

Table S1 Content (g or mg per 100 g dw) of main compounds of extracts from *Cornus mas* of two cultivars ('Uholok' and 'Koralovyi') and mix of two Polish hybrids of *Cornus mas* × *Cornus officinalis* ('Jerzy' and 'Tomasz') by HPLC-PDA.

Peak no.	Compound	UV λ_{\max} (nm)	Content		
			<i>C. mas</i> 'Uholok'	<i>C. mas</i> 'Koralovyi'	<i>C. mas</i> × <i>C. officinalis</i> 'Jerzy' & 'Tomasz'
IRIDOIDS (g/100 g dw)					
1	Loganic acid	245	19.66±1.02	27.05±1.66	13.31±0.70
2	Morroniside	246			10.06±0.37
3	Loganin	245		2.39±0.27	7.00±0.80
4	Ir 1	245			0.29±0.01
5	Ir 2	244/277			0.27±0.05
6	Ir 3	246			0.37±0.21
7	Cornuside	245/273	1.81±0.12	2.26±0.17	1.69±0.01
Total iridoids			21.47	31.70	32.99
HYDROLYSABLE TANNINS (g/100 g dw)					
8	T 1	279	0.41±0.02	0.42±0.03	0.27±0.00
9	T 2	267	0.82±0.04	1.25±0.13	0.81±0.04
10	T 3	278	0.17±0.01	0.21±0.02	
11	T 4	270	0.23±0.01	0.53±0.04	0.41±0.00
12	T 5	266	0.42±0.02	0.63±0.05	0.33±0.01
13	T 6	269	0.16±0.01	0.51±0.05	0.19±0.00
14	T 7	271	0.36±0.02	0.98±0.08	0.82±0.00
15	T 8	271			0.27±0.00
16	T 9	267		0.28±0.06	0.12±0.00
17	T 10	265			0.08±0.01
18	T 11	274			0.34±0.02
19	T 12	270	0.45±0.01	1.70±0.18	1.77±0.04
20	T 13	274	0.39±0.01		0.85±0.01
21	T 14	278		0.38±0.06	0.54±0.01
22	T 15	277	0.09±0.00	0.10±0.01	0.38±0.03
23	T 16	277			0.27±0.08
24	T 17	275			0.12±0.05
25	T 18	278	0.07±0.00	0.17±0.02	0.40±0.03
26	T 19	278			0.15±0.01
27	T 20	276			0.05±0.00
28	T 21	265			0.10±0.00
29	T 22	279			0.88±0.03
Total hydrolysable tannins			3.58	7.17	9.16
ANTHOCYANINS (g/100 g dw)					
30	Delphinidin 3- <i>O</i> -galactoside	524	0.03±0.00		0.03±0.00
31	An	516			0.01±0.00
32	Cyanidin 3- <i>O</i> -galactoside	515	4.83±0.29	0.04±0.01	0.32±0.01
33	Cyanidin 3- <i>O</i> -robinobioside	516	1.99±0.13		0.22±0.01
34	Pelargonidin 3- <i>O</i> -galactoside	501	2.12±0.15	0.22±0.03	0.96±0.02
35	Pelargonidin 3- <i>O</i> -robinobioside	501	0.18±0.02		0.57±0.01
36	Cyanidin	523	0.34±0.01		
37	Pelargonidin	509	0.14±0.03	0.01±0.00	
Total anthocyanins			9.63	0.27	2.11
FLAVONOLS (g/100 g dw)					
38	Quercetin 3- <i>O</i> -glucuronide	257/354	0.13±0.02	0.04±0.00	0.37±0.01
39	Kaempferol 3- <i>O</i> -galactoside	264/347	0.21±0.01	0.50±0.05	0.05±0.00
Total flavonols			0.35	0.55	0.42
PHENOLIC ACIDS (mg/100 g dw)					
40	<i>trans</i> -Caftaric acid	326	5.95±0.25		2.15±0.07
41	<i>p</i> -Coumaric acid derivative 1	309	11.22±0.90	3.34±0.04	
42	<i>p</i> -Coumaric acid derivative 2	309	4.91±0.15	13.65±1.26	
43	Caffeoylquinic acid 1	323		2.25±0.03	0.95±0.00

