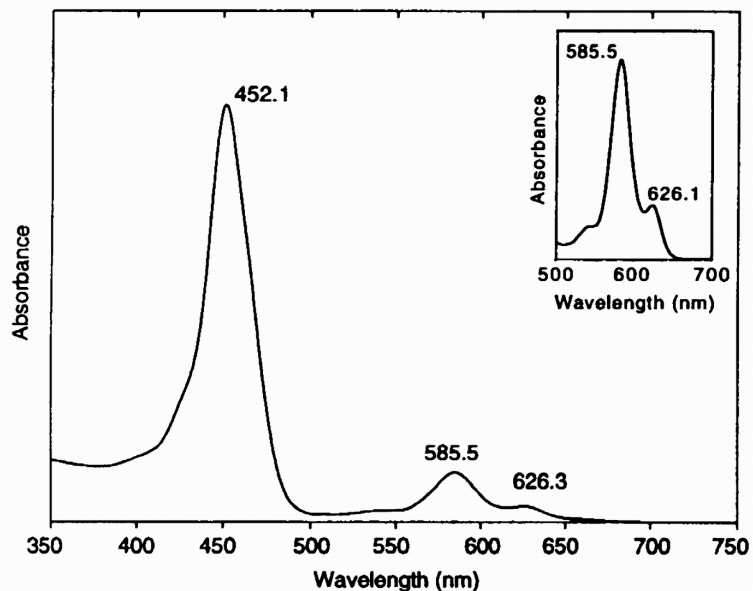


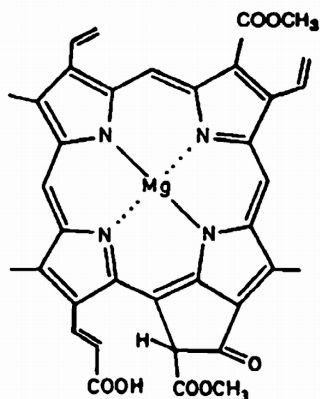
Chlorophyll *c*₃

HPLC peak 5

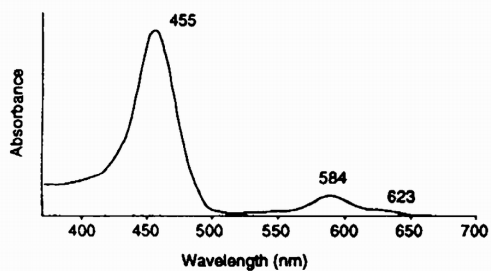
Standard spectrum in reference solvent: acetone (100%)



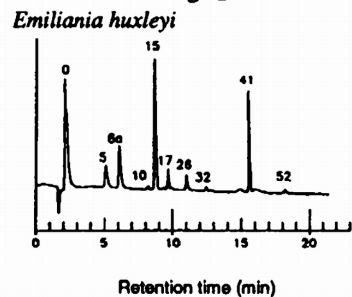
Molecular structure



Diode array spectrum in SCOR eluant



HPLC: Chl *c*₃, peak 5



Chlorophyll *c*₃

Property

Data

Name:	(Trivial) (IUPAC)	Chlorophyll <i>c</i>₃ 7-demethyl-7-methoxycarbonyl chlorophyll <i>c</i> ₂
SCOR abbreviation:		Chl <i>c</i> ₃
Occurrence:		Some prymnesiophytes, some diatoms, chrysophytes (Vesk & Jeffrey, 1987; Jeffrey & Wright, 1994)
Colour:		Light green on TLC; emerald green (concentrated solution)
Molecular formula:		C ₃₆ H ₂₈ N ₄ O ₇ Mg Fookes & Jeffrey (1989)
Molecular weight:		652.95
Specific extinction coefficient: α (l g ⁻¹ cm ⁻¹)		Not known; use mean of chl <i>c</i> ₁ + <i>c</i> ₂ at Soret band. 334.5 (at 452.9 nm in 100% acetone + 1% pyridine) 346 (at 452.9 nm in 90% acetone + 1% pyridine) Jeffrey (1972)
Molar extinction coefficient: ε (l mol ⁻¹ cm ⁻¹)		Not known; 218.4 × 10 ³ (at 452.9 nm in 100% acetone + 1% pyridine) Calculated from α above

UV-vis spectra:

Solvent	Absorbance maxima (nm)	Band ratio*	Reference
100% Acetone	452.1 585.5 626.3	28.3	SCOR WG 78 data
Diethyl ether	451.3 584.5 625.9 32.1		Jeffrey & Wright (1987)
HPLC Eluant	455 584 623	33.5	SCOR WG 78: Wright <i>et al.</i> (1991) method

Fluorescence spectra:

Solvent	Excitation (nm)	Emission (nm)	Reference
100% Acetone	452	635, 690	SCOR WG 78 data

Alteration products:

None known

Culture from which SCOR data were obtained:

Emiliania huxleyi (prymnesiophyte)

Additional reference(s):

Jeffrey & Wright (1987); Fookes & Jeffrey (1989); Jeffrey (1989)