

Table S1. Mean values (and standard deviations) of phenolic acids ($\mu\text{g/g}_{\text{dry weight}}$) of corn mixtures and extrudates.

Samples	Caffeic Acid	Siringic Acid	p-Coumaric Acid	Ferulic Acid	Di-caff	Total Phenolic Acids
Mixtures						
CM	20.84 (0.06) ^{aA}	14.26 (0.07) ^{aA}	64.75 (0.21) ^{aA}	42.86 (0.04) ^{aA}	58.61 (0.06) ^{aA}	201.32 (0.44) ^{aA}
R4M	18.44 (0.26) ^{bA}	13.31 (0.08) ^{bA}	61.95 (0.05) ^{bA}	31.30 (0.09) ^{bB}	44.47 (0.03) ^{bB}	169.48 (0.78) ^{bB}
MDR4M	17.99 (0.03) ^{cA}	13.22 (0.02) ^{bcA}	61.56 (0.03) ^{dA}	31.00 (0.12) ^{dB}	44.22 (0.51) ^{bB}	167.98 (0.71) ^{cdB}
RMDR4M	18.10 (0.32) ^{cA}	13.14 (0.06) ^{cA}	61.21 (0.02) ^{eA}	30.83 (0.22) ^{eB}	44.09 (0.05) ^{bB}	167.38 (0.67) ^{eB}
PPR4M	18.14 (0.08) ^{bcA}	13.16 (0.28) ^{cA}	61.76 (0.06) ^{cA}	31.13 (0.05) ^{cB}	44.27 (0.03) ^{bB}	168.46 (0.50) ^{cB}
CDR4M	18.10 (0.20) ^{cA}	13.19 (0.02) ^{bcA}	61.54 (0.04) ^{dA}	30.82 (0.34) ^{eB}	44.09 (0.09) ^{bB}	167.73 (0.69) ^{deB}
R8M	17.34 (0.07) ^{dA}	12.91 (0.08) ^{dA}	59.55 (0.13) ^{fgA}	29.49 (0.13) ^{fB}	42.93 (0.02) ^{cdB}	162.22 (0.43) ^{fB}
MDR8M	17.20 (0.13) ^{dA}	12.77 (0.05) ^{eA}	59.56 (0.02) ^{fgA}	29.22 (0.07) ^{gB}	42.84 (0.08) ^{cdB}	161.58 (0.35) ^{gB}
RMDR8M	17.12 (0.05) ^{dB}	12.62 (0.16) ^{efA}	59.40 (0.15) ^{ghA}	29.03 (0.08) ^{hB}	42.74 (0.02) ^{dB}	160.90 (0.46) ^{hB}
PPR8M	17.02 (0.09) ^{dB}	12.32 (0.03) ^{fA}	59.38 (0.09) ^{hA}	29.05 (0.23) ^{hB}	43.34 (0.84) ^{cB}	161.10 (1.28) ^{ghB}
CDR8M	17.11 (0.08) ^{dB}	12.65 (0.05) ^{gA}	59.59 (0.03) ^{fA}	28.99 (0.78) ^{hB}	42.70 (0.15) ^{dB}	161.05 (1.09) ^{ghB}
Extrudates						
CE	18.46 (0.22) ^{aB}	12.43 (0.04) ^{aB}	60.36 (0.05) ^{aB}	32.52 (0.23) ^{dB}	46.79 (0.40) ^{eB}	170.56 (0.94) ^{fA}
R4E	18.28 (0.07) ^{abA}	11.86 (0.07) ^{bB}	57.73 (0.13) ^{bB}	37.92 (0.24) ^{aA}	53.56 (0.12) ^{aA}	179.35 (0.63) ^{aA}
MDR4E	18.19 (0.08) ^{abcA}	11.63 (0.02) ^{cdB}	57.75 (0.07) ^{bB}	37.76 (0.08) ^{abA}	53.31 (0.13) ^{aA}	178.65 (0.38) ^{abA}
RMDR4E	18.09 (0.06) ^{abcdeA}	11.69 (0.07) ^{cB}	57.76 (0.04) ^{bB}	37.78 (0.08) ^{abA}	53.26 (0.22) ^{abA}	178.58 (0.47) ^{abA}
PPR4E	18.14 (0.09) ^{abcdA}	11.59 (0.02) ^{deB}	57.48 (0.11) ^{cB}	37.81 (0.07) ^{aA}	53.31 (0.33) ^{aA}	178.33 (0.62) ^{bA}
CDR4E	18.01 (0.08) ^{abcdeA}	11.45 (0.04) ^{fgB}	57.36 (0.15) ^{dB}	37.60 (0.09) ^{bA}	52.71 (0.66) ^{bA}	177.13 (1.02) ^{cA}
R8E	18.24 (0.60) ^{abcA}	11.51 (0.22) ^{efB}	55.35 (0.04) ^{fB}	36.62 (0.13) ^{cA}	51.91 (0.07) ^{cA}	173.63 (0.52) ^{dA}
MDR8E	17.63 (0.16) ^{eA}	11.47 (0.03) ^{fgB}	55.37 (0.08) ^{efB}	36.65 (0.22) ^{cA}	51.63 (0.23) ^{cdA}	172.74 (0.72) ^{deA}
RMDR8E	17.67 (0.15) ^{deA}	11.38 (0.07) ^{gB}	55.46 (0.07) ^{eB}	36.73 (0.31) ^{cA}	51.50 (0.22) ^{cdA}	172.75 (0.82) ^{deA}
PPR8E	17.76 (0.02) ^{cdeA}	11.47 (0.03) ^{fB}	55.20 (0.15) ^{gB}	36.54 (0.15) ^{cA}	51.17 (0.07) ^{dA}	172.14 (0.42) ^{eA}
CDR8E	17.83 (0.03) ^{bcdeA}	11.51 (0.12) ^{efB}	55.41 (0.02) ^{efB}	36.60 (0.06) ^{cA}	51.43 (0.02) ^{cdA}	172.78 (0.25) ^{deA}

