Spiny cup-and-saucer shell

**DESCRIPTION**

Low conical limpet-like shell with apex spirally coiled. Dorsal surface of shell ray-white with spirally arranged spines or knobby projections. Ventral surface of shell purple or black and smooth with a distinct cup-like projection (from Kay 1979).

Another introduced intertidal gastropod, *Crepidula aculeata* (Gmelin, 1791), is superficially similar to *Crucibulum* when viewed dorsally. The ventral is smooth with similar coloration, but with a shelf or deck, rather than a cup.

**HABITAT**

In harbors and embayments, on pier pilings, coral rubble and basalt rocks from the intertidal to 8 m.

**DISTRIBUTION**

**HAWAIIAN ISLANDS**

Throughout the main islands

**NATIVE RANGE**

Southern California to Chile

**PRESENT DISTRIBUTION**

World-wide in warm seas

**MECHANISM OF INTRODUCTION**

Unintentional, as fouling on ships’ hulls

**IMPACT**

Fouling organism. Ecological impact unstudied, some competition for space with native intertidal species likely.

**ECOLOGY**

**Feeding**

*Crucibulum spinosum* is a ciliary feeder.

**Reproduction**

These gastropods are protandrous hermaphrodites, changing during the course of their life from a small
male into a full-grown female (Kay 1979). They spawn throughout the year in Kaneohe Bay and can account for 90 percent of the veliger component in the Bay in certain areas (Taylor 1975).

**REMARKS**

Like many nonindigenous species, this small fouling gastropod species appeared in the Hawaiian fauna soon after World War II. Keen (1971) noted an Eastern Pacific distribution from California to the Gulf to Tomé, Chile. Springsteen and Leobrera (1986) report it as introduced to the Philippines. Given the volume of ship traffic between Pearl and Honolulu Harbors and the Philippines, the appearance of *C. spinosum* in other Pacific harbors is not a surprise. It is now much more widespread, but goes unreported.

Edmondson (1946) appears to have been the first to remark on its presence in Honolulu Harbor. By the late 1950s it was widespread around Oahu (Burgess 1959). Ulbrick (1969) reported that it occurred on pieces of dead coral or basalt rocks dredged from sand and rock bottom at 5 to 8 meters in Kaneohe Bay and that it was also found on seawalls and experimental trays put out for oyster spat. It is now a common intertidal and shallow water throughout the main islands, and continues to be reported in the literature.

**REFERENCES**

Burgess, C.M. 1959. Where did this shell come from? Hawaiian Shell News. 7(8): 73.