44	<i>cis</i> -caftaric acid	325	62.40±4.05	26.61±2.23	38.40±2.22
45	<i>p</i> -Coumaric acid derivative 3	314		2.95±0.02	
46	<i>p</i> -Coumaric acid derivative 4	309		6.17±0.17	2.49±0.00
47	<i>cis</i> -coutaric acid	315		39.01±2.26	27.49±0.81
48	<i>p</i> -Coumaric acid	310	5.54±0.48	2.59±0.23	12.14±0.38
49	<i>p</i> -Coumaric acid derivative 5	310	6.00±0.51		
50	<i>p</i> -Coumaric acid derivative 6	315			1.77±0.01
51	Ellagic acid	254	10.57±0.80	28.00±0.00	37.14±1.15
52	<i>p</i> -Coumaric acid derivative 7	314			26.81±1.06
53	<i>p</i> -Coumaric acid derivative 8	311			3.93±0.07
54	<i>p</i> -Coumaric acid derivative 9	315			1.54±0.07
55	<i>p</i> -Coumaric acid derivative 10	315			1.33±0.03
Total phenolic acids			106.59	124.57	156.14

Ir, iridoid; T, hydrolysable tannin; An, anthocyanin.

Table S2 The main compounds of extracts from *Cornus mas* of different cultivars ('Uholok', 'Koralovyi', 'Podolski', 'Yantarnyi' and 'Flava'), the hybrids of *C. mas* × *C. officinalis* ('Jerzy' and 'Tomasz' cultivars), and Loganic acid, a main iridoid glycoside extracted from yellow fruits of *C. mas* 'Yantarnyi' and 'Flava' cultivars*

Fruit extracts from	<i>C. mas</i> 'Uholok' cultivar	<i>C. mas</i> 'Koralovyi' cultivar	<i>C. mas</i> × <i>C. officinalis</i> 'Jerzy' & 'Tomasz' cultivars	<i>C. mas</i> 'Podolski' cultivar	<i>C. mas</i> 'Yantarnyi' & 'Flava' cultivars	Loganic acid
IRIDOIDS						
Loganic acid <i>Mean:</i>	+ 19.66	+ 27.05	+ 13.31	+ 11.29 [†]	+ 15.47	+ 73.99 [§]
Loganin <i>Mean:</i>	–	+ 2.39	+ 7.00 [§]	+ Trace [†]	+ 0.98	–
Cornuside <i>Mean:</i>	+ 1.81	+ 2.26	+ 1.69 [†]	+ 1.99	+ 2.81 [§]	–
Morroniside <i>Mean:</i>	–	–	+ 10.06 [§]	–	–	–
Sweroside <i>Mean:</i>	–	–	–	+ 0.55 [†]	+ 0.61 [§]	–
Secoxyloganin <i>Mean:</i>	–	–	–	+ 0.24 [†]	+ 0.43 [§]	–
Total, g/100 g dw	21.47	31.70	32.06	14.07	20.30	73.99
ANTHOCYANINS						
Delphinidin 3- <i>O</i> -galactoside <i>Mean:</i>	+ 0.03	–	+ 0.03	+ 0.05 [§]	–	–
Cyanidin <i>Mean:</i>	+ 0.34 [§]	–	–	+ 0.08 [†]	–	–
Cyanidin 3- <i>O</i> -galactoside <i>Mean:</i>	+ 4.83 [§]	+ 0.04 [†]	+ 0.32	+ 0.76	–	–
Cyanidin 3- <i>O</i> -robinobioside <i>Mean:</i>	+ 1.99 [§]	–	+ 0.22	+ 0.22	–	–
Pelargonidin <i>Mean:</i>	+ 0.14 [§]	+ 0.01 [†]	–	+ 0.13	–	–
Pelargonidin 3- <i>O</i> -galactoside <i>Mean:</i>	+ 2.12 [§]	+ 0.22 [†]	+ 0.96	+ 1.57	–	–
Pelargonidin 3- <i>O</i> -robinobioside <i>Mean:</i>	+ 0.18 [†]	–	+ 0.57 [§]	+ 0.25	–	–
Total, g/100 g dw	9.63	0.27	2.11	3.06	0.00	0.00
FLAVONOLS						
Quercetin 3- <i>O</i> -glucoside <i>Mean:</i>	–	–	–	+ 0.02 [†]	+ 0.03 [§]	–
Quercetin 3- <i>O</i> -glucuronide <i>Mean:</i>	+ 0.13	+ 0.04 [†]	+ 0.37	+ 0.39	+ 0.48 [§]	–
Quercetin 3- <i>O</i> -galactoside <i>Mean:</i>	–	–	–	+ 0.06 [§]	+ 0.04 [†]	–
Kaempferol 3- <i>O</i> -glucuronide <i>Mean:</i>	–	–	–	+ 0.03 [§]	–	–
Kaempferol 3- <i>O</i> -galactoside <i>Mean:</i>	+ 0.21	+ 0.50 [§]	+ 0.05 [†]	+ 0.23	–	–
Total, g/100 g dw	0.34	0.54	0.42	0.73	0.55	0.00
PHENOLIC ACIDS						
Caftaric acid 1 <i>Mean:</i>	–	–	–	–	–	+ 0.722 [§]

