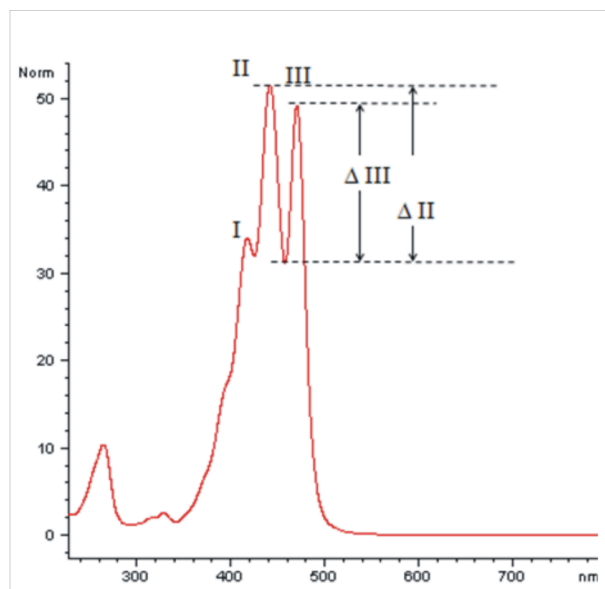


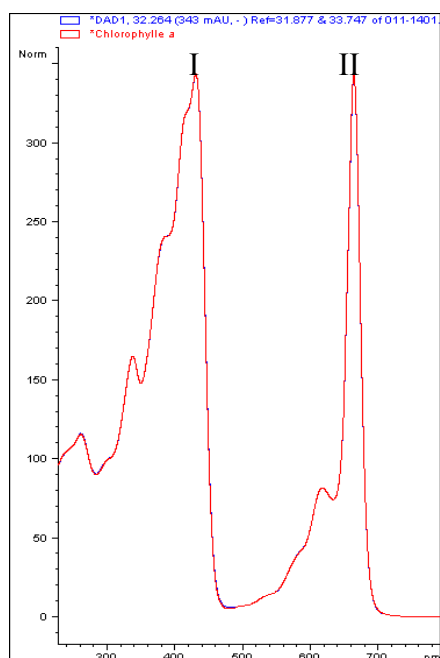
Supporting Information

S1.A Fig. Calculation of carotenoid band ratio.



UV-visible spectra showing wavelength I; II and III of a carotenoid. Band ratio corresponds to the % ratio $\Delta \text{III} / \Delta \text{II}$.

S1.B Fig. Calculation of porphyrin band ratio.



UV-visible spectra showing the location of I the Soret (blue maximum) and II the red bands of Chlorophyll -a.