

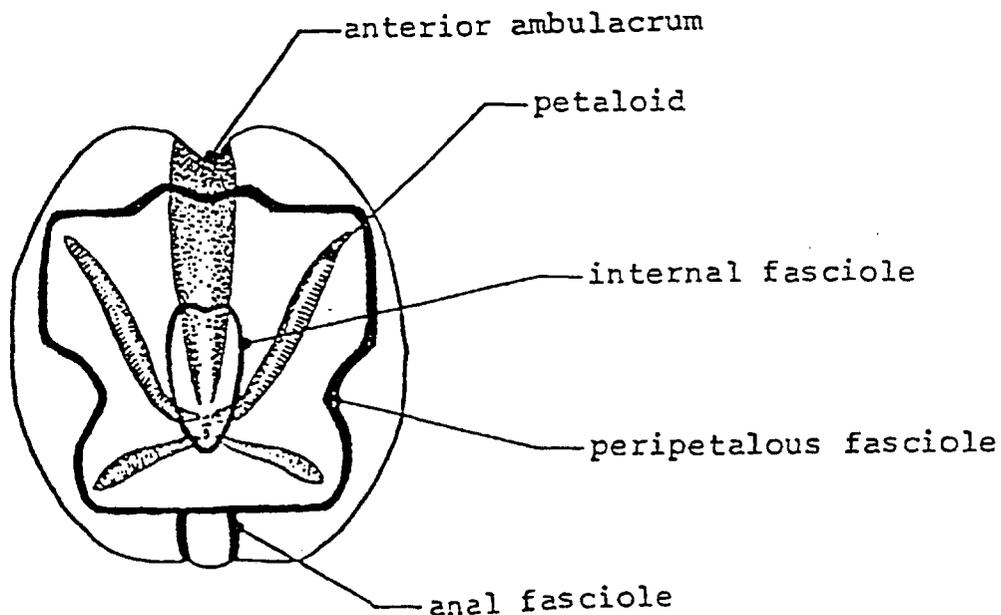
KEY TO SOME COMMON IRREGULAR (HEART) URCHINS
 FOUND NEAR PT. LOMA

by S. Lagos 11/91 after Charwat & Word

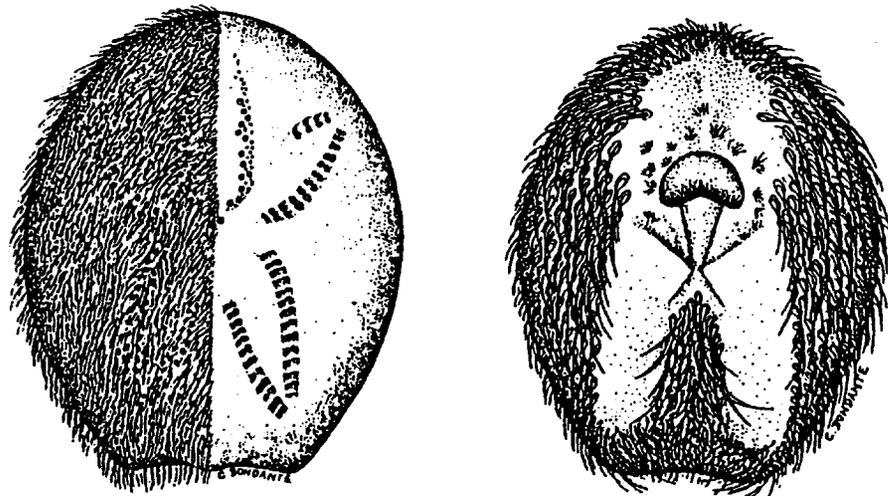
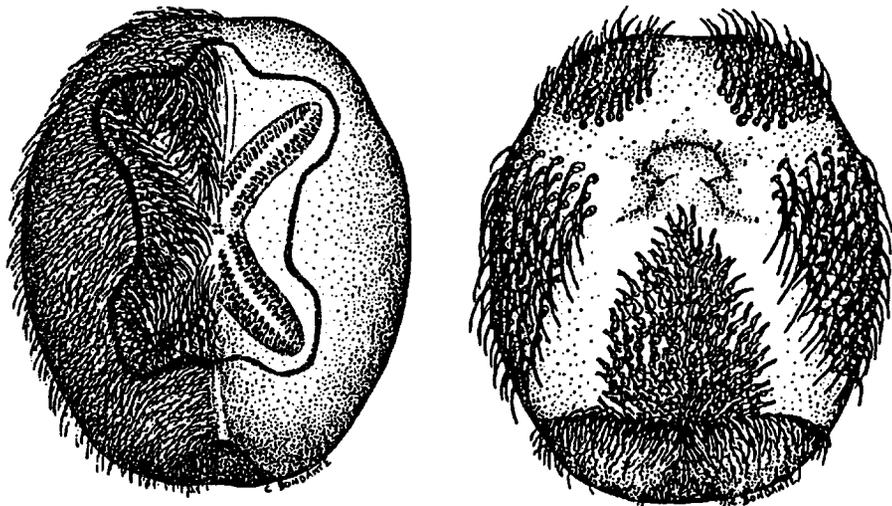
- 1a Elongate spines anteriorly to 3/4 of test length with
 2 to 3 tufts of long spines posteriorly; internal
 fasciole present Lovenia cordiformis
- 1b Spines short, maximally to 1/4 of test length, uniformly
 distributed over test surface or in short clumps; internal
 fasciole absent 2
- 2a Anterior ambulacral depression present; peripetalous
 fasciole present or absent 3
- 2b No anterior ambulacral depression; peripetalous fasciole
 absent; large brown/black pedicels near mouth
 Gonimaretia laevis
- 3a Peripetalous fasciole absent; petaloids not evident
 Spatangus californicus
- 3b Peripetalous fasciole present; petaloids evident4
- 4a Anterior lateral petaloids approximately equal to length
 of posterior petaloids and not extending to test margin;
 slight anterior ambulacral depression
 Brissopsis pacifica*
- 4b Anterior lateral petaloids extend to test margin and are
 twice the length of posterior petaloids; deep anterior
 ambulacral depression present Briaster latifrons*

