

Supplementary Data

Table S1. The glass transition temperature (T_g) determined from the first and second heating curves.

Extract Content [wt %]		Biodegradation Time [days]									
		0		7		14		21		28	
		T_{g1} [°C]	T_{g2} [°C]	T_{g1} [°C]	T_{g2} [°C]	T_{g1} [°C]	T_{g2} [°C]	T_{g1} [°C]	T_{g2} [°C]	T_{g1} [°C]	T_{g2} [°C]
P	-	62.5	59,9	55.4	54,1	54.8	54,5	53.9	55,9	55.6*	28,5* 51,2*
Coffee extract	0.5	62.5	59,9	52.2	54,0	54.9	48,5	55.3*	32,9	55.2*	43,4
	5	61.5	58,7	61.1	57,6	59.7	55,7	55.8	52,8	55.9	52,1
	10	60.8	57,2	62.3	57,7	62.6	57,4	59.4	56,6	57.9	50,4
Cocoa extract	0.5	62.7	59,9	61.4	58,7	61.0	59,8	56.3	56,5	61.6	58,4
	5	61.6	58,8	61.4	58,5	61.5	58,6	57.7	56,7	60.4	58,3
	10	60.4	58,5	62.3	58,6	62.1	58,7	58.5	56,6	61.4	57,8
Cinnamon extract	0.5	63.3	59,7	54.9	58,9	62.5	58,9	58.4*	58,3	50.9*	36,2
	5	62.8	59,3	59.7	58,6	62.7	59,0	47.7*	54,6	54.3*	26,9* 48,9*
	10	62.3	58,8	62.6	58,5	63.5	58,8	57.4*	51,1	54.4*	44,7
R	-	61.0	57,7	57.2	56,2	55.3	53,3	50.5	51,9	-	28,8* 47,1*

* weak glass transition

Table S2. The degree of crystallinity (X_c) determined from the first and second heating curves.

Extract Content [wt %]		Biodegradation Time [days]									
		0		7		14		21		28	
		X_{c1} [%]	X_{c2} [%]	X_{c1} [%]	X_{c2} [%]	X_{c1} [%]	X_{c2} [%]	X_{c1} [%]	X_{c2} [%]	X_{c1} [%]	X_{c2} [%]
P	-	0.0	0,2	44.6	0,1	40.3	0,5	39.5	1,4	61.2	3,2
Coffee extract	0.5	1.4	0,8	44.4	0,0	44.0	0,0	43.9	1,4	41.0	0,0
	5	1.5	0,2	30.1	0,3	36.8	0,0	39.0	0,0	38.5	0,9
	10	1.5	0,1	29.5	0,0	29.9	0,0	30.9	0,0	36.0	1,6
Cocoa extract	0.5	0.4	0,7	31.8	0,2	35.7	0,0	38.6	0,1	32.6	0,2
	5	1.8	0,0	27.9	0,0	33.3	0,2	35.4	0,0	29.4	0,1
	10	1.6	0,0	4.0	1,1	32.8	0,0	34.2	0,0	28.5	0,9
Cinnamon extract	0.5	1.9	0,5	28.2	0,9	32.2	0,0	34.9	1,1	39.0	1,7
	5	2.0	1,0	28.8	0,3	42.2	2	77.0	0,6	39.4	0,6
	10	1.5	0,0	24.7	0,0	47.2	0,0	57.5	1,8	32.4	1,8
R	-	1.0	0,2	32.8	0,6	39.3	0,0	40.9	0,3	38.2	4,8

Table S3. The cold crystallization temperature (T_{cc}) determined from the first and second heating curves.

Extract Content [wt %]		Biodegradation Time [days]									
		0		7		14		21		28	
		T_{cc1} [°C]	T_{cc2} [°C]	T_{cc1} [°C]	T_{cc2} [°C]	T_{cc1} [°C]	T_{cc2} [°C]	T_{cc1} [°C]	T_{cc2} [°C]	T_{cc1} [°C]	T_{cc2} [°C]
P	-	125.3	127.5	-	127.5	-	124.4	-	128.5	-	82.2
Coffee extract	0.5	116.5	118.3	-	116.1	-	108.9	-	87.2 99.1	-	97.1
	5	114.3	114.6	-	120.1	-	117.1	-	117.1	-	114.8
	10	115.5	117.2	-	117.1	-	118.7	-	118.9	-	114.3
Cocoa extract	0.5	121.8	123.5	-	122.2	-	115.6	-	119.7	-	115.3
	5	111.0	115.9	-	116.6	-	115.2	-	125.8	-	116.0
	10	115.3	120.0	101.3	123.3	-	123.1	-	119.0	-	125.3
Cinnamon extract	0.5	124.0	124.9	-	121.8	-	118.7	-	119.1	-	94.1
	5	120.2	122.6	-	122.7	-	118.0	-	115.2	-	83.2
	10	116.6	123.0	-	125.1	-	122.2	-	100.5	-	96.2
R	-	113.6	116.2	-	115.4	-	117.5	-	107.3	-	82.2 96.1

Table S4. The melting temperature (T_m) determined from the curves of the first and second heating.

Extract Content [wt %]		Biodegradation Time [days]									
		0		7		14		21		28	
		T_{m1} [°C]	T_{m2} [°C]	T_{m1} [°C]	T_{m2} [°C]	T_{m1} [°C]	T_{m2} [°C]	T_{m1} [°C]	T_{m2} [°C]	T_{m1} [°C]	T_{m2} [°C]
P	-	148.4	144.7	146.8	144.2	139.9 149.9	146.3 152.1	138.3 150.6	148.6 153.1	138.1	130.4 140.5
Coffee extract	0.5	146.6	147.3	143.5 149.6	146.8 150.9	139.0 149.5	142.6 150.6	138.3	122.9 135.9	144.6	132.9 144.6
	5	145.9 151.5	145.7 151.8	143.7 149.3	145.7 151.7	133.8 150.7	146.1 152.6	131.1 149.5	142.1 149.5	134.3 149.0	141.3 149.1
	10	145.2 150.3	145.7 151.4	143.9 151.0	145.7 151.4	131.1 150.6	146.3 152.3	133.5 151.6	146.3 152.6	134.1 147.2	141.5 148.4
	0.5	147.4	148.0	145.0	147.8	134.6 150.6	147.1 153.1	136.9 150.9	146.9 153.2	150.3	146.8 152.8
	5	145.3	146.3	145.6	146.6	133.4 150.0	146.7 152.5	135.1 151.3	148.5 153.2	133.2 150.5	147.1 152.8
Cinnamon extract	10	146.3	147.3	143.9 151.0	148.4	143.8 150.5	148.1	135.7 151.3	146.8 151.3	134.6 150.6	148.8
	0.5	148.1	148.3	143.5 149.8	148.0	133.9 150.5	147.9	134.8 150.4	147.6 153.6	140.3	127.5 140.9
	5	146.7	147.9	144.4 150.5	148.2	132.2 149.9	147.4 152.3	135.6 156.3	125. 136.8	137.8 156.3	144.6 151.7
R	10	145.4	147.8	143.6 150.3	148.7	149.6 148.3	148.3	143.0	133.0 141.7	145.0	135.1 146.0
	-	144.7	145.5	143.5 148.2	145.2	134.4 149.3	146.1 152.0	136.5 148.1	140.8 149.7	134.6	117.0 134.0