

Waialua Alien Algae Investigative Report



Completed by Aquatic Invasive Species Team (AIST) September 2009

Background:

On August 11, 2009 the AIST received a report of an area with “accelerated” algal growth on the inshore reef of Waialua on the North Shore of Oahu. The report came from a concerned citizen via the Hawaii Coral Reef Initiative Program (HCRI) and was forwarded to the Hawaii Division of Aquatic Resources & the AIST.

According to the initial report, the area has gone through a phase shift over the past year “where large coral heads that were mostly healthy last year are now becoming covered and smothered by algae”.

Findings:

On September 3, 2009 the AIST and the Oahu monitoring coordinator surveyed a .5km section of the area in question. The coordinates given were 21°34'60” N 158°8'44.64” W. The area resembled other degraded inshore areas around the state with high levels of macro algae coverage and isolated coral heads, mostly *Porites* & *Pocillopora spp.* (Figure 1). *A. specifera* was the only alien species observed, and was the dominant algae present. Several native species were also seen, none of which were acting invasively.

Recommended Action:

The reef is visibly degraded. Observations suggest that this could result from a lack of herbivores and/or increased eutrophication/sedimentation. Unfortunately, we have no baseline in which to compare our observations and therefore it is difficult to pinpoint which stressors may have most greatly contributed to the invasion. At this time there is little that can be done for areas of this nature. The DAR AIST will monitor the area periodically to look for seasonal changes in abundance or distribution of AIS. Research is underway to determine best management practices for controlling invasive algae species and restoring ecosystem functions. Please feel free to contact the AIST for any further information at hauk@hawaii.edu or 808-256-4897.

Waialua Invasive Algae Survey

September 03, 2009

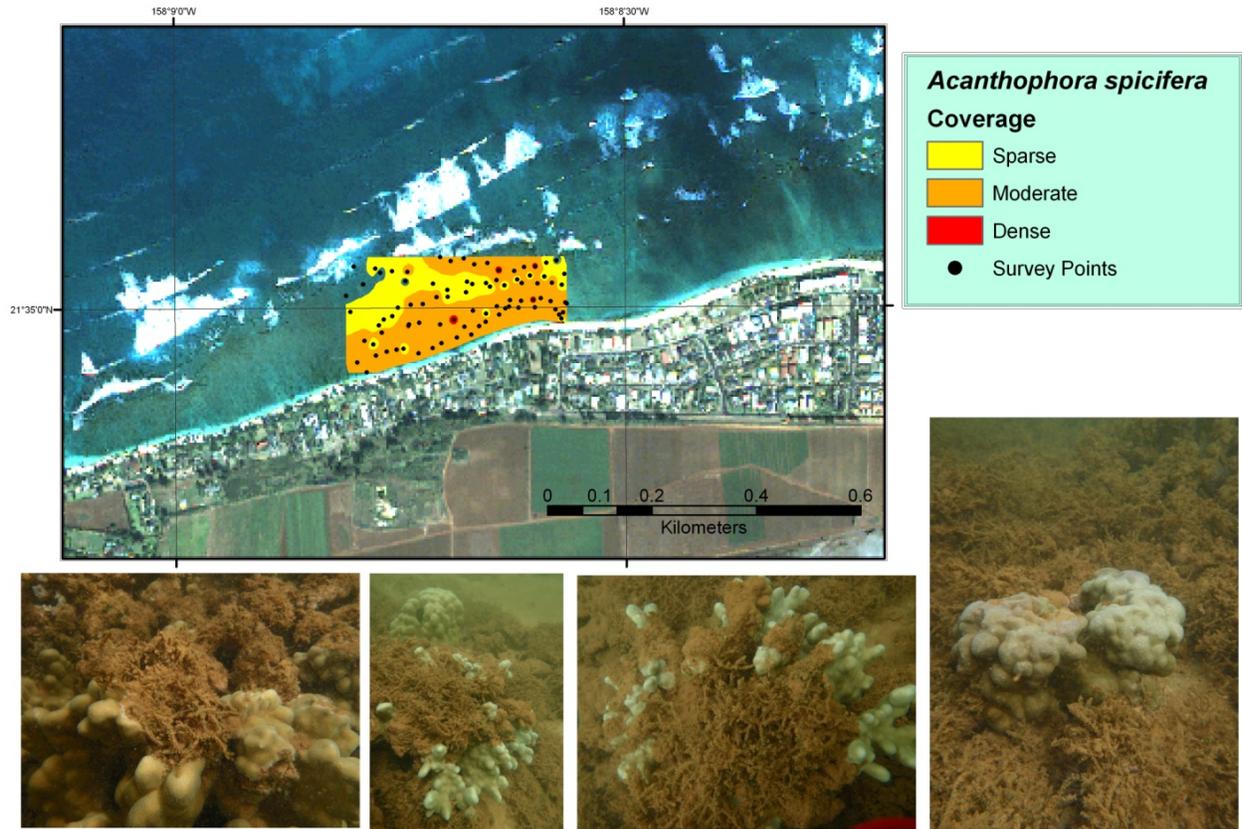


Figure 1 Surveyed area showing distribution and abundance of the alien algae *Acanthophora spicifera*. Pictures indicate areas of moderate to dense coverage