

Fig. S-1: values for single catechins and procyanidins along the three years of investigation

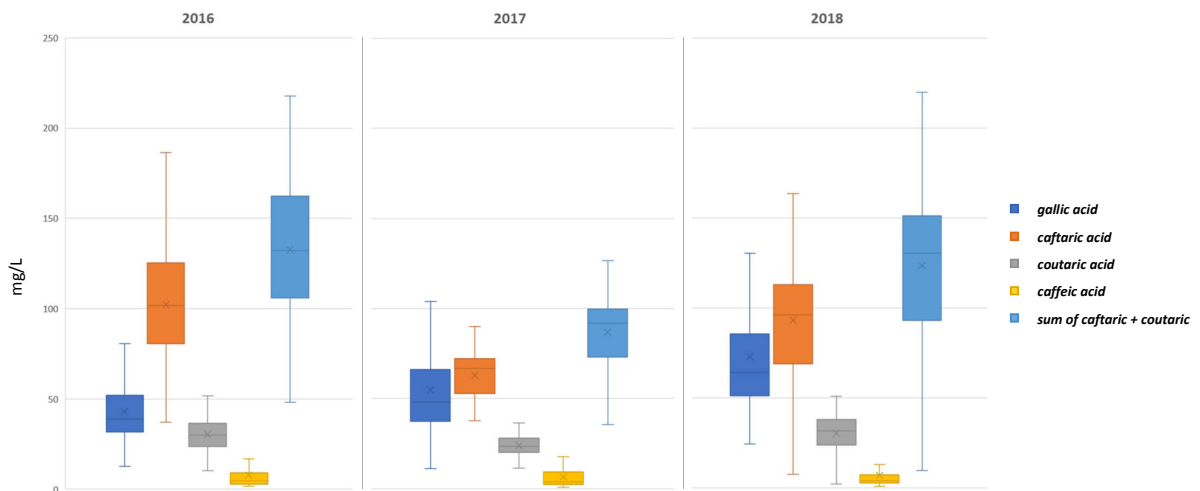


Fig. S-2: values for single benzoic and hydroxycinnamic acids/esters along the three years of investigation

