5.Appendix Data

(1)Measurements of Carbon Dioxide Evolved

date	duration (day)	change in weight of each reaction column												total weight						total change in weight						gain from day before						degree of Biodegradation			
		No.1(PBS)		No.2(PBS)		No.3(cellulose)		No.4(cellulose)		No.5(blank)		No.6(blank)																							
		CaCl2	soda lime soda talc	CaCl2	soda lime soda talc	CaCl2	soda lime soda talc	CaCl2	soda lime soda talc	CaCl2	soda lime soda talc	CaCl2	soda lime soda talc	No.1	No.2	No.3	No.4	No.5	No.6	No.1	No.2	No.3	No.4	No.5	No.6	No.1	No.2	No.3	No.4	No.5	No.6	No.1	No.2	No.3	No.4
2003/5/8	0	234.241	181.246	228.474	183.218	234.502	185.110	234.507	185.109	226.158	184.635	226.158	184.635	415.487	411.692	419.612	419.616	410.793	410.793	0.000	0.000	0.000	0.000	0.000	0.000										
2003/5/9	1	234.270	181.386	228.518	183.356	234.529	185.200	234.508	185.100	226.209	184.806	226.199	184.716	415.656	411.874	419.729	419.608	411.015	410.915	0.169	0.182	0.117	(0.008)	0.222	0.122	0.169	0.182	0.117	(0.008)	0.222	0.122	0.231	0.293	−0.032	−0.838
2003/5/10	2	234.314	181.518	228.555	183.499	234.582	185.638	234.561	185.538	226.249	184.893	226.239	184.803	415.832	412.054	420.220	420.099	411.142	411.042	0.345	0.362	0.608	0.483	0.349	0.249	0.176	0.180	0.491	0.491	0.127	0.127	0.472	0.552	2.315	1.509
2003/5/11	3													0.000	0.000	0.000	0.000	0.000	0.000	(415.487)	(411.692)	(419.612)	(419.616)	(410.793)	(410.793)	(415.832)	(412.054)	(420.220)	(420.099)	(411.142)	(411.042)				
2003/5/12	4	234.341	181.707	228.586	183.722	234.603	188.566	234.582	188.466	226.271	185.019	226.261	184.929	416.048	412.308	423.169	423.048	411.290	411.190	0.561	0.616	3.557	3.432	0.497	0.397	416.048	412.308	423.169	423.048	411.290	411.190	0.806	1.069	20.379	19.573
2003/5/13	5	234.372	181.789	228.619	183.822	234.632	189.379	234.611	189.279	226.305	185.079	226.295	184.989	416.161	412.441	424.011	423.890	411.384	411.284	0.674	0.749	4.399	4.274	0.591	0.491	0.113	0.133	0.842	0.842	0.094	0.094	0.900	1.259	25.203	24.397
2003/5/14	6	234.402	181.858	228.652	183.904	234.663	190.239	234.642	190.139	226.330	185.126	226.320	185.036	416.260	412.556	424.902	424.781	411.456	411.356	0.773	0.864	5.290	5.165	0.663	0.563	0.099	0.115	0.891	0.891	0.072	0.072	1.033	1.469	30.485	29.679
2003/5/15	7	234.429	181.921	228.681	183.978	234.690	191.012	234.669	190.912	226.358	185.167	226.348	185.077	416.350	412.659	425.702	425.581	411.525	411.425	0.863	0.967	6.090	5.965	0.732	0.632	0.090	0.103	0.800	0.800	0.069	0.069	1.136	1.635	35.199	34.393
2003/5/16	8	234.450	182.045	228.708	184.107	234.710	192.146	234.689	192.046	226.381	185.243	226.371	185.153	416.495	412.815	426.856	426.735	411.624	411.524	1.008	1.123	7.244	7.119	0.831	0.731	0.145	0.156	1.154	1.154	0.099	0.099	1.362	1.914	42.003	41.197
2003/5/17	9	234.493	184.558	228.755	184.286	234.761	193.209	234.740	193.109	226.429	185.377	226.419	185.287	419.051	413.041	427.970	427.849	411.806	411.706	3.564	1.349	8.358	8.233	1.013	0.913	2.556	0.226	1.114	1.114	0.182	0.182	13.035	2.128	48.014	47.208
