

Mediterranean Mussel

Mytilus galloprovincialis

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Pathway

- Aquaculture
- Ballast water
- Hull fouling
- Natural spread

Impacts



Biodiversity

Outcompetes and displaces native species for space and nutrients which reduces natural biodiversity as they become the dominant species. Mass deposition of waste products in the sediment creates hypoxic conditions and alters nutrient fluxes which can impact community composition of native species. Natural tendency to hybridise with other species of *Mytilus* can lead to a reduction in genetic diversity of native species.



Human Health

None known.



Economy

Biofouling of pipes and water systems in ports can have a negative economic impact.

Key ID Features



Description

Large triangular shaped shell with concentric lines. The two shell halves are equal although shell shape can show regional variation.

Size

Can reach 20 cm in length, typically 5 - 10 cm.

Colour

Varies from brown, blue or purple to black.

*Note: Images not to scale



Distribution

Native range: Mediterranean, Black Sea and the eastern Atlantic.

Non-native range: Pacific coast of North America, Japan, Hong Kong, South Africa, Chile, and Australia.



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Habitat and Ecology

Habitat: Usually in the intertidal zone to depths of 40 m. It is fast growing and can occur in dense masses. Usually found attached to hard substrates along exposed coasts and rocky shores but is also found in sheltered shores such as sandy harbours and estuaries.

Environmental preference: Tolerant to a range of environmental conditions including air exposure and can tolerate salinities of 10 PSU.

Diet: Filter feeder which prefers fast moving water with nutrient rich upwellings, eats a wide range of planktotrophic organisms.

Reproduction: Multiple times per year during the months with the highest water temperature. Males and females spawn simultaneously, producing millions of eggs and sperm. Larvae drift with water currents for several weeks before settling on the benthos and attaching firmly to rocks using byssal threads. Reaches sexual maturity in 1 - 2 years.

Confusion with similar species

Numerous *Mytilus* species are similar morphologically with the only reliable means of identification being DNA analysis.

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/73756>
- <http://www.iucngisd.org/gisd/species.php?sc=102>
- <https://invasions.si.edu/nemesis/calnemo/SpeciesSummary.jsp?TSN=-64>

Images

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