Small different letters in superscript within column indicates significant changes between samples, by Fisher test ($p < 0.05$) comparing studied samples in mixtures or extrudates. Big different letter within column indicates significant changes between samples, by Fisher test ($p < 0.05$) comparing mixtures and extrudates.

R, rosehip; MDR, maltodextrin rosehip; RMDR, resistant maltodextrin rosehip; PPR, pea protein rosehip; CDR, cyclodextrin rosehip. 4, concentration of 4 % of rosehip preparation; 8, concentration of 8 % of rosehip preparation. M, mixture; E, extrudate.

Table S2. Mean values (and standard deviations) of hydroxybenzoic acid (Di-Gallic acid) and flavanols content ($\mu\text{g/g}_{\text{dry weight}}$) of corn mixtures and extrudates.

Samples	Di-Gall	Procyan d1	Procyan d2	Cat	Q-acet-rham	I-glucur	Q-gluc	Q-glu-gluc-rham	I-gluc	I-acet-gluc-gluc	Q	Total Flavonoids
Mixtures												
CM	\bar{a}_k	\bar{a}_k	\bar{a}_j	\bar{a}_k	\bar{a}_h	\bar{a}_i	\bar{a}_k	\bar{a}_h	\bar{a}_i	\bar{a}_j	\bar{a}_k	\bar{a}_k
R4M	187.14 (0.41) ^{gB}	38.62 (0.04) ^{gA}	23.21 (0.06) ^{fA}	182.44 (0.07) ^{gA}	20.92 (0.04) ^{fA}	13.74 (0.08) ^{fA}	18.29 (0.03) ^{gA}	18.33 (0.08) ^{dB}	19.96 (0.08) ^{eB}	17.62 (0.12) ^{gB}	15.98 (0.25) ^{fA}	558.11 (1.26) ^{fA}
MDR4M	146.19 (0.32) ^{iA}	37.34 (0.02) ^{hA}	22.80 (0.15) ^{gA}	183.14 (0.12) ^{fA}	23.51 (0.02) ^{eA}	13.73 (0.05) ^{fA}	16.35 (0.07) ^{iB}	18.00 (0.09) ^{eB}	20.26 (0.50) ^{eB}	14.93 (0.02) ^{iB}	14.93 (0.08) ^{jA}	515.18 (1.44) ^{hA}
RMDR4M	124.43 (0.07) ^{iA}	25.25 (0.03) ^{iA}	22.63 (0.04) ^{ghA}	123.44 (0.12) ^{jA}	20.55 (0.05) ^{gA}	12.84 (0.23) ^{hA}	18.27 (0.04) ^{gB}	16.67 (0.05) ^{gB}	18.29 (0.45) ^{gB}	18.90 (0.07) ^{fA}	15.32 (0.03) ^{iA}	416.59 (1.04) ^{jA}
PPR4M	194.90 (0.06) ^{iB}	27.1 (0.3) ^{iA}	22.14 (0.07) ^{iA}	131.05 (0.04) ^{jA}	20.56 (0.03) ^{gA}	13.34 (0.02) ^{gA}	19.23 (0.02) ^{iB}	16.62 (0.02) ^{gB}	14.66 (0.02) ^{hB}	16.29 (0.34) ^{hB}	15.64 (0.02) ^{hA}	491.46 (0.92) ^{iA}
CDR4M	175.02 (0.06) ^{hB}	40.70 (0.04) ^{fA}	22.41 (0.13) ^{hA}	165.04 (0.02) ^{hA}	20.55 (0.09) ^{gA}	13.72 (0.09) ^{fA}	17.59 (0.05) ^{iB}	17.59 (0.55) ^{iB}	19.51 (0.34) ^{iB}	17.93 (0.77) ^{gB}	16.59 (0.33) ^{gA}	526.65 (2.47) ^{gA}
