

## INSTITUTO POLITÉCNICO NACIONAL CENTRO INTERDISCIPLINARIO DE CIENCIAS MARINAS



## Repositorio Institucional

**Naegel, L.C.A.** & C.A. Aguilar Cruz (2006). The hypobranchial gland from the purple snail *Plicopurpura pansa* (Gould, 1853, Prosobranchia: Muricida). Journal of Shellfish Research, 25(2): 391-393.

## The hypobranchial gland from the purple snail *Plicopurpura pansa* (Gould, 1853, Prosobranchia: Muricida)

Ludwig C.A. Naegel & C.A. Aguilar Cruz

Most marine snails of the family Muricidae produce in the hypobranchial gland a viscous secretion containing, besides mucus and biologically-active compounds, minute amounts of chromogens. These chromogens develop enzymatically and under the influence of light and oxygen into a purple pigment known variously as "Tyrian Purple", "Royal Purple" or shellfish purple. In the hypobranchial gland the enzyme purpurase is kept apart from the chromogens, so that no pigments are formed under normal conditions. The chromogens together with the enzyme can be obtained from *Plicopurpura pansa* (Gould, 1853) by "milking" without harming the animals. Different species of muricids produce different pigments, depending on the number and concentration of different chromogens and on the varying light intensity and oxygen availability during pigment formation. The main pigment obtained from the hypobranchial gland from muricids contains indigoids. The "ink" of *P. pansa* is mainly 6,6′-dibromindigo with smaller amounts of 6-bromoindigo and 6,6′-dibromoindirubin, similar to that of *Murex brandaris*.

Para obtener copia del documento contacta con el autor (lnaegel@ipn.mx) o con el personal de la biblioteca (bibliocicimar@ipn.mx).