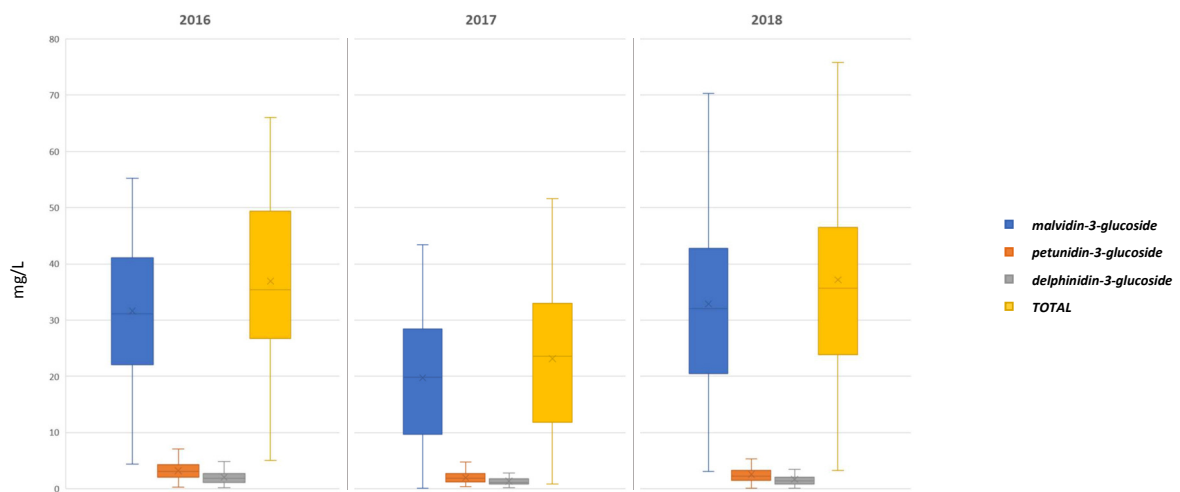


Fig. S-3: values for single anthocyanins along the three years of investigation

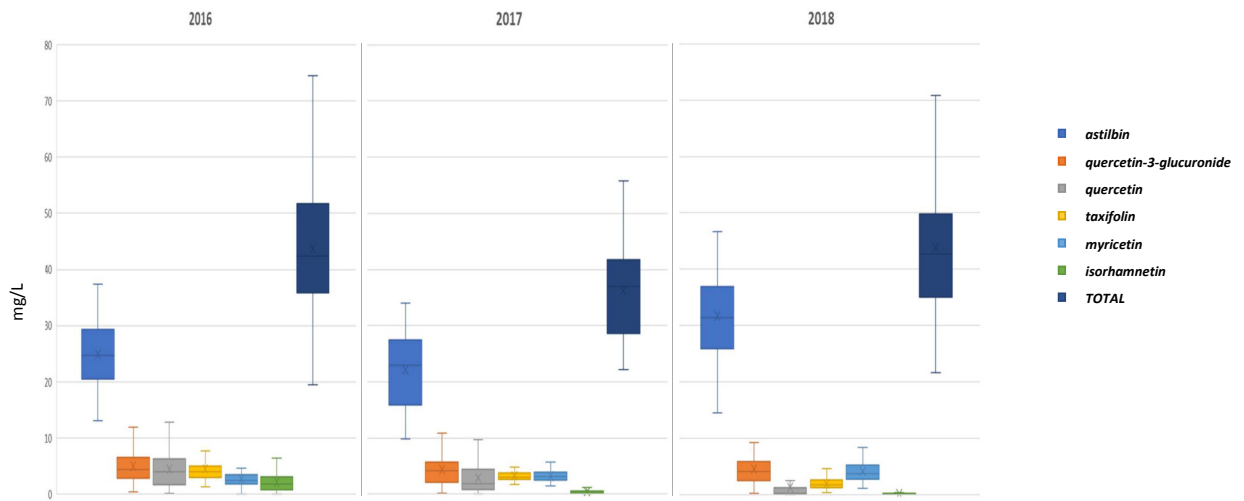


Fig. S-4: values for single flavonols and flavonol-glycosides along the three years of investigation