R8M	736.79 (0.69) ^{aA}	148.0 (0.3) ^{aA}	205.2 (0.2) ^{aA}	361.40 (0.02) ^{aA}	31.98 (0.04) ^{aA}	21.23 (0.08) ^{aA}	44.40 (0.04) ^{aA}	28.42 (0.08) ^{bB}	32.22 (0.09) ^{aB}	27.77 (0.08) ^{aB}	23.49 (0.04) ^{eA}	1660.86 (1.69) ^{aA}
MDR8M	643.42 (0.13) ^{bA}	120.60 (0.08) ^{bA}	204.2 (0.2) ^{bA}	319.04 (0.05) ^{cA}	29.05 (0.03) ^{cA}	20.49 (0.05) ^{cA}	39.83 (0.03) ^{bA}	31.67 (0.04) ^{aA}	29.60 (0.11) ^{cA}	26.75 (0.55) ^{bB}	29.05 (0.52) ^{aA}	1493.64 (1.84) ^{bA}
RMDR8M	496.38 (0.28) ^{eA}	80.9 (0.3) ^{eA}	120.42 (0.03) ^{eA}	287.65 (0.02) ^{eA}	30.66 (0.03) ^{bA}	20.79 (0.06) ^{bA}	37.83 (0.08) ^{cA}	28.41 (0.09) ^{bB}	29.60 (0.05) ^{cB}	25.80 (0.09) ^{dB}	28.68 (0.37) ^{bA}	1187.11 (1.37) ^{eA}
PPR8M	507.93 (0.14) ^{dA}	116.17 (0.08) ^{cA}	168.61 (0.04) ^{cA}	325.95 (0.37) ^{bA}	28.99 (0.54) ^{cA}	14.67 (0.08) ^{eA}	37.12 (0.09) ^{dA}	31.59 (0.03) ^{aB}	28.98 (0.03) ^{dB}	26.39 (0.05) ^{cB}	27.02 (0.65) ^{cA}	1313.42 (2.10) ^{dA}
CDR8M	565.81 (0.21) ^{cA}	108.88(0.02) ^{dA}	155.16 (0.02) ^{dA}	317.55 (0.02) ^{dA}	24.42 (0.13) ^{dA}	14.96 (0.02) ^{dA}	29.98 (0.03) ^{eB}	23.78 (0.02) ^{cB}	30.31 (0.02) ^{bA}	24.44 (0.03) ^{eA}	26.07 (0.04) ^{dA}	1321.36 (0.56) ^{cA}
Extrudates												
CE	\bar{a}_j	-	-	-	-	-	\bar{a}_k	\bar{a}_j	\bar{a}_g	\bar{a}_j	-	\bar{a}_k
R4E	211.76 (0.34) ^{eA}	n.d.	n.d.	n.d.	n.d.	n.d.	17.02 (0.02) ^{iB}	31.66 (0.07) ^{eA}	29.13 (0.04) ^{eA}	19.83 (0.03) ^{gA}	0.00 ^B	309.40 (0.5) ^{iB}
MDR4E	116.65 (0.02) ^{hB}	n.d.	n.d.	n.d.	n.d.	n.d.	19.56 (0.05) ^{hA}	27.11 (0.55) ^{hA}	26.01 (0.06) ^{fA}	16.12 (0.02) ^{jA}	0.00 ^B	205.46 (0.7) ^{iB}
RMDR4E	113.74 (0.73) ^{jB}	n.d.	n.d.	n.d.	n.d.	n.d.	23.59 (0.23) ^{gA}	28.27 (0.03) ^{fghA}	27.97 (0.38) ^{eA}	16.46 (0.04) ^{iB}	0.00 ^B	210.03 (1.41) ^{iB}
PPR4E	221.73 (0.18) ^{dA}	n.d.	n.d.	n.d.	n.d.	n.d.	25.96 (0.34) ^{eA}	36.80 (0.78) ^{cA}	31.47 (0.78) ^{dA}	23.97 (0.65) ^{fA}	0.00 ^B	339.93 (2.39) ^{dB}
CDR4E	196.45 (0.08) ^{fA}	n.d.	n.d.	n.d.	n.d.	n.d.	28.54 (0.04) ^{dA}	27.82 (0.03) ^{ghA}	28.45 (0.56) ^{eA}	18.85 (0.05) ^{hA}	0.00 ^B	300.03 (0.76) ^{hB}
R8E	339.13 (0.34) ^{bB}	n.d.	n.d.	n.d.	n.d.	n.d.	33.09 (0.08) ^{bB}	39.56 (0.22) ^{bA}	40.05 (0.22) ^{bA}	34.30 (0.67) ^{bA}	0.00 ^B	486.15 (1.53) ^{bB}

