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Uptake of Mg and Sr in valves of *Cypridopsis vidua* determined from culture experiments

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Experiments with ostracod (*Cypridopsis vidua*) controlled-cultures were carried out in two kinds of water with different hydrochemistry. One water type (1) had average molar ratios of Mg/Ca $\sim$ 0.067 and Sr/Ca $\sim$ 0.0015 and the other type (2) had average Mg/Ca $\sim$ 0.532 and Sr/Ca $\sim$ 0.0063. Individual ostracods from A-4 to A-1 moult stages were introduced and weekly monitored in individual microaquaria within both waters under different constant temperature regimes of 15º, 20º and 25ºC. The juvenile individuals were grown in these cultures to obtain adults moulted in controlled water and temperature conditions. Variations in the life cycle and individual development in relation to the water temperature differences have been noticed. The individuals introduced at 15 ºC grew slower and became smaller than at the other temperatures. Well-calcified adult valves were analysed for Mg and Sr contents. For both studied waters, in the temperature range of the experiments, the valve Mg/Ca and Sr/Ca molar ratios are definitely proportional to the Mg/Ca and Sr/Ca molar ratios of the waters where the ostracods moulted. Regarding to the water temperature, only for the water 2 there is a direct relationship between the Mg/Ca of the valves and the temperature of the water where the ostracods moulted.