

Table S1. Bayesian estimates of the posterior means and Highest Posterior Density intervals (HPD: 2.5 and 97.5%) of the growth (μ ; day⁻¹) and decline (k ; day⁻¹) rates of *E. coli* O157:H7 LCDC 86-51, *E. coli* O157:H7 ATCC 35150, non-pathogenic *E. coli*, and *P. fluorescens* cultured alone (EcO1, EcO2, Ec, Pf), or co-cultured (EcO1 + Pf, EcO2 + Pf, Ec + Pf) at 7, 13, 19 or 25 °C.

Cultures	Temp (°C)	Strain	μ mean	HPD Intervals		k mean	HPD Intervals	
				2.5%	97.5%		2.5%	97.5%
EcO1, EcO2, Ec, Pf	7	EcO1	0.104	0.041	0.261	–	–	–
		EcO2	0.123	0.014	0.789	–	–	–
		Ec	0.120	–0.019	1.382	–	–	–
		Pf	1.690	1.173	2.202	0.485	–0.514	2.160
	13	EcO1	0.535	0.356	0.782	–0.017	–2.003	1.987
		EcO2	0.503	0.348	0.727	0.520	–0.438	2.148
		Ec	0.494	0.345	0.688	0.007	–1.937	1.965
		Pf	0.990	0.633	1.450	0.460	–0.488	2.007
	19	EcO1	1.664	1.264	2.070	–0.164	–0.190	–0.142
		EcO2	1.597	1.006	2.214	–0.233	–0.268	–0.203
		Ec	1.577	0.919	2.232	–0.212	–0.240	–0.187
		Pf	1.539	0.981	2.126	–0.056	–0.072	–0.045
	25	EcO1	2.550	1.505	3.336	–0.179	–0.209	–0.154
		EcO2	2.781	1.591	3.609	–0.247	–0.285	–0.215
		Ec	2.007	1.714	2.275	–0.170	–0.194	–0.150
		Pf	1.775	1.185	2.348	–0.128	–0.147	–0.111
EcO1 + Pf	7	EcO1	0.563	0.235	0.918	–0.281	–0.447	0.538
		Pf	2.021	1.357	2.749	–0.036	–0.116	0.361
	13	EcO1	0.692	0.425	1.026	0.242	–1.292	2.028
		Pf	0.944	0.670	1.218	0.256	–1.247	2.005
	19	EcO1	1.596	1.138	2.020	–1.804	–2.467	–1.264
		Pf	1.579	1.049	2.025	–0.064	–0.140	–0.025
	25	EcO1	1.358	–0.900	3.259	–0.262	–0.304	–0.225
		Pf	1.167	–0.869	2.628	–0.131	–0.157	–0.108
EcO2 + Pf	7	EcO2	0.824	0.357	1.208	–0.017	–1.841	2.009
		Pf	2.006	1.406	2.645	0.202	–1.108	1.952
	13	EcO2	0.664	0.420	0.952	0.130	–1.293	2.017
		Pf	0.936	0.660	1.205	0.163	–1.332	1.989
	19	EcO2	1.624	1.226	2.019	–0.260	–0.300	–0.224
		Pf	1.641	1.239	2.047	–0.046	–0.062	–0.030
	25	EcO2	1.857	0.187	2.791	–1.371	–2.210	–0.304
		Pf	1.782	0.306	2.738	–0.698	–2.129	–0.168
Ec + Pf	7	Ec	0.581	0.357	0.791	–0.222	–1.738	1.835
		Pf	1.679	0.855	2.227	–0.019	–1.174	1.856
	13	Ec	0.945	0.661	1.270	0.266	–1.468	2.104
		Pf	1.204	0.854	1.487	0.319	–1.305	2.078
	19	Ec	1.495	1.114	1.907	–1.709	–2.064	–1.089
		Pf	1.606	1.185	2.030	–0.072	–0.156	–0.038
	25	Ec	2.178	1.667	2.620	–0.143	–0.311	–0.065
		Pf	2.575	1.957	3.149	–0.095	–0.128	–0.066

Table S2. Bayesian estimates of the posterior means and Highest Posterior Density intervals (HPD: 2.5 and 97.5%) of the standard deviations for growth (σ) and decline ($-\sigma$) periods of *E. coli* O157:H7 LCDC 86-51, *E. coli* O157:H7 ATCC 35150, non-pathogenic *E. coli*, and *P. fluorescens* cultured alone (EcO1, EcO2, Ec, Pf), or co-cultured (EcO1 + Pf, EcO2 + Pf, Ec + Pf) at 7, 13, 19 or 25 °C.

