Title: **High vulnerability of Red Sea zooplankton to ambient UVB radiation**

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Experimental assessments of the vulnerability of Red Sea zooplankton to UVB radiation showed that exposure of zooplankton species to ambient levels of UVB radiation greatly increases their mortality rate compared to that when the UVB radiation is excluded or when the organisms are maintained in the dark. Assessment experimental UV-B dose-mortality curves for Red Sea zooplankton showed the mortality of zooplankton to increase steeply with ambient levels of UV-B radiation in the oligotrophic waters of the Red Sea, where biologically-significant levels of UVB radiation reaches below 40 m depth in open coastal waters. The maximum mortality rates under ambient UV-B levels were five-fold greater than the average mortality in the dark for the eight taxa tested. The results confirm that Red Sea zooplankton are highly vulnerable to ambient UV-B radiation, as a consequence of the combination of high incident radiation and high water transparency allowing deep penetration of damaging UV-B radiation.