

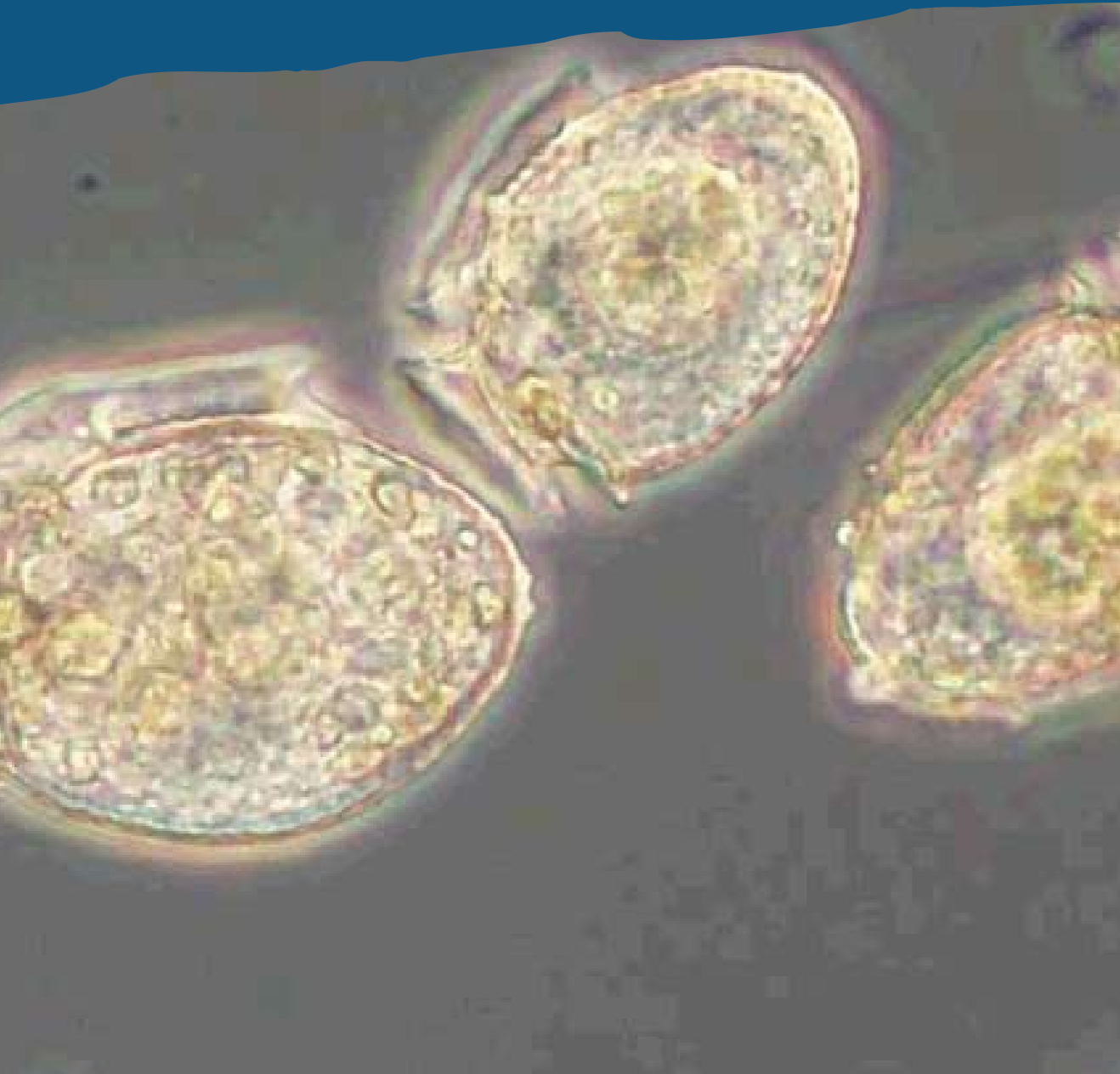
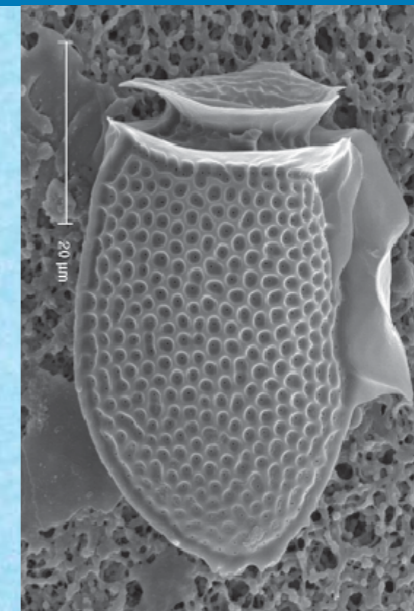
Dinophysis Acuminata

What is *Dinophysis acuminata*?

Dinophysis acuminata is a marine planktonic (free-floating) microalgal species (dinoflagellate). It is a regular oval shape and approximately 40- 50 microns long.

Where does *Dinophysis* live?

Dinophysis is commonly found in the Peel-Harvey Estuary, as well as the Swan and lower Canning River estuaries, Wilson Inlet and various southern and northern coastal inlets. It is also common in Australian and New Zealand coastal waters, but rarely at significant densities.



Is *Dinophysis* toxic?

Yes!

Dinophysis is associated with Diarrhetic Shellfish Poisoning (DSP). This gastrointestinal illness is caused by the consumption of contaminated shellfish (filter feeding species). However, toxicity levels can vary among seasons. Regular monitoring and testing is part of the WA Shellfish Quality Assurance Program (WASQAP), ensuring the safety of all commercially farmed shellfish. Wild shellfish are not monitored, hence their toxicity unknown.

The first cases of DSP were reported in the Netherlands in the 1960s, though it is now reported worldwide. Onset of DSP can occur 30 minutes to 12 hours following seafood ingestion. Symptoms include diarrhoea, nausea and vomiting. There are no long- term ill effects, with even severe cases completely recovering and no reported fatalities.

The first confirmed *Dinophysis*-related shellfish harvesting closure in WA occurred in 2007 at the Wilson Inlet in Denmark. Mussels tested contained the toxin at levels much higher than the WASQAP standard.

If you experience any DSP or related symptoms following consumption of wild shellfish, seek medical advice. Most of these cases go undetected since people assume they are 'allergic to seafood'.

Past blooms in the Peel-Harvey Catchment:

- Riverine end of the Peel-Harvey Estuary in the summer of 2000/2001.
- June, August and October 2004 in the Peel-Harvey Estuary.
- April and December 2005 in the Peel-Harvey Estuary.
- May 2006 in the Murray River; June and July 2006 in the Harvey Estuary; and, August 2006 in the Peel Inlet.

Acknowledgments

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Photos from unpublished report, Department of Water