Supplementary Material

Samples were left to thaw on ice for 2 hours before being carefully rinsed with filtered sea water (FSW) to remove any unrelated material (e.g. sediments, shells etc.). Samples were dried and weighed before and after the removal of tissue using FSW and the water picking method (REF?). Total volume of the used FSW (approx. 100-500 ml) was recorded and four aliquots of 40 ml each (one for symbiont analysis, one for chlorophyll measurements and two as a control) were sampled into 50 ml plastic centrifuge tubes. The aliquots were centrifuged at 9,500 rpm for 90 minutes at 4oC. The supernatant was discarded, and the algal pellets were stored at -20 oC for further analysis.

For symbiont density and health analysis, the tissue pellet was resuspended in 2 ml of FSW. The sample was then homogenised in an ice-cold water bath using a tissue grinder. For cell preservation, 2 ml of alcohol (70%) was added to the cell suspension. The number of zooxanthellae cells in suspension were counted using the Olympus BX51 microscope and an integrated digital camera Olympus DP70. Counting was conducted on a Neubauer haemocytometer with a 20x or 40x magnification. Five replicate counts per coral sample were used to calculate the average density of cells per 1 ml of the cell suspension. The total number of cells was then calculated by multiplying the average count by the total volume of liquid used during water picking. Symbiont health was assessed during the counting process by grading the cells from 1 to 5 (1 = cell is healthy, 2= initiation of degradation (cell-wall starts to disintegrate), 3= in degradation process (cell wall has been disrupted), 4= degraded and dead cell (content has been dissolved), 5= totally degraded (some contents to be seen in form of bubbles; sup Fig. 1)).

For chlorophyll *a* analysis, each tissue pellet was resuspended in 10 ml of FSW and homogenized with a tissue grinder on an ice bath in the dark. The resulting suspension was centrifuged at 9,500 rpm for 30 minutes at 4oC. The supernatant was discarded, and the pellet resuspended in 6 ml of 90% acetone and left in dark for 20-24 hours. The next day, the algal suspension was centrifuged at 8,000 rpm, at 4 oC for 12 minutes. Chlorophyll *a* absorbance was measured (SHIMAZU, UVmini-1240 automated spectrophotometer) at the four wavelengths (λ664, λ647, λ630 and λ691) and total chlorophyll *a* content was calculated following Jeffrey et al. (1975). Chlorophyll *a* content (ug) and symbiont density were expressed per cm2 of the coral surface area, which was determined using the wax coating method (Strickland, 2010).