* NOTE: These two species occur in a wide range of
 depths. Where they coexist, hybrid specimens are
 frequently reported. Caution is advised.

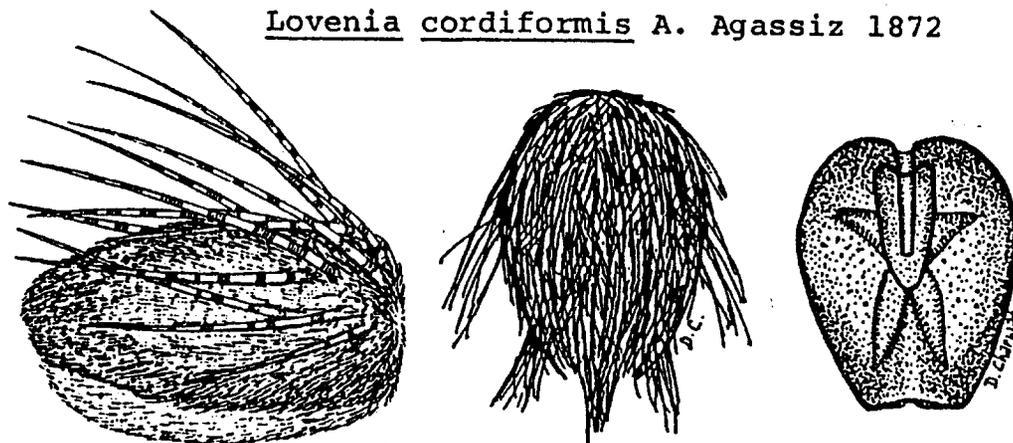
Diagram of irregular urchin features (aboral view).



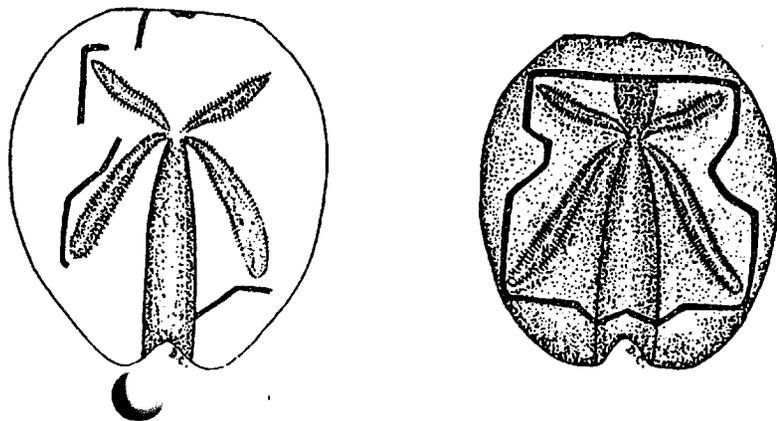
Brissopsis pacifica (A. Agassiz 1898)



Lovenia cordiformis A. Agassiz 1872



Brisaster latifrons (A. Agassiz 1898)



(from: Brusca, 1980)

Spatangus californicus H. L. Clark 1917