2003/5/18	10													0.000	0.000	0.000	0.000	0.000	0.000	(415.487)	(411.692)	(419.612)	(419.616)	(410.793)	(410.793)	(419.051)	(413.041)	(427.970)	(427.849)	(411.806)	(411.706)				
2003/5/19	11	234.507	189.421	228.765	184.608	234.772	194.283	234.751	194.183	226.440	185.605	226.430	185.515	423.928	413.373	429.055	428.934	412.045	411.945	8.441	1.681	9.443	9.318	1.252	1.152	423.928	413.373	429.055	428.934	412.045	411.945	35.841	2.582	53.470	52.663
2003/5/20	12	234.526	190.977	228.783	184.812	234.791	194.657	234.770	194.557	226.462	185.720	226.452	185.630	425.503	413.595	429.448	429.327	412.182	412.082	10.016	1.903	9.836	9.711	1.389	1.289	1.575	0.222	0.393	0.393	0.137	0.137	42.912	2.997	55.121	54.314
2003/5/21	13	234.545	192.099	228.804	185.169	234.813	194.974	234.792	194.874	226.483	185.815	226.473	185.725	426.644	413.973	429.787	429.666	412.298	412.198	11.157	2.281	10.175	10.050	1.505	1.405	1.141	0.378	0.339	0.339	0.116	0.116	47.952	4.276	56.559	55.753
2003/5/22	14	234.569	192.838	228.826	185.740	234.838	195.224	234.817	195.124	226.502	185.893	226.492	185.803	427.407	414.566	430.062	429.941	412.395	412.295	11.920	2.874	10.450	10.325	1.602	1.502	0.763	0.593	0.275	0.275	0.097	0.097	51.227	6.697	57.707	56.901
2003/5/23	15	234.587	194.569	228.845	187.244	234.855	195.702	234.834	195.602	226.521	186.004	226.511	185.914	429.156	416.089	430.557	430.436	412.525	412.425	13.669	4.397	10.945	10.820	1.732	1.632	1.749	1.523	0.495	0.495	0.130	0.130	59.188	13.497	60.061	59.254
2003/5/24	16	234.639	196.853	228.895	191.194	234.911	196.398	234.890	196.298	226.566	186.138	226.556	186.048	431.492	420.089	431.309	431.188	412.704	412.604	16.005	8.397	11.697	11.572	1.911	1.811	2.336	4.000	0.752	0.752	0.179	0.179	69.794	32.149	63.756	62.950
2003/5/25	17													0.000	0.000	0.000	0.000	0.000	0.000	(415.487)	(411.692)	(419.612)	(419.616)	(410.793)	(410.793)	(431.492)	(420.089)	(431.309)	(431.188)	(412.704)	(412.604)				
2003/5/26	18	234.658	198.550	228.907	194.730	234.916	197.111	234.895	197.011	226.577	186.391	226.567	186.301	433.208	423.637	432.027	431.906	412.968	412.868	17.721	11.945	12.415	12.290	2.175	2.075	433.208	423.637	432.027	431.906	412.968	412.868	76.934	48.179	66.684	65.878
2003/5/27	19	234.680	184.332	228.931	195.584	234.937	197.345	234.916	197.245	226.594	186.510	226.584	186.420	419.012	424.515	432.282	432.161	413.104	413.004	18.112	12.823	12.670	12.545	2.311	2.211	0.391	0.878	0.255	0.255	0.136	0.136	78.188	51.801	67.451	66.645
2003/5/28	20	234.696	184.639	228.947	196.135	234.957	197.543	234.936	197.443	226.609	186.609	226.599	186.519	419.335	425.082	432.500	432.379	413.218	413.118	18.435	13.390	12.888	12.763	2.425	2.325	0.323	0.567	0.218	0.218	0.114	0.114	79.215	54.012	68.122	67.316
2003/5/29	21	234.716	184.904	228.968	196.562	234.977	197.724	234.956	197.624	226.627	186.691	226.617	186.601	419.620	425.530	432.701	432.580	413.318	413.218	18.720	13.838	13.089	12.964	2.525	2.425	0.285	0.448	0.201	0.201	0.100	0.100	80.125	55.711	68.773	67.967
