

Figure 6.3. Quotients of H, C, N

and O in four plankton samples from different locations in the ocean. (A) A van Krevelan plot of the H/C and O/C quotients on an atomic (subscript a) basis. The triangle has values for proteins, P, carbohydrates, C, and lipids, L, at the apices. The dark rectangle represents the plankton values and R is the RKR value. The trend from R to the triangle is the result of removing H_2O from the formula; the horizontal trend is for O removal alone. (B) The nitrogen/carbon quotient in organic matter, N/C, versus the molecular oxygen utilization to organic carbon degradation rate, the respiratory quotient ($RQ = \Delta O_2 / \Delta C$). R is the RKR formula and the dark box the results of the plankton analysis. Redrawn from Hedges *et al.* (2002).