Table S2.Cont.

Samples	Di-Gall	Procyan d	Procyan d	Cat	Q-acet-rham	I-glucur	Q-gluc	Q-glu-gluc-rham	I-gluc	I-acet-gluc-gluc	Q	Total flavonoids
Extrudates												
MDR8E	196.82 (0.17) ^{iB}	n.d.	n.d.	n.d.	n.d.	n.d.	25.35 (0.06) ^{iB}	24.43 (0.19) ^{iB}	29.09 (0.34) ^{eA}	28.78 (0.04) ^{cA}	0.00 ^B	304.46 (0.8) ^{gB}
RMDR8E	193.62 (0.04) ^{gB}	n.d.	n.d.	n.d.	n.d.	n.d.	25.09 (0.45) ^{iB}	34.76 (0.34) ^{dA}	34.70 (0.05) ^{cA}	26.65 (0.76) ^{dA}	0.00 ^B	314.81 (1.64) ^{eB}
PPR8E	369.69 (0.02) ^{aB}	n.d.	n.d.	n.d.	n.d.	n.d.	36.92 (0.57) ^{aA}	43.47 (0.67) ^{aA}	45.55 (1.06) ^{aA}	37.78 (0.99) ^{aA}	0.00 ^B	533.40 (0.75) ^{aB}
CDR8E	333.02 (0.09) ^{cB}	n.d.	n.d.	n.d.	n.d.	n.d.	31.60 (0.03) ^{cA}	28.81 (0.94) ^{fA}	25.38 (0.02) ^{iB}	23.86 (0.05) ^{iB}	0.00 ^B	442.68 (0.23) ^{cB}

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