

**Table II.** Fraction of cell fresh and dry weight accounted for by the plasmalemma plus outer membrane plus cell wall of cyanobacteria and by the plasmalemma plus plastid envelope membranes plus intermembrane space in chlorophyte algae, for spherical cells of radius 0.5  $\mu\text{m}$  and 5.0  $\mu\text{m}$ . Values of fresh weight basis from Table 6 of Raven (1986) assuming overall cell density is  $1 \text{ Mg m}^{-3}$ , but with membrane thickness assumed to be 8 nm rather than 10 nm (cf. Raven, 1984a)

	Cell of radius	
	0.5 $\mu\text{m}$	5.0 $\mu\text{m}$
(1) Prokaryotic outer membrane as fraction of cell fresh weight	0.048	0.0048
(2) Prokaryotic plasma membrane inside wall of 10 nm thickness (0.5 $\mu\text{m}$ radius cell) and 100 nm thickness (5 $\mu\text{m}$ radius cell) as a fraction of cell fresh weight	0.044	0.0046
(3) Prokaryotic outer membrane plus plasmalemma as fraction of cell fresh weight	0.092	0.0094
(4) Prokaryotic outer membrane plus plasmalemma as fraction of cell dry weight <sup>a</sup>	0.322	0.0364
(5) Chlorophyte plasmalemma as fraction of cell fresh weight assuming no cell wall	0.048	0.0048
(6) Inner and outer plastid membranes of a chlorophyte with a spherical plastid occupying half of the cell volume and with a 10 nm intermembrane space	0.060	0.0060
(7) Chlorophyte plasmalemma plus plastid envelope membranes as fraction of cell fresh weight	0.11	0.011
(8) Chlorophyte plasmalemma plus plastid envelope membranes as a fraction of cell dry weight	0.33	0.042

<sup>a</sup>Assumes membrane has a density of  $1.15 \text{ Mg m}^{-3}$  (Douce and Joyard, 1979; Raven, 1984a) and that cell material other than the specified membranes has  $0.25 \text{ g dry weight g}^{-1}$  fresh weight.