Cultures	Temp (°C)	Strain	σ mean	HPD Intervals		$-\sigma$ mean	HPD Intervals		
				2.5%	97.5%		2.5%	97.5%	
EcO1, EcO2, Ec, Pf	7	EcO1	0.234	0.151	0.376	–	–	–	
		EcO2	0.292	0.182	0.499	–	–	–	
		Ec	0.388	0.240	0.666	–	–	–	
		Pf	0.554	0.291	1.111	0.749	0.397	1.492	
	13	EcO1	0.605	0.350	1.090	0.990	0.452	2.212	
		EcO2	0.552	0.322	1.000	0.891	0.406	1.986	
		Ec	0.528	0.308	0.932	1.107	0.469	2.239	
		Pf	0.662	0.378	1.219	0.275	0.125	0.661	
	19	EcO1	0.398	0.206	0.826	0.664	0.317	1.466	
		EcO2	0.619	0.329	1.228	0.724	0.360	1.565	
		Ec	0.658	0.346	1.302	0.621	0.302	1.352	
		Pf	0.598	0.312	1.199	0.465	0.211	1.104	
	25	EcO1	0.578	0.275	1.302	0.684	0.328	1.497	
		EcO2	0.536	0.241	1.290	0.728	0.352	1.575	
		Ec	0.210	0.104	0.460	0.563	0.271	1.258	
		Pf	0.641	0.333	1.298	0.600	0.286	1.342	
EcO1 + Pf	7	EcO1	0.447	0.247	0.860	0.485	0.173	1.493	
		Pf	0.729	0.409	1.346	0.281	0.098	0.806	
	13	EcO1	0.862	0.483	1.575	0.765	0.380	1.586	
		Pf	0.492	0.260	0.979	0.283	0.130	0.672	
	19	EcO1	0.581	0.291	1.181	1.930	1.056	3.555	
		Pf	0.612	0.308	1.271	0.707	0.298	1.626	
	25	EcO1	1.263	0.401	2.827	0.552	0.307	1.057	
		Pf	0.935	0.354	2.165	0.542	0.301	1.027	
EcO2 + Pf	7	EcO2	0.387	0.188	0.852	1.981	1.062	3.511	
		Pf	0.646	0.340	1.288	1.296	0.674	2.395	
	13	EcO2	0.747	0.415	1.367	0.770	0.274	1.817	
		Pf	0.504	0.270	1.018	0.214	0.090	0.561	
	19	EcO2	0.554	0.312	1.022	0.470	0.190	1.245	
		Pf	0.553	0.311	1.029	0.414	0.160	1.107	
	25	EcO2	0.986	0.378	2.530	1.419	0.736	2.612	
		Pf	1.125	0.445	2.558	1.868	0.984	3.427	
	Ec + Pf	7	Ec	0.217	0.091	0.508	1.228	0.714	2.470
			Pf	0.645	0.297	1.524	1.695	0.816	3.205
13		Ec	0.577	0.303	1.086	0.570	0.230	1.450	
		Pf	0.372	0.174	0.825	0.130	0.044	0.407	
19		Ec	0.588	0.333	1.103	1.764	0.915	3.434	
		Pf	0.562	0.312	1.061	0.449	0.130	1.335	
25		Ec	0.415	0.213	0.819	1.750	0.885	3.549	
		Pf	0.760	0.443	1.354	0.653	0.270	1.637	

Table S3. Maximal population density (N_{max} ; log CFU/mL) and time to reach (ttr; day) a population density of 6 or 8 log CFU/mL of *E. coli* spp. strains and *P. fluorescens* cultured alone or in co-culture at 7, 13, 19, or 25 °C.

