materials

MDPI

Supplementary Materials

Synthesis, Properties of Biodegradable Poly(Butylene Succinate-*co*-Butylene 2-Methylsuccinate) and Application for Sustainable Release

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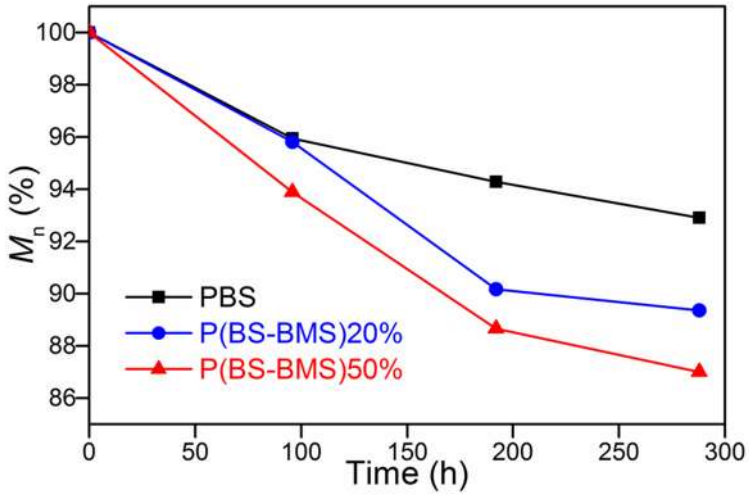

Figure S1. M_n losses of pure PBS and P(BS-BMS) copolymer residual films in enzymatic degradation environment in different time intervals.

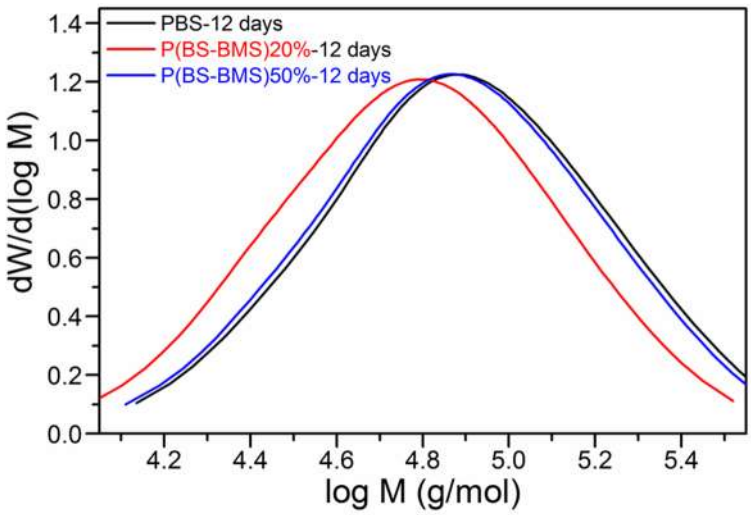

Figure S2. GPC curves of P(BS-BMS) copolymers and pure PBS after 12 days degradation process.

