coelenterates, tunicates, whose shallow water chemistry has become familiar to us.

We successfully collected five specimens each of two coelenterates. Because of technical difficulties (see below) we were unable to retain two species of nudibranch. All four organisms have to the best of my knowledge not previously been studied by chemists.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

- 1) The PISCES V lacks the "fish-sucker of the Makalii.
- 2) The collecting basket should have several compartments which can be independently opened and closed.

Recommendations for corrective action or improvement:

See above paragraph.

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.

Partially - the lack of a secure lid for the collecting basket caused considerable problems in retaining specimens which were free to move. As a result only specimens which were securely attached to rocks were collectible.

List specimens or samples collected on the mission.

- 5 specimens of what has been coined the "Venus fly trap" sea anemone which se attached to rocks.
- 5 specimens of another sea anemone, photographs were taken of both.
- 2 specimens of a purple "nudibranch" which were lost in transit to the surface.
- l specimen of a brown nudibranch which was also lost in transit to the surface.

DATA RELEASE

Data may be retained by the project leader for up to 2 years after the mission date with the following exception. NOAA may request to use photos for publication or publicity purposes at any time.

Project Leader