

**Table S5.** Chlorophyll fluorescence parameters (maximal quantum efficiency ( $F_v/F_m$ ) measured in dark adapted leaves and quantum efficiency of PSII photochemistry ( $\Phi$  PSII) measured at steady state with light intensity of  $370 \mu\text{mol photons m}^{-2} \text{s}^{-1}$ ) were obtained from 6 fully developed leaves of endives (cv. ‘Domari’ and ‘Myrna’) and escaroles (cv. ‘Flester’ and ‘Confiance’) cultivars grown under greenhouse conditions for X days (average data  $\pm$  SE; n=6). Four AOI (Area Of Interest) were selected, two in the internal part of the leaf and two in the external part in order to evaluate spatial heterogeneity. For each parameter a one-way analysis of variance (ANOVA) was applied and data followed by common letters in the same row are not significantly different (Student-Newman-Keuls test,  $P \leq 0.05$ ).

Cultivar	$F_v/F_m$ (rel. un.)			$\Phi$ PSII (rel. un.)		
	external	internal	<i>P</i>	external	internal	<i>P</i>
Domari	$0.792 \pm 0.001$ a	$0.794 \pm 0.001$ a	0.32	$0.410 \pm 0.004$ a	$0.401 \pm 0.006$ a	0.23
Myrna	$0.807 \pm 0.001$ a	$0.806 \pm 0.001$ a	0.58	$0.379 \pm 0.005$ a	$0.371 \pm 0.005$ a	0.29
Flester	$0.828 \pm 0.001$ a	$0.827 \pm 0.001$ a	0.45	$0.379 \pm 0.007$ a	$0.371 \pm 0.003$ a	0.30
Confiance	$0.780 \pm 0.003$ a	$0.782 \pm 0.001$ a	0.72	$0.423 \pm 0.009$ a	$0.416 \pm 0.005$ a	0.56