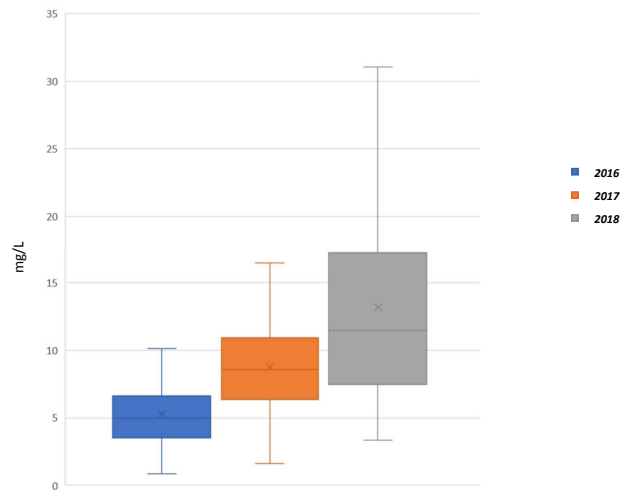


Fig. S-5: values for t-resveratrol along the three years of investigation

Rt (min)	Name	CAS #	Mode	Tube Lens	Q1 (precursor)	Q3 (quantifier)	CE (eV)	Q3 (qualifier)	CE (eV)	Linear range (ppm)	Slope	Intercept	R ²	Precision intraday	Precision interday	Internal standard
Anthocyanins																
3.36	Delphinidin-3-glucoside ¹	6906-38-3	+	92	465	303	35	229	45	0.005-1.000	1.81	-0.007	0.992	3.9%	5.4%	Cyanidin-3-galactoside
4.09	Petunidin-3-glucoside ¹	6988-81-4	+	124	479	317	23	302	45	0.005-2.000	2.156	<-0.001	0.998	2.6%	4.2%	Cyanidin-3-galactoside
4.69	Malvidin-3-glucoside ¹	7228-78-6	+	124	493	331	23	315	45	0.05-20.00	2.319	0.082	0.993	3.4%	5.4%	Cyanidin-3-galactoside
Flavan-3-ols																
1.77	(+)-catechin	154-23-4	+	126	291	123	28	139	16	0.2-20.0	0.205	0.014	0.994	4.2%	10.3%	Epigallocatechin Gallate
3.33	(-)-epicatechin	490-46-0	+	126	291	123	28	139	16	0.1-20.0	0.261	0.069	0.997	7.3%	9.2%	Epigallocatechin Gallate
0.71	(-)-gallocatechin	3374-27-5	+	105	307	139	14	163	21	0.005-2.0	0.285	0.004	0.996	6.5%	8.7%	Epigallocatechin Gallate
1.49	Dimer B1	20315-25-7	+	150	579	127	33	291	15	0.1-20.0	0.125	0.008	0.998	6.7%	12.4%	Epigallocatechin Gallate
2.92	Dimer B2	29106-49-8	+	150	579	127	33	291	15	0.1-20.0	0.123	<-0.001	0.999	8.3%	9.8%	Epigallocatechin Gallate
3.84	Trimer C1	37064-30-5	+	150	867	291	15	579	15	0.01-5.00	0.089	<-0.001	0.994	7.9%	11.6%	Epigallocatechin Gallate
Flavonols																
4.29	Taxifolin	480-18-2	+	140	305	231	22	259	14	0.02-5.00	0.058	<-0.001	0.991	7.2%	9.8%	Quercetin-4-glucoside
5.13	Astilbin	29838-67-3	+	120	451	147	10	305	10	0.2-20.0	0.012	0.002	0.995	7.1%	10.9%	Quercetin-4-glucoside
5.12	Quercetin-3-glucuronide	22688-79-5	+	155	479	153	50	303	17	0.01-5.00	0.378	0.035	0.994	4.9%	7.4%	Quercetin-4-glucoside
5.71	Myricetin	529-44-2	+	140	319	153	33	165	25	0.005-1.0	0.059	-0.002	0.994	7.9%	9.2%	Quercetin-4-glucoside
8.92	Isohammetin	480-19-3	+	140	317	153	40	105	28	0.005-1.0	0.142	<-0.001	0.998	5.9%	23.7%	Quercetin-4-glucoside
7.47	Quercetin	117-39-5	+	136	303	137	33	153	36	0.005-1.0	0.043	<-0.001	0.993	9.3%	33.0%	Quercetin-4-glucoside
Phenolic acids																
0.49	Gallic acid	149-91-7	-	95	169	79	24	125	17	0.2-20.0	0.0176	0.006	0.986	8.3%	10.3%	Quercetin-4-glucoside
2.27	Caffeic acid	331-39-5	-	100	179	91	17	135	18	0.01-10.00	0.05	-0.002	0.991	6.5%	13.9%	Quercetin-4-glucoside
1.28	Gallic acid	67879-58-7	-	110	311	135	31	179	18	0.1-20.0	0.029	0.01	0.994	6.2%	9.3%	Quercetin-4-glucoside
2.15	Coumaric acid	27174-07-8	-	100	295	119	20	163	10	0.05-20.0	0.02	0.007	0.992	7.7%	12.5%	Quercetin-4-glucoside
Other compounds																
6.02	resveratrol	501-36-0	+	123	229	107	23	135	15	0.02-10.00	0.015	<-0.001	0.997	6.4%	10.2%	Quercetin-4-glucoside

Tab. S-2: parameters for MRM mass spectrometry, calibration curves and LC-MS method validation

Correlation coefficients of chemical parameters with scores

EtOH (%)	Score	0.37
Score	Malvidin-3-glu	0.36
Score	anthocyanins total	0.35
Score	IAC	0.32
Score	Petunidin-3-glu	0.29
CaftaricAcid	Score	0.23
Score	Delphinidin-3-glu	0.22
Astilbin	Score	0.18
Glicerol	Score	0.17
tartaric esters total	Score	0.17
Flavonols total	Score	0.14
Score	(-)-Gallocatechin	0.14
(-)-Epicatechin	Score	0.13
Score	Isorhamnetin	0.12
Procyanidin B2	Score	0.08
monomers total	Score	0.08
catechins/procyanidins total	Score	0.08
Score	Taxifolin	0.08
Procyanidin C1	Score	0.06
Procyanidin B1	Score	0.05
Score	Myricetin	0.04
(+)-Catechin	Score	0.03
CoutaricAcid	Score	0.01
Total H+	Score	0
Score	pH	0
Red. Sugars	Score	-0.01
Querc-3-Glucur	Score	-0.01
t-resveratrol	Score	-0.02
Dry Extract	Score	-0.04
Score	Lactic acid	-0.04
Score	Quercetin	-0.08
Abs 520	Score	-0.12
Score	CaffeicAcid	-0.12
Abs 620	Score	-0.16
Score	Volatile H+	-0.16
Intensity	Score	-0.17
Methanol	Score	-0.17
Abs 420	Score	-0.22
TPC	Score	-0.24
Score	Tonality	-0.24
Gallic Acid	Score	-0.32

Tab. S-3: correlation coefficients of chemical parameters with scores