

Orange Cup Coral

Tubastraea coccinea

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Pathway • Hull fouling • Natural dispersal • Aquarium trade
• Translocation of machinery / mobile oil & gas platforms

Impacts

Biodiversity

Can compete with native benthic invertebrates such as sponges and other corals potentially causing local exclusion and wider ecosystem effects. Has been reported to cause cell death in native corals growing in close proximity.

Human Health
None known.

Economy
None known.

Key ID Features



Description

Non-reef-building coral that grows in rounded clumps / colonies, attached to the substrate at the base of the corallite cylinder. Translucent tentacles extend at night. Colony arrangement can range from individuals positioned close together with their walls fused, to individuals being more loosely arranged.

Size

Individuals roughly 1 cm in diameter and can reach heights of 4 cm. Colonies can measure up to 14 cm in diameter.

Colour

White coral skeleton surrounded by an orange to red polyp with orange to yellow tentacles.

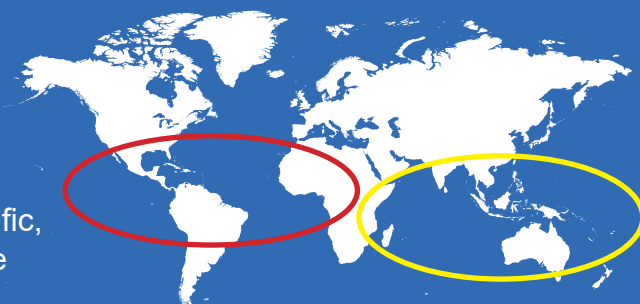
*Note: Images not to scale



Distribution

Native range: Indo-Pacific region.

Non-native range: Asia, Africa, Australasia, Pacific, North America, Central America, South America and the Caribbean.



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Habitat and Ecology

Habitat: Found in the shallow sub-tidal zone at depths between 0 m and 3 m but can also be found inhabiting natural vertical surfaces at depths down to 130 m as they do not rely on photosynthesis. Can also colonise artificial structures such as ship wrecks.

Environmental preferences: Can survive in variable salinities and turbidities, but cold water may limit its distribution.

Diet: Uses tentacles to catch zooplankton.

Reproduction: Can reproduce sexually and asexually to free swimming larvae during multiple periods throughout the year. Larvae can disperse on currents over long distances and survive for ~14 days, however most settle on the substrate close to the adult. Fragments and polyps that abandon the corallite skeletons can settle and re-develop.

Confusion with similar species

Differs from other species in the *Tubastraea* genus by its orange to red polyp with orange to yellow tentacles.

Does not contain zooxanthellae (endosymbiotic algae) as most corals do.

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

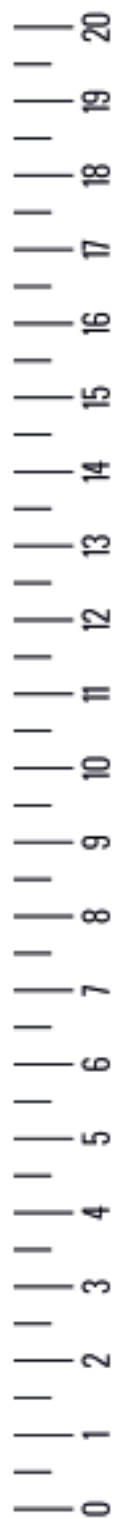
Please also refer to the mitigation strategies guidance document, provided as part of the Marine Biosecurity Toolkit.

Further Information

- <https://www.cabi.org/isc/datasheet/109218#toimpact>
- <https://invasions.si.edu/nemesis/browseDB/SpeciesSummary.jsp?TSN=53808>
- <http://www.iucngisd.org/gisd/species.php?sc=1096>

Images

Front: Top © Bernard Picton / Bottom © Nick Hobgood



cm