Temp (°C)	Cultures	N_{max}	Time to Reach (ttr) a Population of	
			6 log CFU/mL	8 log CFU/mL
7	EcO1	4.41	–	–
	EcO2	4.42	–	–
	Ec	4.80	–	–
	Pf	8.76	0.72	0.96
	EcO1(Pf)	5.30	–	–
	EcO2(Pf)	5.37	–	–
	Ec(Pf)	5.20	–	–
	Pf(EcO1)	8.73	0.56	1.04
	Pf(EcO2)	8.79	0.56	1.04
	Pf(Ec)	9.01	0.56	1.12
13	EcO1	8.46	2.08	3.36
	EcO2	8.33	2.08	3.52
	Ec	8.25	2.24	3.68
	Pf	8.28	1.12	1.76
	EcO1(Pf)	8.29	2.24	3.52
	EcO2(Pf)	8.29	2.08	3.52
	Ec(Pf)	8.20	1.60	3.68
	Pf(EcO1)	8.33	0.96	1.76
	Pf(EcO2)	8.30	0.96	1.76
	Pf(Ec)	8.21	0.64	1.44
19	EcO1	8.37	0.56	1.04
	EcO2	8.17	0.64	1.04
	Ec	8.04	0.64	1.04
	Pf	8.11	0.64	1.04
	EcO1(Pf)	8.26	0.56	1.04
	EcO2(Pf)	8.23	0.56	1.04
	Ec(Pf)	7.89	0.64	1.12
	Pf(EcO1)	8.14	0.56	0.96
	Pf(EcO2)	8.11	0.56	1.04
	Pf(Ec)	8.13	0.56	1.04
25	EcO1	8.22	0.32	0.64
	EcO2	8.33	0.32	0.64
	Ec	8.28	0.40	0.96
	Pf	8.94	0.48	0.88
	EcO1(Pf)	8.43	0.32	0.56
	EcO2(Pf)	8.54	0.40	0.56
	Ec(Pf)	8.10	0.36	0.80
	Pf(EcO1)	8.71	0.48	0.72
	Pf(EcO2)	8.98	0.40	0.64
	Pf(Ec)	9.08	0.40	0.56

Figure S1. Hamiltonian Monte Carlo Method (HMCM) diagnosis plots of the growth rates of *E. coli* O157:H7 LCDC 86-51 (EcO1), *E. coli* O157:H7 ATCC 35150 (EcO2) or *E. coli* ATCC 8739 (Ec) co-cultured with *P. fluorescens* (EcO1(Pf), EcO2(Pf), or Ec(Pf)) at 7 °C. Panels show three plots for the growth rate parameter: traces or value estimated in each step of the HMM (left); the parameter posterior distributions (middle); and the autocorrelation functions for the parameter estimates (right). mu[1] and mu[2] are the growth rates of *E. coli* spp or *P. fluorescens*, respectively.

