Dinophysis acuminata

Acuminate microalgae

MARINE-COASTAL EXOTIC SPECIES GUIDE FOR ARGENTINA

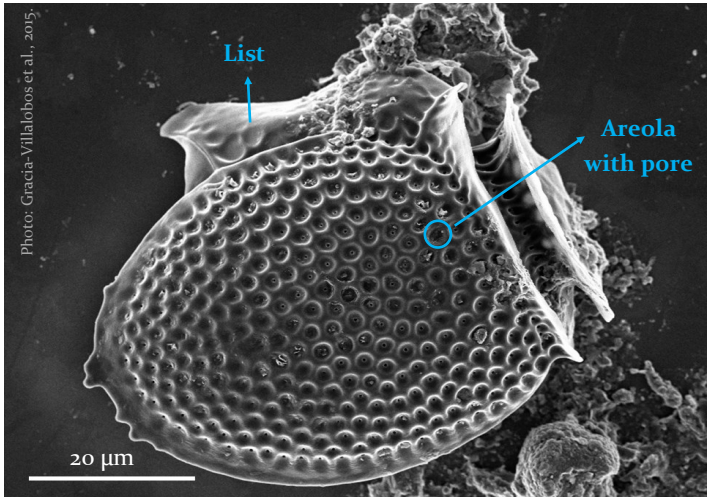
DESCRIPTION

- Solitary and unicellular marine microalgae with an oval shape.
- The length (58 µm) doubles the width (30 µm).
- It has two flagella (hair-like structure) and lists.
- On its external plate, it has circular areolae (small depressions), each one with a single pore only visible with a electron microscope.

D. acuminata view under the optical microscope.

Photo: Gracia-Villalobos et al., 2015.

Length: 58 µm



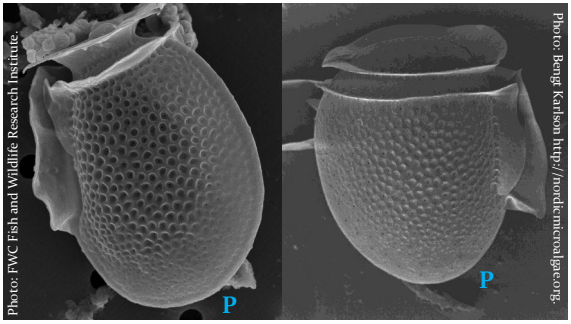
D. acuminata view under scanning electron microscope (SEM).

HABITAT

It integrates the plankton in coastal areas with cold or temperate waters. It is abundant in the northern Atlantic and Pacific Oceans.

Dinophysis acuminata– Acuminate microalgae

SIMILAR SPECIES



Dinophysis fortii *Phalacroma rotundatum*

- *Dinophysis fortii:* Native. It is bigger than *D. acuminata* (length: 56-83 µm; width: 43-58 µm), with the posterior region (P) rounded and not oval.
- *Phalacroma rotundatum*: Native. Similar in size to *D. acuminata*, but with a rounded posterior region (P).

INVASIVE STATUS

Dinophysis acuminata is native to the Northeast Atlantic. In Argentina it was first reported in 1941, most likely carried in ballast water. It is currently found throughout the Argentinean coast.

IMPACT ON NATIVE COMMUNITIES

The effects of this species are known by the toxic blooms that it produces known as "red tides". Even in low concentrations, this species has toxins that tend to accumulate in the adipose tissue of several mollusk species. Many of these mollusks are consumed by humans, which can lead to poisoning.

CONTACT US

This guide has been developed by the Grupo de Ecología en Ambientes Costeros (GEAC), from CENPAT (CONICET). If you find this species outside the reported areas, please contact us and let us know the date, locality, approximate number of individuals and, if possible, send us a picture:

especiesexoticasarg@gmail.com

Grupo de Ecología en Ambientes Costeros (GEAC)

Gracia-Villalobos et al., 2015. Journal of Shellfish Research, 34(3):1141-1149.

We tank Dra. Leilén Gracia- Villalobos (CESIMAR-CONICET, Argentina) for her valuable advise.