Caftaric acid 2 <i>Mean:</i>	–	–	–	–	–	+ 1.110 [§]
<i>trans</i> -Caftaric acid <i>Mean:</i>	+ 0.006 [§]	–	+ 0.002 [†]	–	–	–
<i>cis</i> -Caftaric acid <i>Mean:</i>	+ 0.062 [§]	+ 0.027 [†]	+ 0.038	–	–	–
Caffeic acid <i>Mean:</i>	–	–	–	+ 0.091 [†]	+ 0.116 [§]	–
Caffeoylquinic acid 1 <i>Mean:</i>	–	+ 0.002	+ 0.001 [†]	+ 0.585	+ 0.834 [§]	–
Caffeoylquinic acid 2 <i>Mean:</i>	–	–	–	+ Trace [†]	+ 0.014 [§]	–
Caffeoylhexoside 1 <i>Mean:</i>	–	–	–	+ 0.123 [†]	+ 0.228 [§]	–
<i>p</i> -Coumaric acid <i>Mean:</i>	+ 0.005	+ 0.003 [†]	+ 0.012	+ 0.009	+ 0.074 [§]	–
<i>p</i> -Coumaric acid derivative 1 <i>Mean:</i>	+ 0.011 [§]	+ 0.003 [†]	–	–	–	–
<i>p</i> -Coumaric acid derivative 2 <i>Mean:</i>	+ 0.005 [†]	+ 0.014 [§]	–	–	–	–
<i>p</i> -Coumaric acid derivative 3 <i>Mean:</i>	–	+ 0.003 [§]	–	–	–	–
<i>p</i> -Coumaric acid derivative 4 <i>Mean:</i>	–	+ 0.006 [†]	+ 0.027 [§]	–	–	–
<i>p</i> -Coumaric acid derivative 5 <i>Mean:</i>	+ 0.006 [§]	–	–	–	–	–
<i>p</i> -Coumaric acid derivative 6 <i>Mean:</i>	–	–	+ 0.002 [§]	–	–	–
<i>p</i> -Coumaric acid derivative 7 <i>Mean:</i>	–	–	+ 0.003 [§]	–	–	–
<i>p</i> -Coumaric acid derivative 8 <i>Mean:</i>	–	–	+ 0.004 [§]	–	–	–
<i>p</i> -Coumaric acid derivative 9 <i>Mean:</i>	–	–	+ 0.002 [§]	–	–	–
<i>p</i> -Coumaric acid derivative 10 <i>Mean:</i>	–	–	+ 0.001 [§]	–	–	–
<i>p</i> -Coumaroilquinic acid 1 <i>Mean:</i>	–	–	–	+ 0.051 [†]	+ 0.093 [§]	–
<i>p</i> -Coumaroilquinic acid 2 <i>Mean:</i>	–	–	–	+ 0.302 [†]	+ 0.702 [§]	–
<i>p</i> -Coumaroilquinic acid 3 <i>Mean:</i>	–	–	–	+ 0.022 [†]	+ 0.048 [§]	–
<i>cis</i> -Coutaric acid <i>Mean:</i>	–	+ 0.039 [§]	+ 0.027 [†]	–	–	–
Ellagic acid <i>Mean:</i>	+ 0.011 [†]	+ 0.028	+ 0.037	+ 0.102 [§]	+ 0.046	–
Total, g/100 g dw	0.106	0.125	0.156	1.285	2.155	1.832

§ – the highest content of this substance among studied extracts;

† – the lowest content of this substance among studied extracts;

* – comparison of the qualitative and quantitative composition of the fruit extracts from 'Uholok' and 'Koralovyj' cultivars of *Cornus mas* and the hybrids of *C. mas* × *C. officinalis* was made based on Table S1, which is published in this article for the first time, and the results of the content of bioactive components of the extracts of red fruits of 'Podolski' cultivar and yellow fruits of 'Yantarnyi' & 'Flava' cultivars of cornelian cherry, and Loganic acid, published by Dzydzan *et al.* (2019, 2020).^{12,13}