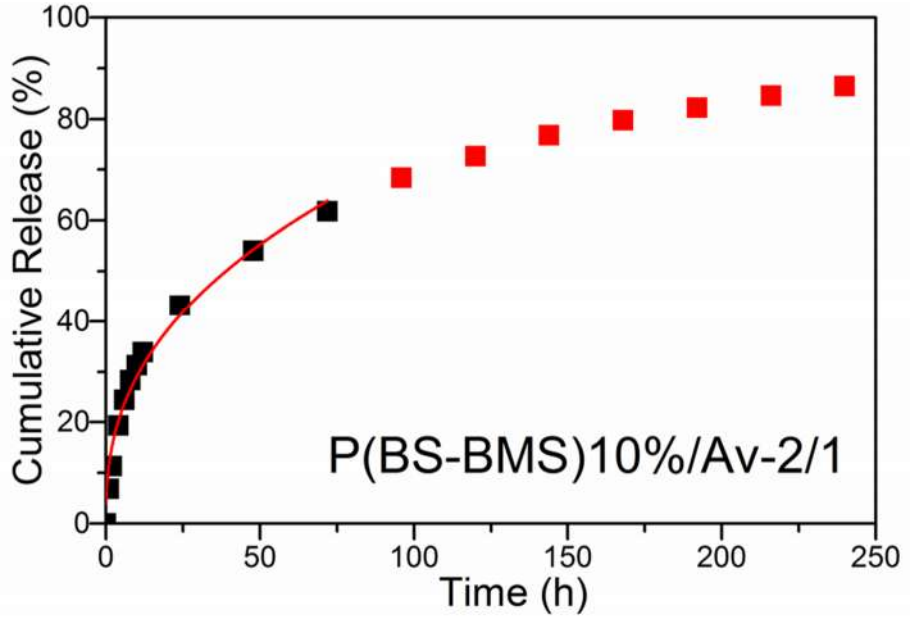

Figure S3. Fitting curve of P(BS-BMS)10%/Av-2/1 release profile according to *Korsmeyer-Peppas* equation.

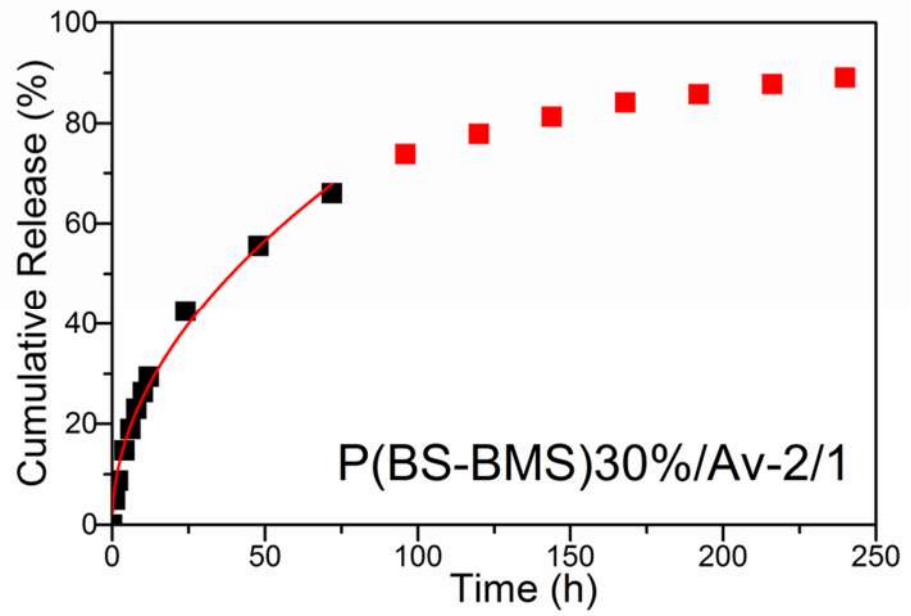

Figure S4. Fitting curve of P(BS-BMS)30%/Av-2/1 release profile according to *Korsmeyer-Peppas* equation.

