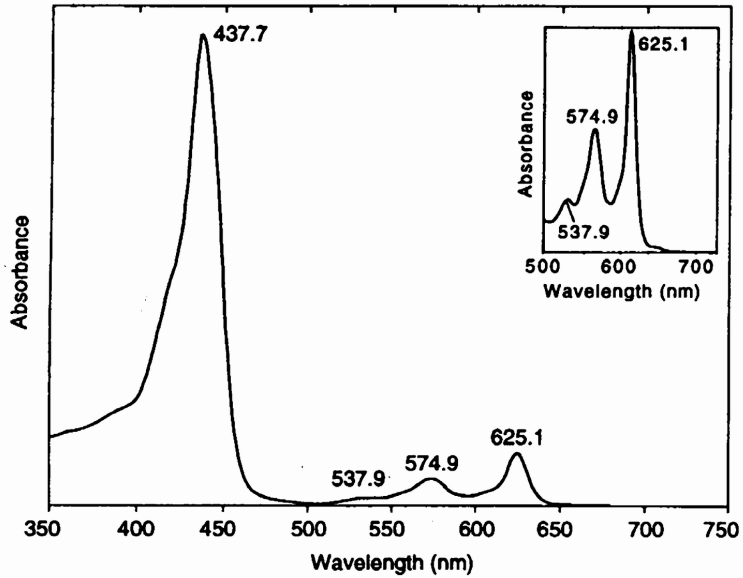
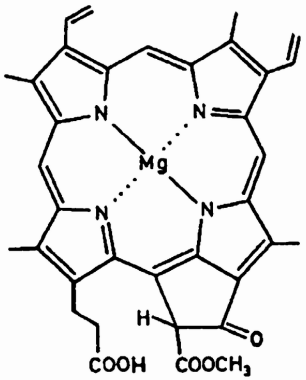
Mg-2,4-divinyl pheoporphyrin a_5 monomethyl ester HPLC peak 6c

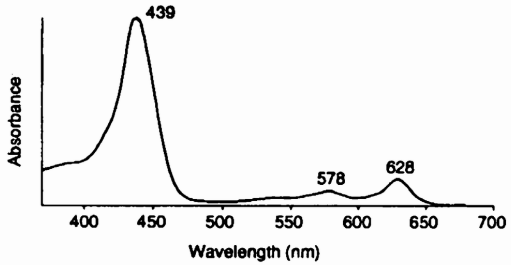
Standard spectrum in reference solvent: acetone (100%)

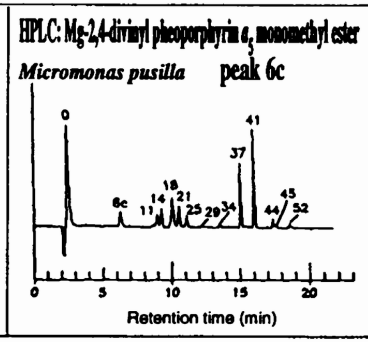


Molecular structure



Diode array spectrum in SCOR eluant





Mg-2,4-divinyl pheoporphyrin a_5 monomethyl ester

Property		Data
Name:	(Trivial: Fischer nomenclature)	**Mg-2,4-divinyl pheoporphyrin a_5 monomethyl ester**
	(Trivial: IUPAC)	Mg-3,8-divinyl phytoporphyrin-13^2-methyl carboxylate
	(IUPAC)	8^1,8^2,17,18-tetradehydro-chlorophyllide *a* = 3^1,3^2,8^1,8^2-tetradehydro-13^2-methoxycarbonyl-phytoporphyrinato-Mg(II); see Hynninen (1991)
SCOR abbreviation:		Mg DVP
Occurrence:		Some prasinophytes; Ricketts (1966); Jeffrey (1989)
Colour:		Light green on TLC; emerald green (concentrated solution)
Molecular formula:		$C_{35}H_{30}N_4O_5Mg$
Molecular weight:		610.94
Specific extinction coefficient: α (l g^{-1} cm^{-1})		Unknown; use 58.9 (at 623 nm in methanol) for the monovinyl derivative (Griffiths, 1991)
Molar extinction coefficient: ε (l mol^{-1} cm^{-1})		Unknown; use 36x10^3 (at 623 nm in methanol) for the monovinyl derivative (Griffiths, 1991)

UV-vis spectra:

Solvent	Absorbance maxima (nm)			Band ratio*	Reference
100% Acetone	437.7	574.9	625.1	9.33	SCOR WG 78 data
Diethyl ether	437.1	573.9	623.5	9.72	Jeffrey & Wright (1987)
HPLC Eluant	439	578	628	7.55	SCOR WG 78: Wright *et al.* (1991) method

*Soret (blue maximum): red ratio

Fluorescence spectra:

Solvent	Excitation (nm)	Emission (nm)	Reference
Diethyl ether	440	627	Chereskin *et al.*(1983)

Alteration products:	None known, but rapid bleaching can occur when handling
Culture from which SCOR data were obtained:	*Micromonas pusilla* (CS-86) (prasinophyte)
Additional reference(s):	Jeffrey (1989); Griffiths (1991)