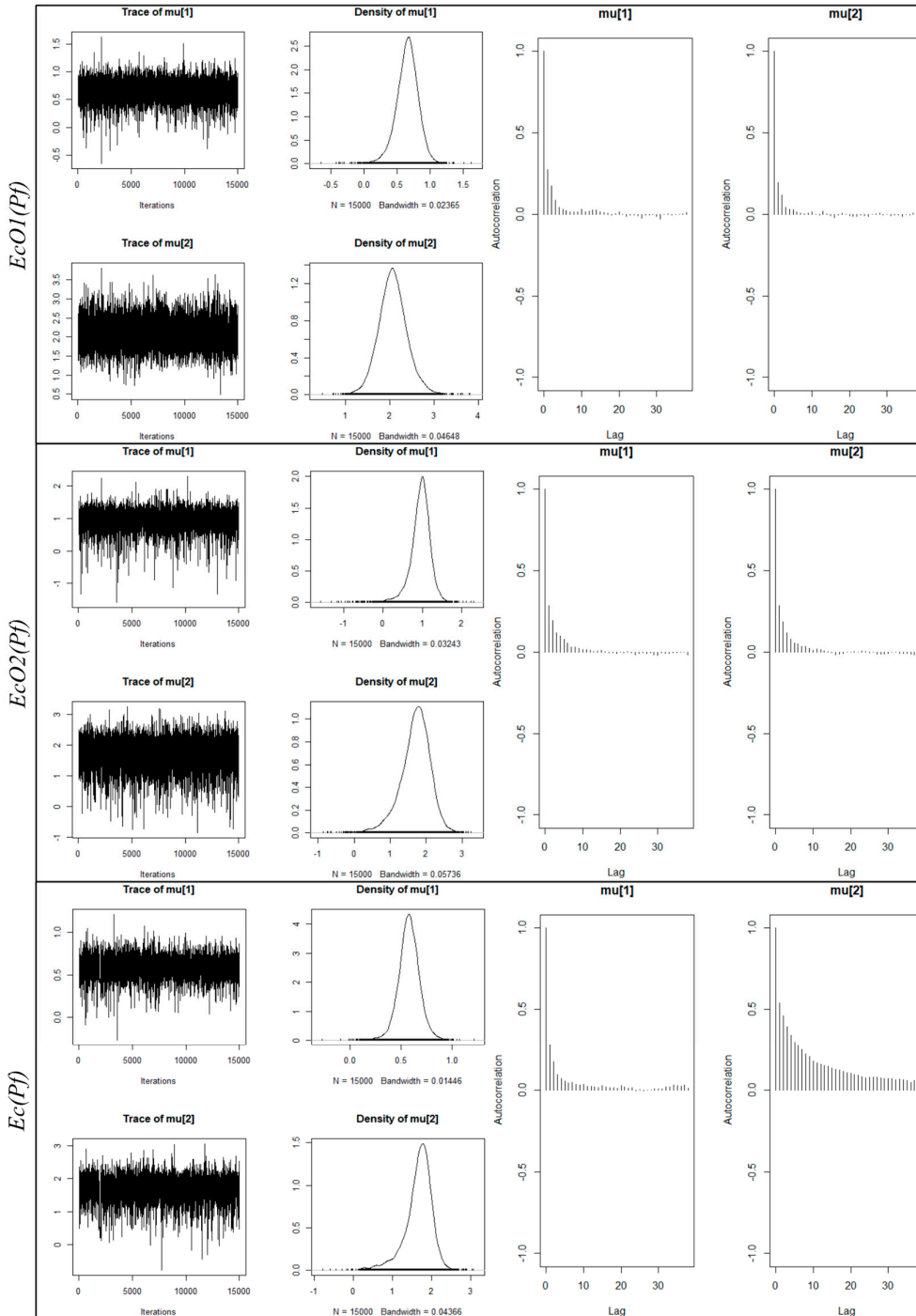


Figure S2. Hamiltonian Monte Carlo Method (HMCM) diagnosis plots of the decline rates of *E. coli* O157:H7 LCDC 86-51 (EcO1), *E. coli* O157:H7 ATCC 35150 (EcO2) or *E. coli* ATCC 8739 (Ec) co-cultured with *P. fluorescens* at 7 °C. See legends and explanations in Figure S1. k[1] and k[2] are the decline rates of *E. coli* spp or *P. fluorescens*, respectively.

