

Ascidian / Sea Squirt

Microcosmus squamiger

D

 **Pathway** • Hull fouling • Ballast water • Aquaculture

Impacts



Biodiversity

Ability to form dense aggregations, could result in native species being outcompeted for space, but further assessments are needed.



Human Health

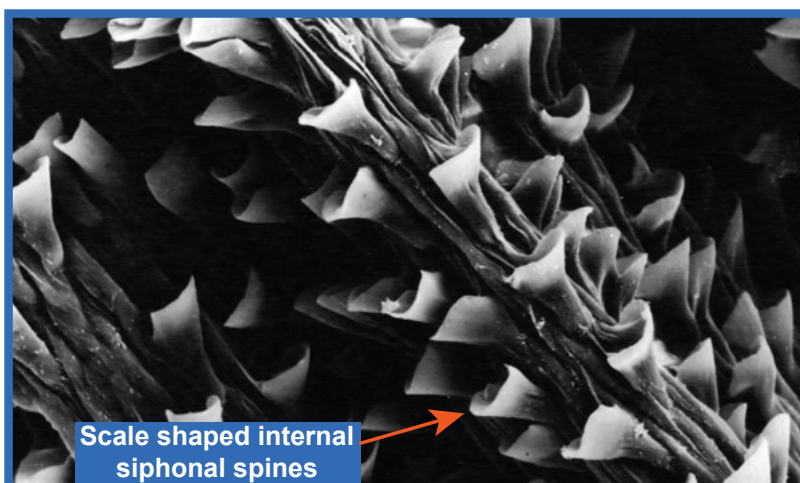
None known.



Economy

Economic damage to oyster culture racks, ropes and shells through biofouling.

Key ID Features



Description

Solitary sea squirt, globular in shape with two siphons at the top. Body surface is tough like leather with ridges / wrinkles and can be covered in other organisms such as algae which can make it hard to see. Internal surface has scaly spines but feels soft. The siphons are directed away from each other and are around a third of the body length, although they are hidden when contracted.

Size

Up to 4 cm.

Colour

External colour can be red or brown, purple interior.

*Note: Images not to scale



Distribution



Native range: Australia.



Non-native range: Global, but more commonly in warm temperate seas (e.g. west Mediterranean and Atlantic southern Europe).



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Habitat and Ecology

Habitat: Shallow littoral rocky habitat to depths of 35 m, most commonly found from the water line to 10 m. When introduced it is often found on artificial substrates such as concrete in harbours and can form large aggregations with same species or other sea-squirts and mussels.

Environmental preference: Can survive in disturbed habitats due to its ability to tolerate pollution, stagnation, and low salinities. Not found within 10 degrees latitude of the equator so distribution may be temperature limited.

Diet: Filter feeder of phytoplankton and detritus.

Reproduction: Hermaphrodite with high reproductive potential due to huge amount of eggs and sperm being released into the water simultaneously. Embryos develop in the water column then settle quickly so dispersal is restricted. Spawning generally occurs in the summer.

Confusion with similar species

Could be confused with another invasive species *Microcosmus exasperatus* which can only be distinguished internally with the main difference being its siphonal spines are scale-shaped rather than pointed.

If you think you have seen this species, please contact the person below who will confirm its identity.

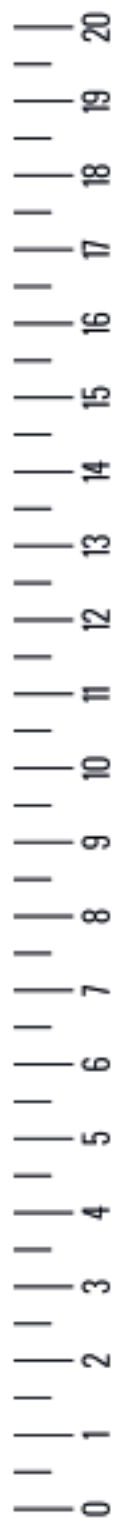
Please also refer to the mitigation strategies guidance document, provided as part of the Marine Biosecurity Toolkit.

Further Information

- <https://www.cabi.org/isc/datasheet/108333>
- <https://invasions.si.edu/nemesis/calnemo/SpeciesSummary.jsp?TSN=-127>
- <http://www.iucn-medmis.org/?c=Guide/specie/30>

Images

Front: Top © Charles Griffiths / Bottom © Xavier Turon



cm