2003/5/30	22	234.741	185.599	228.997	186.049	235.003	184.950	234.982	184.900	226.649	186.816	226.639	186.726	420.340	415.046	419.953	419.882	413.465	413.365	19.440	15.259	13.436	13.311	2.672	2.572	0.720	1.421	0.347	0.347	0.147	0.147	82.942	61.930	70.063	69.257
2003/5/31	23	234.794	186.381	229.053	187.856	235.060	185.476	235.039	185.376	226.699	186.952	226.689	186.862	421.175	416.909	420.536	420.415	413.651	413.551	20.275	17.122	14.019	13.844	2.858	2.758	0.835	1.863	0.583	0.533	0.186	0.186	86.134	70.116	72.624	71.495
2003/6/1	24													0.000	0.000	0.000	0.000	0.000	0.000	(400.900)	(399.787)	(406.517)	(406.571)	(410.793)	(410.793)	(421.175)	(416.909)	(420.536)	(420.415)	(413.651)	(413.551)				
2003/6/2	25	234.803	187.072	229.069	189.515	235.080	186.073	235.059	185.973	226.706	187.162	226.696	187.072	421.875	418.584	421.153	421.032	413.868	413.768	20.975	18.797	14.636	14.461	3.075	2.975	421.875	418.584	421.153	421.032	413.868	413.768	88.509	77.233	75.203	74.075
2003/6/3	26	234.828	187.301	229.093	189.950	235.104	186.282	235.083	186.182	226.725	187.260	226.715	187.170	422.129	419.043	421.386	421.265	413.985	413.885	21.229	19.256	14.869	14.694	3.192	3.092	0.254	0.459	0.233	0.233	0.117	0.117	89.182	78.903	75.951	74.823
2003/6/4	27	234.847	187.485	229.112	190.258	235.129	186.465	235.108	186.365	226.741	187.344	226.731	187.254	422.332	419.370	421.594	421.473	414.085	413.985	21.432	19.583	15.077	14.902	3.292	3.192	0.203	0.327	0.208	0.208	0.100	0.100	89.689	80.011	76.648	75.519
2003/6/5	28	234.861	187.637	229.127	190.490	235.146	186.618	235.125	186.518	226.757	187.419	226.747	187.329	422.498	419.617	421.764	421.643	414.176	414.076	21.598	19.830	15.247	15.072	3.383	3.283	0.166	0.247	0.170	0.170	0.091	0.091	90.058	80.772	77.157	76.029
2003/6/6	29	234.883	187.937	229.150	191.068	235.172	186.907	235.151	186.807	226.775	187.537	226.765	187.447	422.820	420.218	422.079	421.958	414.312	414.212	21.920	20.431	15.562	15.387	3.519	3.419	0.322	0.601	0.315	0.315	0.136	0.136	90.972	83.042	78.312	77.183
2003/6/7	30	234.907	188.301	229.177	191.779	235.198	187.408	235.177	187.308	226.796	187.667	226.786	187.577	423.208	420.956	422.606	422.485	414.463	414.363	22.308	21.169	16.089	15.914	3.670	3.570	0.388	0.738	0.527	0.527	0.151	0.151	92.137	85.907	80.736	79.608
2003/6/8	31													0.000	0.000	0.000	0.000	0.000	0.000	(400.900)	(399.787)	(406.517)	(406.571)	(410.793)	(410.793)	(423.208)	(420.956)	(422.606)	(422.485)	(414.463)	(414.363)				
2003/6/9	32	234.940	188.730	229.218	192.369	235.239	187.960	235.218	187.860	226.830	187.897	226.820	187.807	423.670	421.587	423.199	423.078	414.727	414.627	22.770	21.800	16.682	16.507	3.934	3.834	423.670	421.587	423.199	423.078	414.727	414.627	93.111	87.699	82.858	81.730
2003/6/10	33	234.960	188.898	229.239	192.574	235.262	188.176	235.241	188.076	226.849	188.005	226.839	187.915	423.858	421.813	423.438	423.317	414.854	414.754	22.958	22.026	16.921	16.746	4.061	3.961	0.188	0.226	0.239	0.239	0.127	0.127	93.411	88.182	83.581	82.452