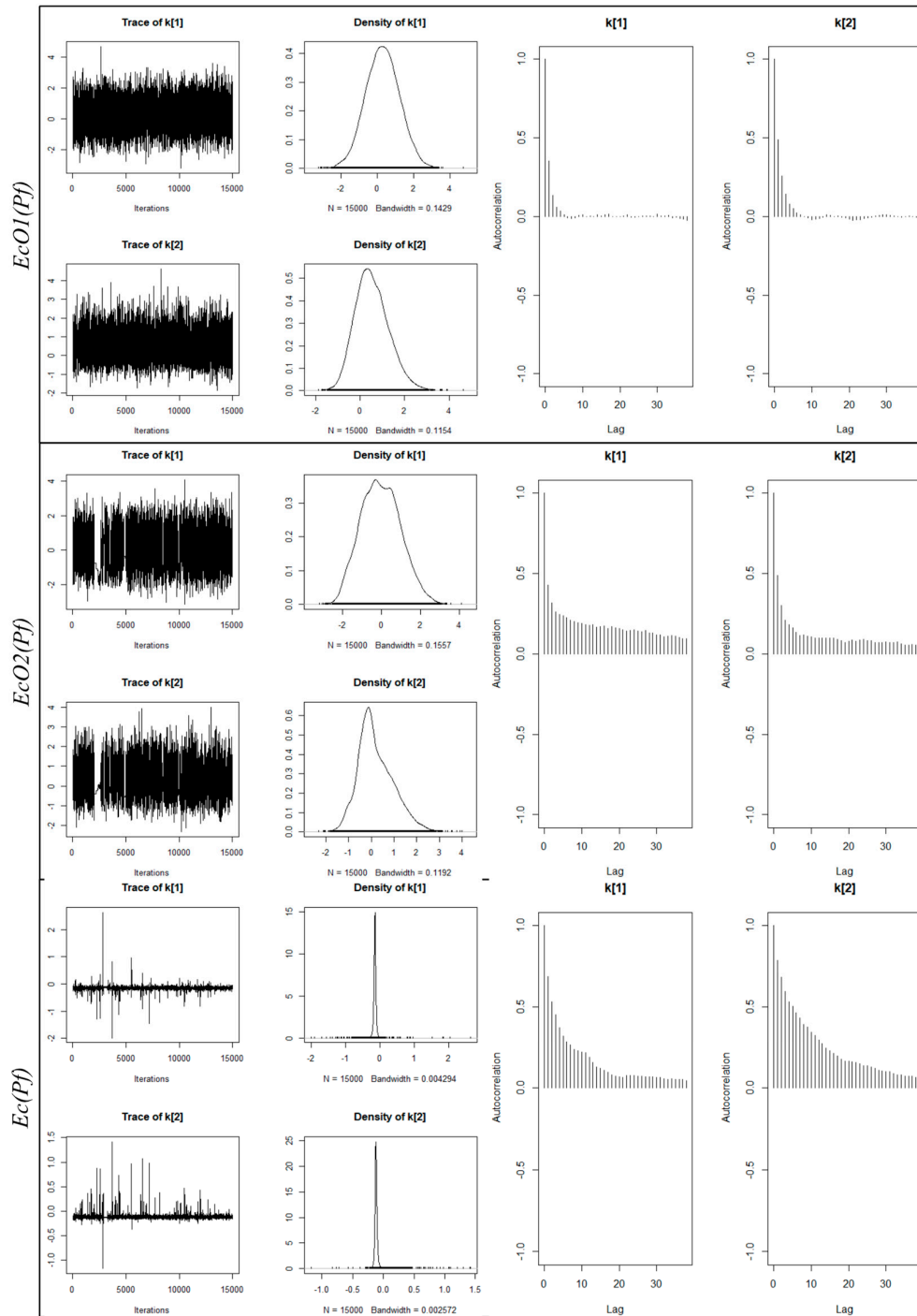


Figure S3. Hamiltonian Monte Carlo Method (HMCM) diagnosis plots of the growth rates of *E. coli* O157:H7 LCDC 86-51 (EcO1), *E. coli* O157:H7 ATCC 35150 (EcO2) or *E. coli* ATCC 8739 (Ec) co-cultured with *P. fluorescens* at 25 °C. See legends and explanations in Figure S1.

