Heterosiphonia japonica

Red Algae

General

- Bushy, deep red-brown fronds, to 600 mm long, arising from a basal disc

Threat scores

1. Ecological impact
   - H. japonica grows rapidly and spreads over large areas, and may therefore displace other algal species in particular locations
   - It also attaches to other algae and to benthic animals
2. Invasive potential
   - Given its capacity for rapid growth at such widely varying temperatures and salinities, and its effective propagation by means of fragmentation, there is reason to assume that H. japonica could continue its expansion into the Kattegat, and possibly into the southern Baltic
   - It probably spreads by shedding its small, monosiphonous pseudolaterals
   - These fragments then give rise to new plants
   - The ability to survive in darkness may be a critical factor for the long-distance dispersal of red algal propagules in ballast water
3. Geographic extent
   - Locally pervasive
4. Management Difficulty
   - No known eradication controls in marine environment

Geography and Habitat

1. Origin: Japan and Korea
2. Introduced: California
3. Habitat
   - Marine, aquaculture, benthic
   - Preference for rocks & other hard surfaces, but also spreads in areas w/other benthic substrata
   - Thrives in areas relatively well sheltered from waves
   - Attaches to algae and other animals, copes with freezing to tropical temps
   - Requires high salinity

Invasion Pathways

1. Ballast &/or Fouling
2. Natural spread - fragmentation
3. Stocking in open water - oyster culture

Non native locations

1. 59- S. California Bight

Sources

1. Molnar, Jennifer, et al. 2008. "Assessing the global threat of invasive species to marine biodiversity." *Frontiers in Ecology and the Environment*. 6 (9), pp. 485-492.
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3. http://www.seaweed.ie/descriptions/Heterosiphonia_japonica.html
4. http://www.algaebase.org/search/species/detail/?species_id=4722