2003/6/11	34	234.978	189.042	229.260	192.736	235.284	188.356	235.263	188.256	226.868	188.113	226.858	188.023	424.020	421.996	423.640	423.519	414.981	414.881	23.120	22.209	17.123	16.948	4.188	4.088	0.162	0.183	0.202	0.202	0.127	0.127	93.583	88.456	84.064	82.936
2003/6/12	35	235.000	189.177	229.287	192.876	235.313	188.531	235.292	188.431	226.889	188.215	226.879	188.125	424.177	422.163	423.844	423.723	415.104	415.004	23.277	22.376	17.327	17.152	4.311	4.211	0.157	0.167	0.204	0.204	0.123	0.123	93.750	88.670	84.587	83.458
2003/6/13	36	235.017	189.322	229.305	193.070	235.329	188.733	235.308	188.633	226.906	188.329	226.896	188.239	424.339	422.375	424.062	423.941	415.235	415.135	23.439	22.588	17.545	17.370	4.442	4.342	0.162	0.212	0.218	0.218	0.131	0.131	93.903	89.066	85.148	84.019
2003/6/14	37	235.041	189.520	229.335	193.364	235.360	189.086	235.339	188.986	226.933	188.478	226.923	188.388	424.561	422.699	424.446	424.325	415.411	415.311	23.661	22.912	17.929	17.754	4.618	4.518	0.222	0.324	0.384	0.384	0.176	0.176	94.129	89.788	86.489	85.361
2003/6/15	38													0.000	0.000	0.000	0.000	0.000	0.000	(400.900)	(399.787)	(406.517)	(406.571)	(410.793)	(410.793)	(424.561)	(422.699)	(424.446)	(424.325)	(415.411)	(415.311)				
2003/6/16	39	235.072	189.879	229.376	193.736	235.398	189.619	235.377	189.519	226.964	188.771	226.954	188.681	424.951	423.112	425.017	424.896	415.735	415.635	24.051	23.325	18.500	18.325	4.942	4.842	424.951	423.112	425.017	424.896	415.735	415.635	94.453	90.223	88.082	86.953
2003/6/17	40	235.090	190.031	229.399	193.876	235.418	189.826	235.397	189.726	226.979	188.923	226.969	188.833	425.121	423.275	425.244	425.123	415.902	415.802	24.221	23.488	18.727	18.552	5.109	5.009	0.170	0.163	0.227	0.227	0.167	0.167	94.468	90.203	88.469	87.340
2003/6/18	41	235.110	190.165	229.426	193.993	235.444	190.010	235.423	189.910	227.003	189.080	226.993	188.990	425.275	423.419	425.454	425.333	416.083	415.983	24.375	23.632	18.937	18.762	5.290	5.190	0.154	0.144	0.210	0.210	0.181	0.181	94.335	90.022	88.656	87.527
2003/6/19	42	235.125	190.275	229.445	194.084	235.459	190.159	235.438	190.059	227.015	189.220	227.005	189.130	425.400	423.529	425.618	425.497	416.235	416.135	24.500	23.742	19.101	18.926	5.442	5.342	0.125	0.110	0.164	0.164	0.152	0.152	94.203	89.817	88.733	87.605
2003/6/20	43	235.139	190.416	229.474	194.251	235.483	190.390	235.462	190.290	227.036	189.415	227.026	189.325	425.555	423.725	425.873	425.752	416.451	416.351	24.655	23.938	19.356	19.181	5.658	5.558	0.155	0.196	0.255	0.255	0.216	0.216	93.903	89.720	88.985	87.856
2003/6/21	44	235.170	190.594	229.512	194.442	235.516	190.721	235.495	190.621	227.064	189.639	227.054	189.549	425.764	423.954	426.237	426.116	416.703	416.603	24.864	24.167	19.720	19.545	5.910	5.810	0.209	0.229	0.364	0.364	0.252	0.252	93.691	89.608	89.707	88.579
2003/6/22	45													0.000	0.000	0.000	0.000	0.000	0.000	(400.900)	(399.787)	(406.517)	(406.571)	(410.793)	(410.793)	(425.764)	(423.954)	(426.237)	(426.116)	(416.703)	(416.603)				