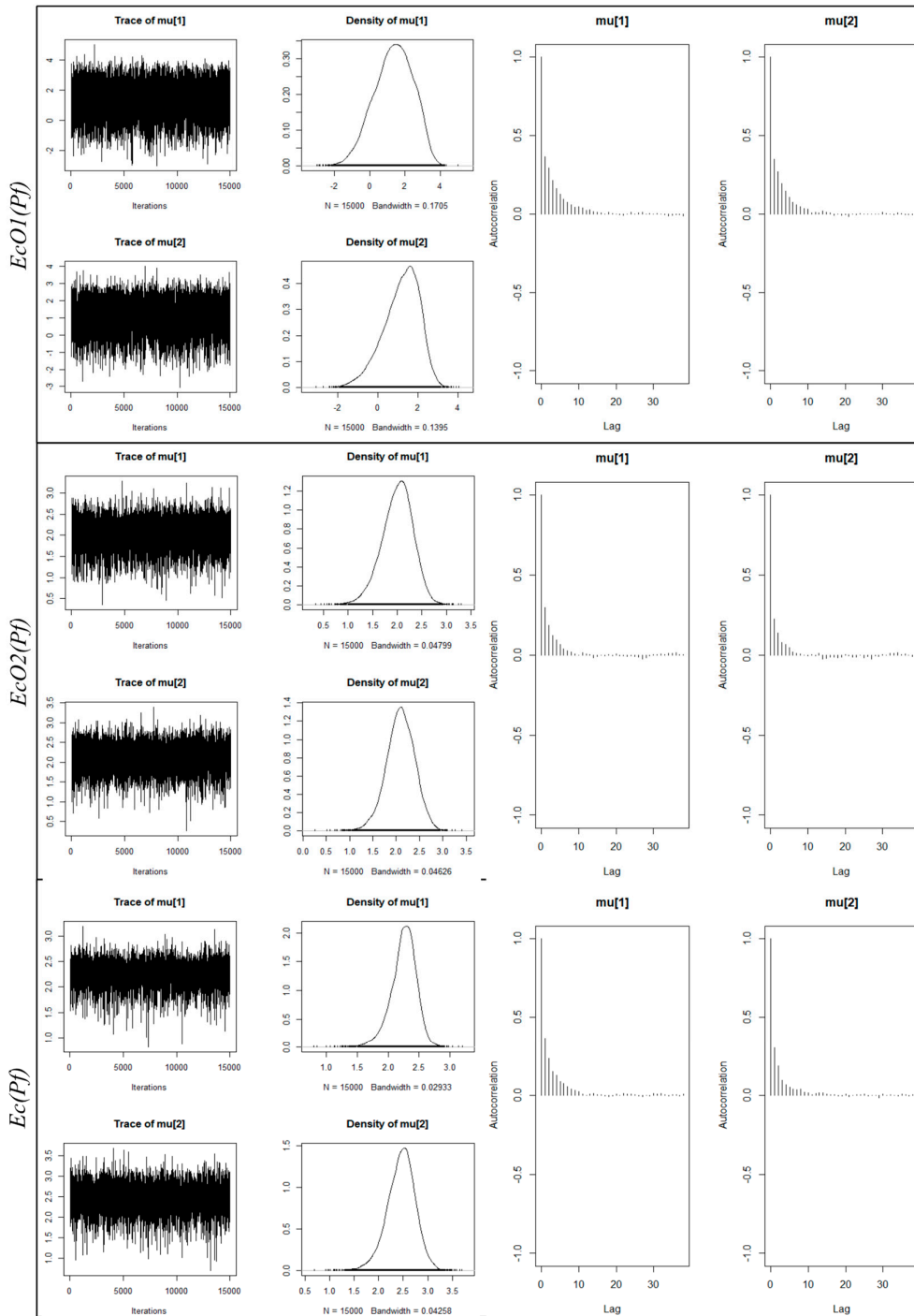


Figure S4. Hamiltonian Monte Carlo Method (HMCM) diagnosis plots of the decline rates of *E. coli* O157:H7 LCDC 86-51 (EcO1), *E. coli* O157:H7 ATCC 35150 (EcO2) or *E. coli* ATCC 8739 (Ec) co-cultured with *P. fluorescens* at 25 °C. See legends and explanations in Figures S1 and S2.

