

Supplementary information 3: Calculated parameters/indices presented in the manuscript

Method	Definition	Formula with wavelength [nm]	References
NDVI _{HSI}	Normalized Difference Vegetation Index	$= \frac{\bar{R}_{740-760} - \bar{R}_{660-680}}{\bar{R}_{740-760} + \bar{R}_{660-680}}$	Rouse et al. (1974)
ARI _{1HSI}	Anthocyanin Reflectance Index	$= \frac{1}{\bar{R}_{548-532}} - \frac{1}{\bar{R}_{698-702}}$	Gitelson et al. 2001
CCI _{HSI}	Chlorophyll Carotenoid Index	$= \frac{\bar{R}_{530-534} - \bar{R}_{628-632}}{\bar{R}_{530-534} + \bar{R}_{628-632}}$	Gamon et al. 2016
NDVI _{ChIF}	Normalized Difference Vegetation Index	$= \frac{R_{730} - R_{660}}{R_{730} + R_{660}}$	Rouse et al. (1974)
F _v /F _m	Max. quantum efficiency of PSII photochemistry	$= \frac{F_m - F_0}{F_m}$	Genty et al. (1989)
NPQ	Nonphotochemical quenching	$= \frac{F_m - F_m'}{F_m'}$	Horton et al. (1996)

Note: \bar{R} indicating mean intensity at pixel level over several wavelength