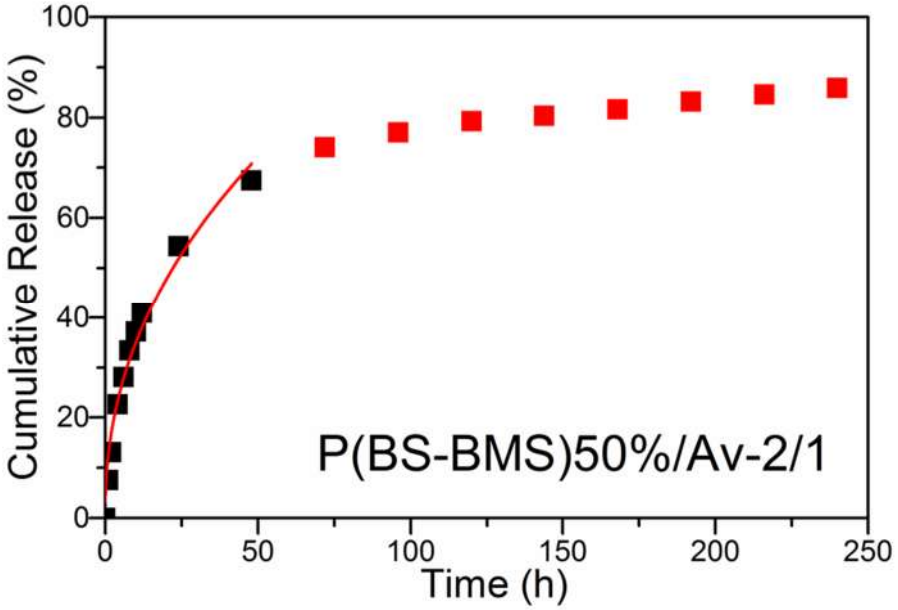

Figure S5. Fitting curve of P(BS-BMS)50%/Av-2/1 release profile according to *Korsmeyer-Peppas* equation.

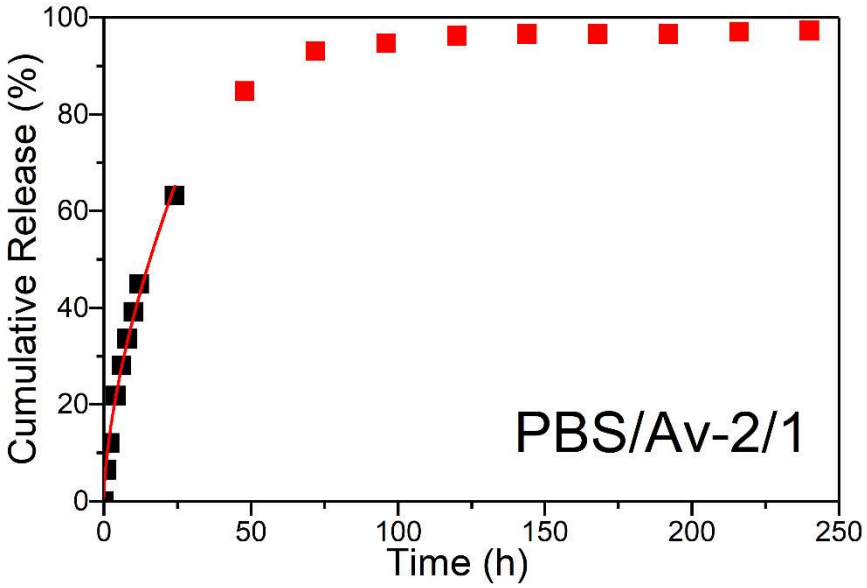

Figure S6. Fitting curve of PBS/Av-2/1 release profile according to *Korsmeyer-Peppas* equation.

Table S1. Weight loss data of pure PBS and P(BS-BMS) copolymers during enzyme degradation test.

Copolymer	Initial (%)	48h (%)	96h (%)	156h (%)	216h (%)	288h (%)
PBS	100	99.1	99.2	99.1	99.2	99.5
P(BS-BMS)10%	100	99.3	99.2	99.1	99.2	99.5
P(BS-BMS)20%	100	97.8	95.5	91.2	88.0	84.8
P(BS-BMS)30%	100	92.8	85.7	75.7	64.7	54.1
P(BS-BMS)50%	100	86.7	74.2	60.1	45.3	31.6

Table S2. Molecular weight data of pure PBS and P(BS-BMS) copolymers by GPC test.

Copolymer	4 days		8 days		12 days	
	$M_n \times 10^{-4}$ (g/mol)	PDI	$M_n \times 10^{-4}$ (g/mol)	PDI	$M_n \times 10^{-4}$ (g/mol)	PDI
PBS	6.04	1.71	5.94	1.72	5.85	1.74
P(BS-BMS)20%	4.92	1.69	4.63	1.76	4.59	1.76
P(BS-BMS)50%	6.04	1.71	5.70	1.81	5.60	1.75