Coral Reefs
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CORRECTION

Correction: Impacts of coral bleaching on pH and oxygen gradients across the coral concentration boundary layer: a microsensor study

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It has come to our attention that unfortunately, there was an error in the equation used to calculate the photosynthesis to respiration ratios. This resulted in the P/R ratios being somewhat higher than they should be. However, relative differences between treatment groups and, thus, outcomes of statistical tests, were not affected (i.e., the values in Table 1 are still correct). The new P/R data are shown in the corrected Fig. 2e. Statistical analyses were re-done following the original approach, as described below. It is now also stated how P/R ratios were calculated.

The original article can be found online at https://doi.org/10.1007/s00338-018-1726-6.

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Corrected materials and methods

P/R ratios were calculated as 12 h of gross P (= net P + R) divided by 24 h of R due to the 12 h:12 h light/dark regime. Non-parametric one-way analysis of variance on ranks (Kruskal–Wallis test) was used to test for the effects of heat stress (2 levels: control, heat stress) on the corrected P/ R ratios measured at the end of the 10-day recovery period. Analyses were performed using RStudio, R version 4.2.2. P values < 0.05 were considered significant.

Corrected results

Heat stress and coral physiology

Heat-stressed corals had significantly lower values than control corals in a range of response variables (Table 1 in the original article): Fv/Fm was 26% lower (Fig. 2a), health scores were 62% lower (Fig. 2b), net photosynthesis rates were 62% lower (Fig. 2c) and P/R ratios were 53% lower (Corrected Fig. 2e).

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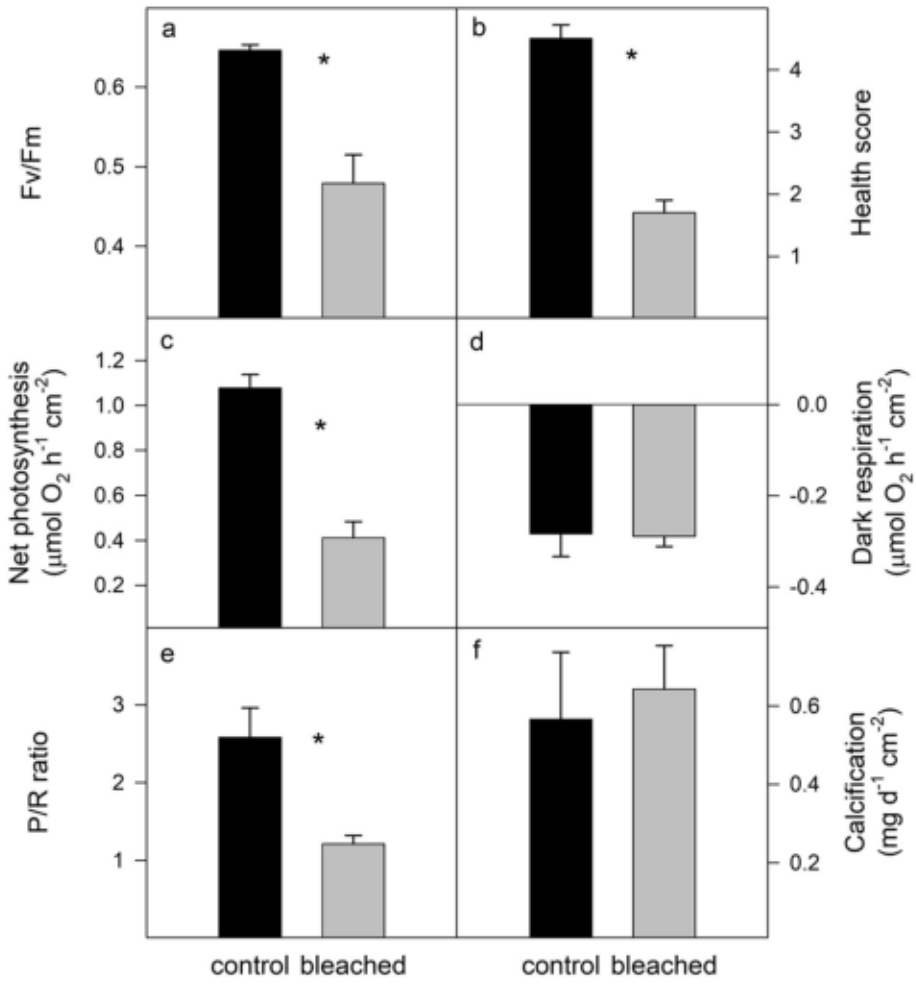

Fig. 2 **a** Photochemical efficiency (Fv/Fm), **b** Coral Health Chart score, **c** net photosynthesis, **d** dark respiration, **e** photosynthesis/respiration ratio (P/R ratio) and **f** calcification rate in control and bleached *Acropora aspera* after 13 days of heat stress. Mean ± 1 SE are shown. Asterisks indicate significant differences between control and bleached corals (Table 1)