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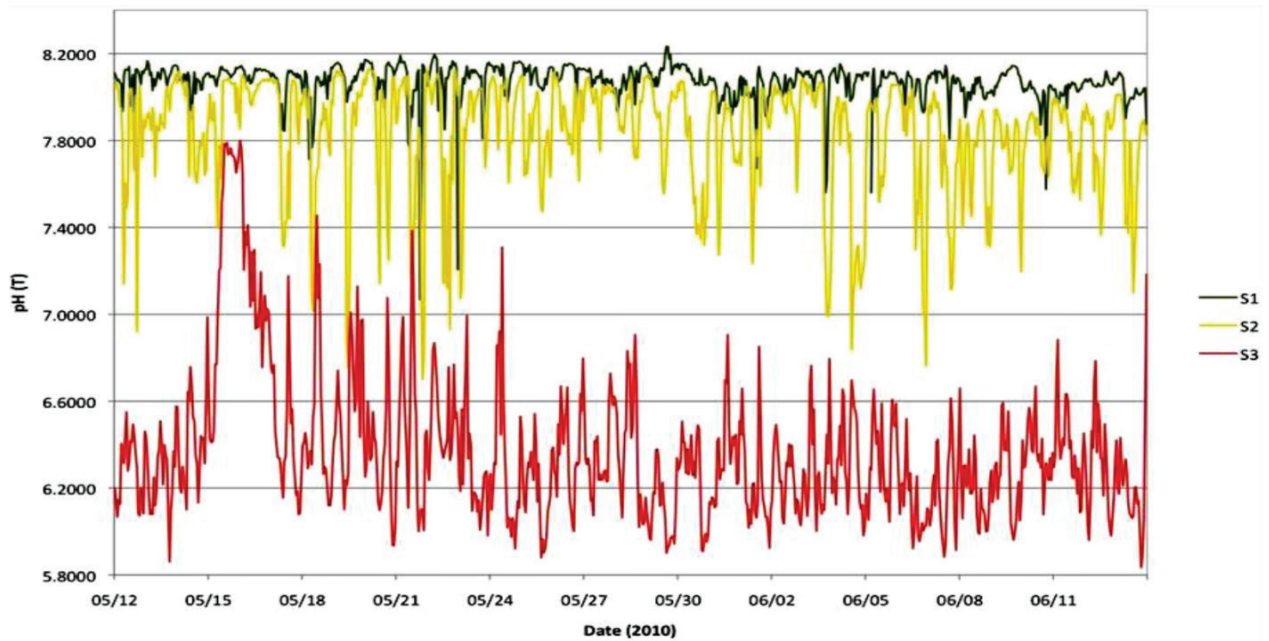
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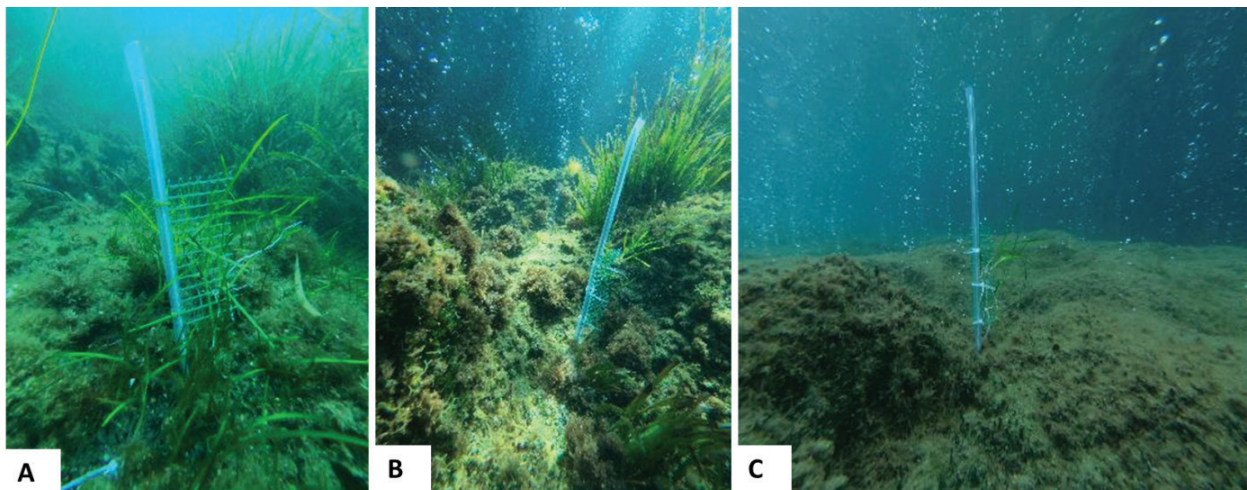
## *In situ* experiments on the effect of low pH on the ultrastructure of the seagrasses *Cymodocea nodosa* and *Posidonia oceanica*

