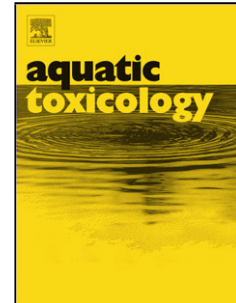


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# The paralytic shellfish toxin, saxitoxin, enters the cytoplasm and induces apoptosis of oyster immune cells through a caspase-dependent pathway.

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## HIGHLIGHTS

- Saxitoxin (STX) appeared to spread throughout the cytoplasm of *Crassostrea gigas* hemocytes.
- STX induces a caspase-dependent apoptosis death of hemocytes that does not depend on ROS production.
- GTX5, which is present in large amounts in *A. catenella*, was found to be the most toxic derivate against oyster hemocytes.
- Hyalinocytes were found to be a hemocyte population highly responsive to this toxic stress.

## Abstract:

Exposure of the toxin-producing dinoflagellate *Alexandrium catenella* (*A. catenella*) was previously demonstrated to cause apoptosis of hemocytes in the oyster species *Crassostrea*

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