Supplementary Material

**INCREASED coral larval SUPPLY ENHANCES recruitment for CORAL AND FISH HABITAT restoration**

Peter L. Harrison1\*, Dexter W. dela Cruz1, Kerry A. Cameron1, Patrick C. Cabaitan2

1Marine Ecology Research Centre, Faculty of Science and Engineering, Southern Cross University, Lismore, New South Wales 2480, Australia

2The Marine Science Institute, College of Science, University of the Philippines, Diliman, Quezon City 1101, Philippines

**CORRESPONDENCE:**

Professor Peter L. Harrison

[peter.harrison@scu.edu.au](mailto:peter.harrison@scu.edu.au)

**Supplementary Table 1**. Summary of costs for 2016 larval culture, larval enhancement and production of *Acropora tenuis* colonies. SCUBA gear hire, air tanks and boat rental from BML to the study sites were based on 2016 rates. The BML outdoor hatchery facility and support system costs include equipment (seawater pump, air blower, pipe assemblies, sedimentation tank), maintenance and electricity. Costs were originally estimated in Philippine Pesos (PhP) and converted to US$ using the conversion rate: PhP45 = US$1. 1total value divided over 15 years of use, 2total value divided by ten uses, 3total value divided by eight uses, 4total value divided by five uses.

|  |  |  |
| --- | --- | --- |
| **Coral Production and Activities** | **Days** | **Total (US$)** |
|  |  |  |
| I. Collection of gravid *A. tenuis* colonies | 1 |  |
| A. Materials (including SCUBA tanks, equipment hire) |  | 96.12 |
| B. Boat rental, fuel |  | 105.40 |
| C. Hired labor (4 personnel) |  | 95.11 |
| Sub-total |  | 296.63 |
| II. Hatchery work (coral spawning, larval culture) | 9 |  |
| A. Facility and support system |  | 9.00 |
| B. Culture tanks and accessories1 |  | 132.60 |
| C. Hired labor (3 personnel) |  | 574.02 |
| Sub-total |  | 715.62 |
| III. Field observations and in situ spawning collection  A. Materials (spawn cone collectors2, dive torches4, SCUBA hire)  B. Boat rental, fuel  C. Hired labor (5 personnel)  Sub-total  IV. Larval settlement tents | 4  5 | 610.60  580.80  428.88  1616.28 |
| A. Mesh tent enclosures3 |  | 341.00 |
| V. Site selection and preparation | 1 |  |
| A. Materials (including SCUBA tanks, equipment hire) |  | 228.48 |
| B. Boat rental, fuel |  | 105.40 |
| C. Hired labor (4 personnel) |  | 65.78 |
| Sub-total |  | 399.66 |
| VI. Larval enhancement activity | 1 |  |
| A. Materials (including SCUBA equipment hire) |  | 233.94 |
| B. Boat rental, fuel |  | 210.80 |
| C. Hired labor (6 personnel) |  | 100.44 |
| Sub-total |  | 545.18 |
| **TOTAL** |  | **3,914.37** |
| **Cost per colony (285 colonies) 10 months post-larval enhancement** |  | **13.73** |
| **Cost per colony (220 colonies) 34 months post-larval enhancement** |  | **17.79** |

**SUPPLEMENTARY FIGURE 1.** Sea Surface Temperature records for the Lingayen Gulf region obtained from 2016 to 2019. Source NOAA [coralreefwatch@noaa.gov](mailto:coralreefwatch@noaa.gov).

**Chart, line chart

Description automatically generated**

**SUPPLEMENTARY FIGURE 2.** Environmental data in the experimental plots on Magsaysay reef during monitoring periods in 2017 and 2018. \* = no data

A picture containing text, fence

Description automatically generated

****