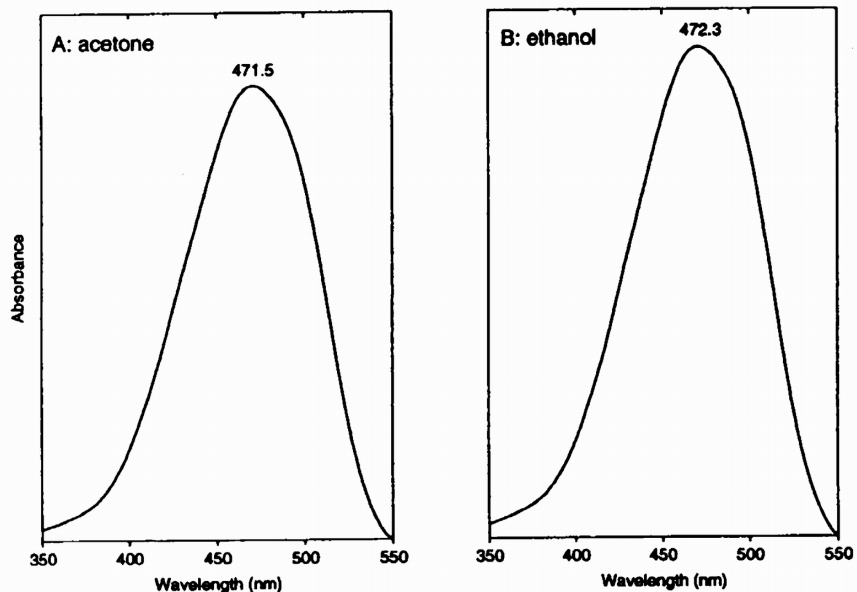


Canthaxanthin

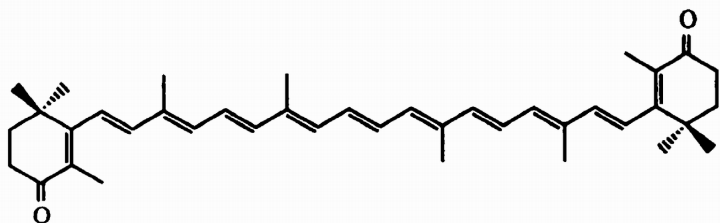
HPLC peak 35

Canthaxanthin

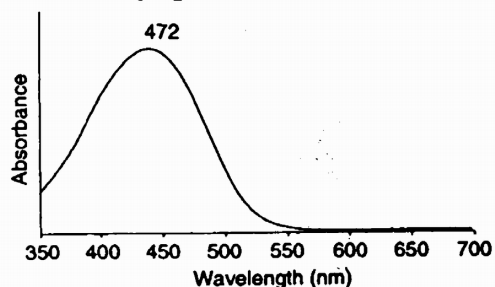
Standard spectrum in reference solvents



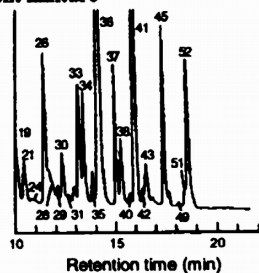
Molecular structure



Diode array spectrum in SCOR eluant



HPLC: Synthetic Canthaxanthin, peak 35 Pigment mixture



Property

Data

Name:	(Trivial) (IUPAC)	Canthaxanthin β,β -Carotene-4,4'-dione
SCOR abbreviation:		Cantha
Occurrence:		Minor or trace pigment in some green and blue-green algae, diatoms, prymnesiophytes, eustigmatophytes
Colour:		Red
Molecular formula:		$C_{40}H_{52}O_2$
Molecular weight:		564.85
Specific extinction coefficient:		2200 (at 466 nm in petroleum ether) Davies (1965) 2092 (at 480 nm in benzene) Warren & Weedon (1958)
Molar extinction coefficient:		124×10^3 (at 466 nm in petroleum ether) 118×10^3 (at 480 nm in benzene) Calculated from $E_{1\text{cm}}^{1\%}$ above

UV-vis spectra:

Solvent	Maxima (nm)			Band ratio % III:II	Reference
	I	II	III		
Acetone		472			SCOR WG 78 data
Ethanol		472			SCOR WG 78 data
Ethanol		474			Hager & Stransky (1970b)
<i>n</i> -Hexane		467			Davies (1976)
HPLC Eluant		472			SCOR WG 78: Wright <i>et al.</i> (1991) method

Alteration products:

Culture from which SCOR data were obtained:	Synthetic
Additional reference(s):	Goodwin (1980); Antia & Cheng (1982)