TUVALU

Spaghetti bryozoan

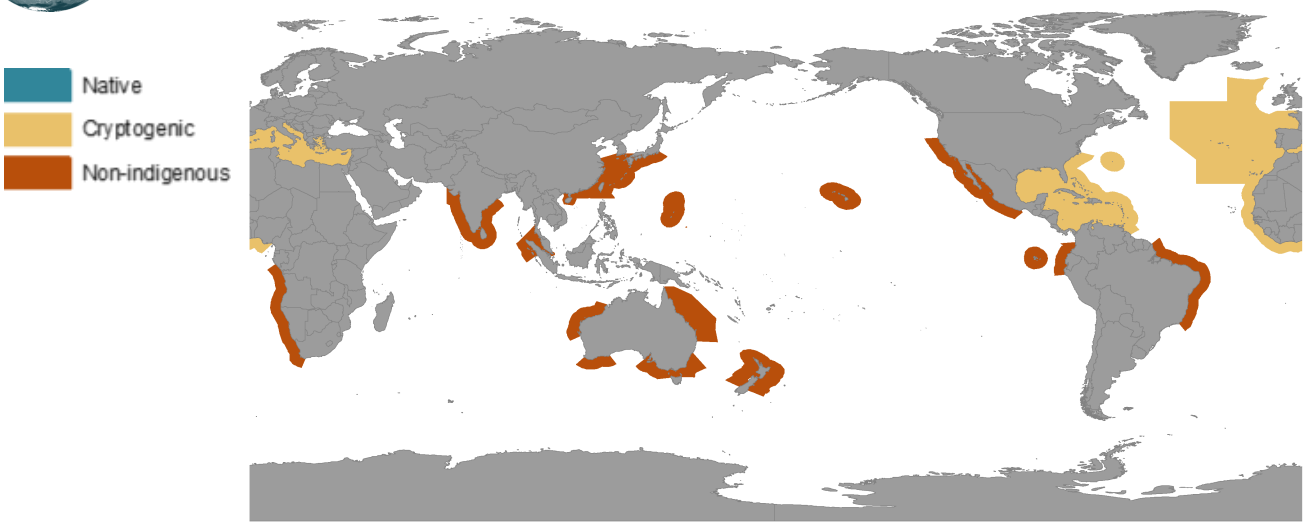
Amathia verticillata (delle Chiaje, 1822)

KEY FEATURES

- Large, bushy, repeatedly branching colonies, up to 1 m long, appearing as thin, stringy, gelatinous noodles
- Immature colonies usually transparent; older, larger colonies dirty white
- Colonies deciduous, branches falling off in winter, new branches regenerating in spring
- Subtidal, mostly on hard surfaces such as rocks, pontoons, pilings, boat hulls, or epibiont on shells or carapaces
- Large bushes are formed only when water warms over 22°C
- Tolerates a wide range of salinities but found in the greatest abundance where salinity is above 30
- Elevated temperature and salinity have been suggested to enhance outbreaks of this bryozoan

PATHWAY

✓ ballast water ✓ biofouling ✓ aquaculture transfer



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IMPACTS

Environmental impacts

Known to kill eelgrass in San Diego Bay, by epiphytic smothering, creating gaps in the seagrass canopy, exposing sediment which is then colonised by adult bryozoans. Large masses drift and entangle submerged surfaces with significant impacts on the settlement and survival of hard-bottom sessile invertebrates

Human health impacts

None known

Social & cultural impacts

Can clog and foul fishing gear and modify habitats, with social impact on food gathering and recreational enjoyment

Economic impacts

Causes problems for vessels and marinas. Has been known to clog fishing gear in Texas and power plant intakes in Israel. Drift mats have been sucked into cooling water intakes causing operational difficulties. Fouls cultured pearls on the south coast of Korea

ADDITIONAL DETAILS

- In contrast to most other bryozoans, calcium carbonate is absent in exoskeletons of this species
- Fragmentation may be an important dispersal mechanism for this species
- The nudibranch *Okenia pellucida* has been found exclusively with the spaghetti bryozoan on which it feeds and lays its eggs masses. This nudibranch has likely been spread in association with this species

DISTRIBUTION

NOT PRESENT IN TUVALU

Native range

Uncertain. Type locality is in the Mediterranean Sea, but it has been suggested that it originated in the Caribbean. Both areas are classified as cryptogenic

Non-indigenous range

Australia, New Zealand, Hawai'i, South America, Galapagos, Ecuador, Mexico, North America West Coast, West Africa, India, Pakistan, and Malaysia

CREDITS AND REFERENCES (click reference for more information)

Images

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References

Gordon and Matawari 1992, McCann et al. (2015), Jeba Kumar et al. (2017), dos Santos et al. (2016)

SPREP Secretariat of the Pacific Regional Environment Programme
gef
Pacific Invasive Species BATTLER
UN environment programme