

Supplementary Material: S3 Pearson correlation among the measured parameters of strawberry fruit at different ripening stages

Table S3-1 Pearson correlation among the colour parameters, contents of phenolic compounds, enzyme activity and contents of volatile organic compounds

Pearson correlation	L*	a*	b*	C*	h°	Anthocyanins	Flavanols	Flavonols	Hydroxybenzoic acid der.	Hydroxycinnamic acid der.	Total Phenolic Compounds	POD	PPO	Total VOCs	Alcohols	Aldehydes	Esters
Anthocyanins	-0.82***	nd	-0.88***	nd	-0.70***												
Flavanols	nd	-0.67**	nd	-0.73***	nd	nd											
Flavonols	nd	nd	nd	nd	nd	nd	0.64**										
Hydroxybenzoic acid der.	nd	nd	nd	nd	nd	nd	nd	nd									
Hydroxycinnamic acid der.	-0.73***	nd	-0.77***	nd	-0.69**	0.68***	nd	nd	0.57*								
Total Phenolic Compounds	-0.57**	nd	-0.66***	-0.52**	nd	0.82***	nd	nd	nd	0.54**							
POD	-0.55*	nd	-0.56*	nd	-0.55*	0.57**	nd	nd	nd	0.49*	0.48*						
PPO	nd	-0.73***	nd	-0.60*	0.52*	nd	0.75***	nd	nd	nd	nd	ns					
Total VOCs	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	ns	ns				
Alcohols	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	ns	ns	ns			
Aldehydes	0.54*	-0.69**	nd	nd	0.68**	nd	0.58*	0.59*	nd	-0.65**	nd	-0.64**	0.76***	ns	0.66***		
Esters	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.58*	ns	ns	ns	ns	
Terpenoids	-0.56*	nd	-0.70**	-0.50*	nd	0.72***	nd	nd	nd	nd	nd	ns	ns	ns	ns	ns	ns

Der., derivatives; ns, not significant; *, ** and ***: significant correlation at $p<0.05$, $p<0.01$ and at $p<0.001$, respectively.

Table S3-2 Pearson correlation among the colour parameters and contents of individual anthocyanins

Pearson correlation	L*	a*	b*	C*	h°	cy-3-O-gal	cy-3-O-glc	plg-3-O-glc	plg-3-O-rut	plg-3-O-ara	cy-3-(6''malonyl)glc	plg der.	plg-3-(6''malonyl)glc	5-pyranoplg-3-glc
cy-3-O-gal	-0.79 ***	nd	-0.82 ***	-0.45 *	-0.65 **									
cy-3-O-glc	-0.81 ***	-0.84 ***	-0.74 **	-0.82 ***	nd	0.92 ***								
plg-3-O-glc	-0.79 ***	nd	-0.86 ***	-0.44 *	-0.65 **	0.95 ***	0.98 ***							
plg-3-O-rut	-0.91 ***	-0.96 ***	-0.90 ***	-0.96 ***	nd	0.87 ***	0.96 ***	0.98 ***						
plg-3-O-ara	nd	nd	nd	nd	nd	nd	nd	nd	ns					
cy-3-(6''malonyl)glc	-0.70 **	0.54 *	-0.62 *	nd	-0.72 **	nd	nd	nd	ns	ns				
plg der.	nd	nd	nd	nd	nd	nd	nd	nd	ns	ns	0.58 *			
plg-3-(6''malonyl)glc	nd	nd	nd	nd	nd	nd	nd	nd	ns	ns	0.72 **	0.70 *		
5-pyranoplg-3-glc	nd	-1.00 *	nd	nd	nd	nd	nd	nd	1.00 *	1.00 *	ns	ns	ns	
plg-3-O-acetylglc	nd	nd	nd	nd	nd	nd	nd	nd	ns	ns	1.00 **	ns	-0.84 *	ns

Gal, galactoside; glc, glucoside; rut, rutinoside; ara, arabinoside; plg, pelargonidin, cy, cyanidin; der., derivative; ns, not significant. *, ** and ***: significant correlation at $p<0.05$, $p<0.01$ and at $p<0.001$, respectively.