Maria KOUTALIANOU, Maria Cristina BUIA and Christos KATSAROS

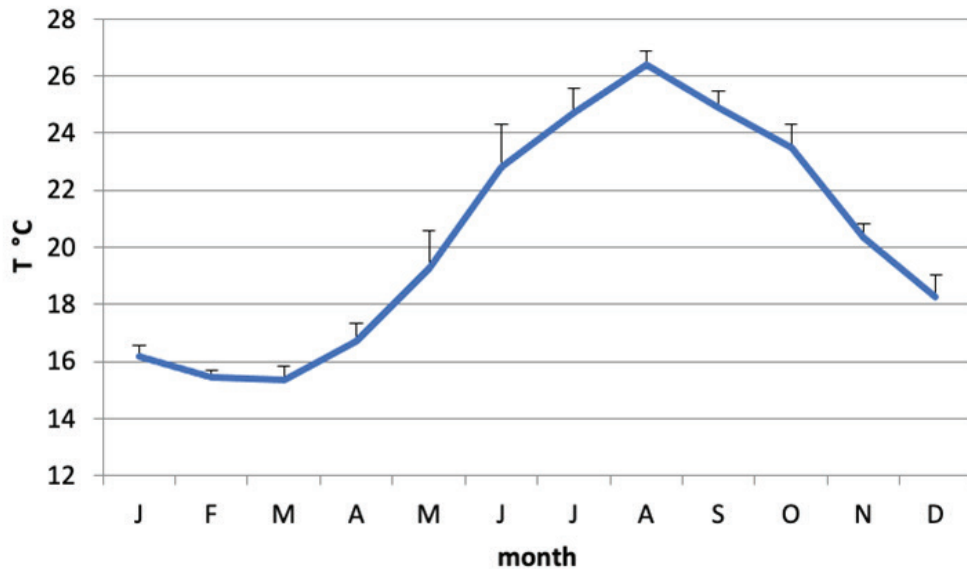
*Mediterranean Marine Science*, 2022, 23 (1)



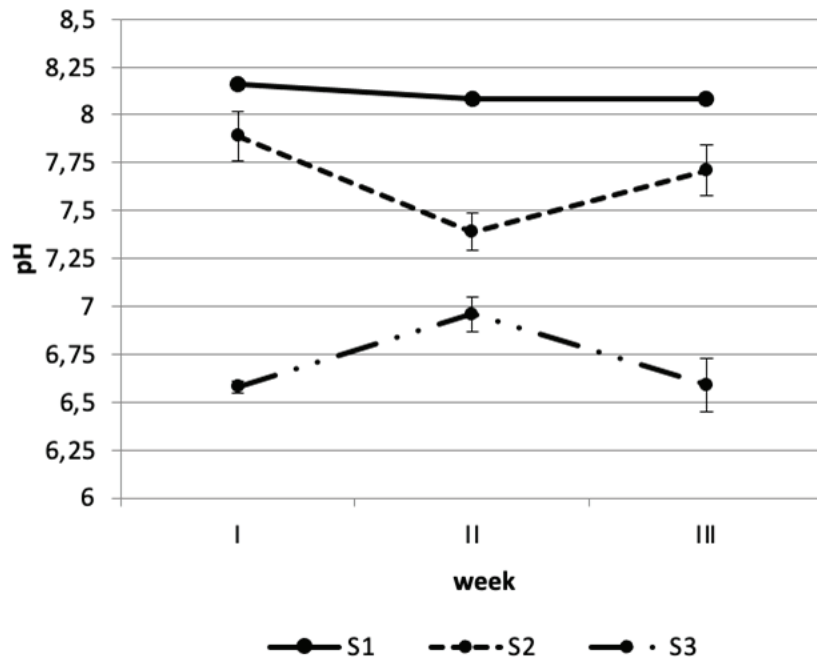
*Suppl. Fig. 1:* Variability of seawater pH on the southern side of the Castello Aragonese (from Porzio *et al.*, 2011).



*Suppl. Fig. 2:* Plastic frame with iron bar used for the experimental procedure at area S1 (A), area S2 (B) and area S3 (C).

