

Equations		
a)	$y=0.0025x+0.0123$ (x: relative chlorophyll a fluorescence intensity; y: total carotenoid content)	($R^2=0.8687$)
b)	$y=0.0021x+0.1501$ (x: relative chlorophyll a fluorescence intensity; y: total carotenoid content)	($R^2=0.7395$)
c)	$y=0.018x-0.3253$ (x: relative Nile red fluorescence intensity; y: total carotenoid content)	($R^2=0.6356$)
d)	$y=0.0081x+0.8609$ (x: relative Nile red fluorescence intensity; y: total carotenoid content)	($R^2=0.3758$)

Supplementary Table 1: Equations for the correlations of total carotenoids with chlorophyll a or lipids content (indicated by Nile red fluorescence intensity).