

Table 1 Rubisco protein as a fraction of total protein and Rubisco nitrogen (N) as a fraction of total N for cyanobacteria, algae and plants with different inorganic carbon (C) acquisition mechanisms

Organisms, C assimilation pathway	Rubisco N : total leaf N	Rubisco protein : total protein	Comments	References
C ₃ physiology flowering plants	0.095–0.28		Lowest value is for a shade-adapted plant	Evans (1989)
5 species of C ₃ flowering plants	0.158–0.259		CO ₂ 300 ppm	Sage <i>et al.</i> (1989)
7 C ₄ -NADme monocotyledons	0.042–0.084		N-replete values	Ghannoum <i>et al.</i> (2005)
7 C ₄ -NADPme monocotyledons	0.044–0.074		N-replete values	Ghannoum <i>et al.</i> (2005)
Cyanobacteria and microalgae, apparently all with CCMs		0.024–0.120 (0.16, 0.23)	Range is for 15 values, many for high and low CO ₂ cultures of the same organism, with two higher values	Raven (1991)
Microalgae (8 species): 5 marine diatoms, 2 marine prymnesiophytes, 1 freshwater green, all with CCMs		0.02–0.06	Some values involve an assumed chl a : total protein ratio Nutrient-replete laboratory cultures; values for field material and nutrient-limited laboratory cultures are all below 0.025	Losh <i>et al.</i> (pp. 52–58)

CCM, CO₂ concentrating mechanism.