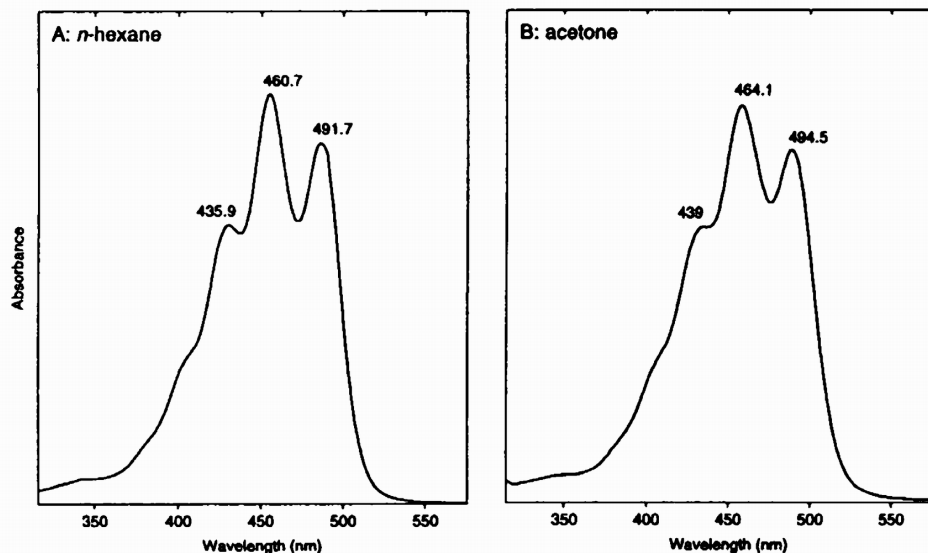
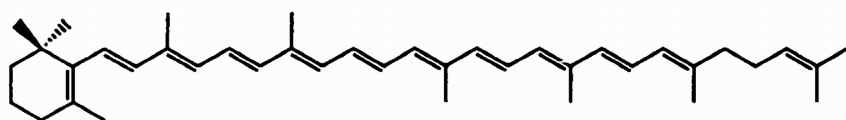


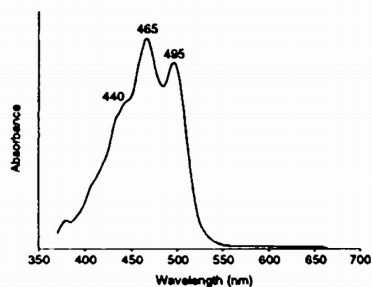
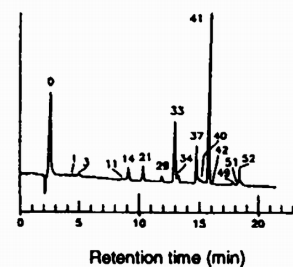
## Standard spectrum in reference solvent



## Molecular structure



## Diode array spectrum in SCOR eluant

HPLC:  $\beta, \psi$ -carotene, peak 49  
*Dunaliella tertiolecta*

## Property

## Data

Name:	(Trivial) (IUPAC)	$\gamma$ -Carotene $\beta, \psi$ -Carotene
SCOR abbreviation:		$\beta\psi$ -car
Occurrence:		Minor or trace pigment in green algae, chromophyte algae
Colour:		Orange-red
Molecular formula:		$C_{40}H_{56}$
Molecular weight:		536.88
Specific extinction coefficient: $E_{1\%}^{1\text{cm}}$ (100 ml $g^{-1}$ $cm^{-1}$ )		3185 (at 459 nm in petroleum ether) Manchand <i>et al.</i> (1965) 2760 (at 462 nm in hexane) Bindl <i>et al.</i> (1970)
Molar extinction coefficient: $\epsilon$ (1 $mol^{-1}$ $cm^{-1}$ )		$171 \times 10^3$ (at 459 nm in petroleum ether) $148 \times 10^3$ (at 462 nm in hexane) Calculated from $E_{1\%}^{1\text{cm}}$ above

## UV-vis spectra:

Solvent	Maxima (nm)			Band ratio %III:II	Reference
	I	II	III		
Acetone	439	464	494	55	SCOR WG 78 data
Acetone	(439)	461	491		Francis & Halfen (1972)
Hexane	436	461	492	59	SCOR WG 78 data
HPLC Eluant	(436)	462	490	32	SCOR WG 78: Mantoura & Llewellyn (1983) method
HPLC Eluant	(440)	465	495	50	SCOR WG 78: Wright <i>et al.</i> (1991) method

## Alteration products:

*Cis*-isomers

## Culture from which SCOR data were obtained:

*Dunaliella tertiolecta* (green flagellate)

## Additional reference(s):

Goodwin (1980)