



## Kappaphycus alvarezii

### Red Algae

#### Threat Scores

1. Ecological Impact
  - This species has an extremely high growth rate; although it has been found to provide habitat for many marine species, it can smother coral reefs
  - It is used by humans as a homogenizer in many products
2. Invasive Potential
  - Since their introduction in Kaneohe Bay in 1974, they have spread at the rate of 260 m/yr
  - Kappaphycus spp. alga may be able to spread laterally but, does not appear to be able to spread long distances or between islands
  - Dispersal is thought to be constrained by size and weight, as it appears to become trapped in depressions and channels
3. Geographic Extent
  - Locally pervasive
4. Management Difficulty
  - Can re-grow from fragments as small as 0.5 cm making it an extremely difficult species to control



#### Geography and Habitat

1. Native: Malaysia, Sulu Sea, southern Philippines
2. Introduced: Hawai'i
3. Habitats
  - Marine, coral reefs, benthic, coastland, submerged substrates, floating populations

#### Invasion Pathways

1. Plants as food
  - Major producer of kappa-carrageenan, which is used for medicinal purposes and as a homogenizer in milk products, toothpaste, and jellies
2. Natural spread

#### Non-Native Locations

1. 152- Hawaiian Islands

#### Sources

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3. [http://hawaii.edu/reefalgae/invasive\\_algae/rhodo/kappaphycus\\_alvarezii.htm](http://hawaii.edu/reefalgae/invasive_algae/rhodo/kappaphycus_alvarezii.htm)
4. <http://www.issg.org/database/species/ecology.asp?fr=1&si=738&sts=>
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