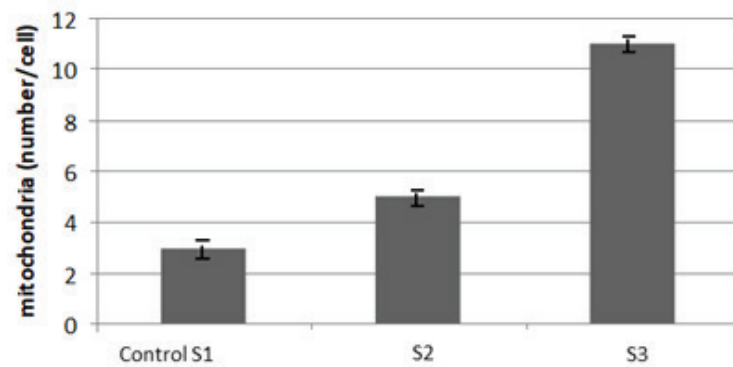


**Suppl. Fig. 3:** Water temperature in June and July (experimental period), matching ambient seasonal fluctuations (13-25°C).



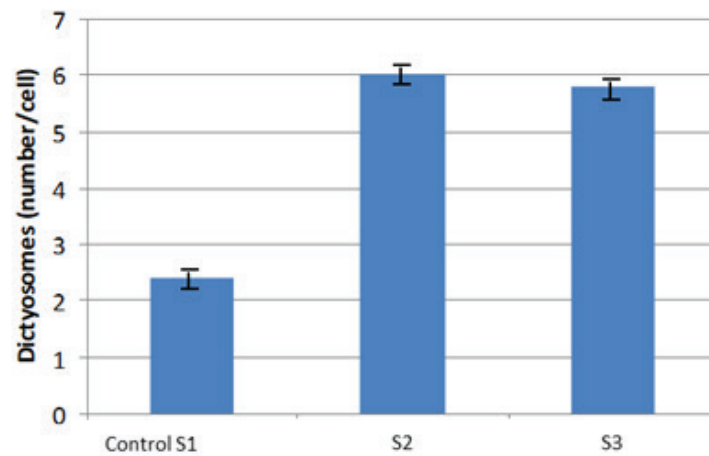
**Suppl. Fig. 4:** Weekly mean values of pH recorded at the three vents sites, varying from  $8.08 \pm 0.004$  (S1) to  $7.71 \pm 0.133$  (S2) to  $6.584 \pm 0.145$  (S3).

## C. nodosa



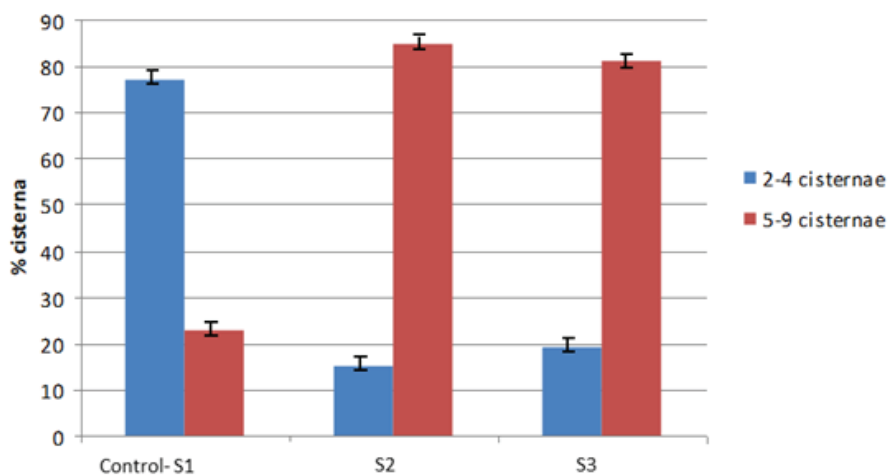
**Suppl. Fig. 5:** Histogram showing the number of mitochondria in epidermal cells in *C. nodosa* in the control area and in S2 and S3 areas. Transfer for one week in S2 resulted in a slight increase of the number of mitochondria per cell; at S3 mitochondria were three times as abundant compared to the control.

## C.nodosa



**Suppl. Fig. 6:** Histogram showing the number of dictyosomes in epidermal cells in *C. nodosa* in the control area and after one week in S1 and S2 areas.

## Dictyosomes -cisterna



**Suppl. Fig. 7:** Histogram showing the percentage of dictyosomes with a specific number of cisternae (2-4 and 5-9) in epidermal cells in *C. nodosa* in the control area and after one week in S2 and S3 areas. After one week in S2 and S3 areas the number of dictyosomes with 5-9 cisternae was increased to four times that of the control.