

Table S1. Statistical summary of growth rate among spider species, bacterial strains and broth treatments. Two treatments that do not share any alphabet letter in the multiple comparison columns are considered significantly different as the 95% highest posterior density of the Bayesian Cohan's d between their respective posterior distributions fall outside the range of -0.2 to 0.2 , which indicated a 'small' effect size between two groups.

Spider	Bacteria	Broth	N	Growth rate percentage		Multiple comparison
				Average	SD	
<i>Cyrtophora moluccensis</i>	<i>Bacillus altitudinis</i>	LB	10	48.47	1.947	abc
		NFG	9	15.04	12.23	fg hijklm
		PBS	6	-32.67	30.69	nopqr
	<i>Bacillus subtilis</i>	LB	10	21.95	3.862	ghi klm st
		NFG	9	-16.09	5.616	n
		PBS	9	-15.40	17.01	nop
	Control	LB	9	8.648	25.94	f opqr
		NFG	9	17.30	34.32	bcdefghijklmnopqrstu
		PBS	9	21.03	42.58	bcdefghijklmnopqrstu
	<i>Enterobacter bugandensis</i>	LB	9	40.47	5.083	bcde u
		NFG	9	12.78	3.147	fg ij lm r
		PBS	9	-2.382	9.798	nopqr
<i>Escherichia coli</i>	LB	9	40.91	7.139	bcde u	
	NFG	9	-3.314	7.754	nopqr	
	PBS	9	-3.634	3.063	nopq	
<i>Hippasa holmerae</i>	<i>Bacillus altitudinis</i>	LB	9	45.00	5.474	abcde
		NFG	9	3.07	13.31	fg j nopqr
		PBS	9	0.918	7.287	f j nopqr
	<i>Bacillus subtilis</i>	LB	9	21.17	3.546	hi klm s
		NFG	9	-7.128	3.677	nop
		PBS	9	-8.637	5.634	no
	Control	LB	9	143.6	39.70	v
		NFG	9	131.2	64.83	v
		PBS	9	126.4	39.22	vw
	<i>Enterobacter bugandensis</i>	LB	8	40.23	2.420	bcde u
		NFG	9	13.65	3.497	fg hijklm r
		PBS	8	10.41	8.585	fg jklm pqr
<i>Escherichia coli</i>	LB	9	38.51	10.50	bcde tu	
	NFG	9	8.020	8.005	fg j qr	
	PBS	9	7.352	6.858	fg j m pqr	
<i>Nephila pilipes</i>	<i>Bacillus altitudinis</i>	LB	13	62.01	20.25	a
		NFG	14	31.67	11.67	b de hi kl stu
		PBS	12	30.54	13.78	d h k stu
	<i>Bacillus subtilis</i>	LB	15	35.86	18.09	b de stu
		NFG	14	4.056	22.16	fg j opqr
		PBS	14	8.117	10.23	fg j m opqr
	Control	LB	9	65.59	51.13	abcde hi stu w
		NFG	9	18.17	36.11	bcdefghijklmnopqrstu
		PBS	9	14.51	43.54	f j opqr
	<i>Enterobacter bugandensis</i>	LB	13	44.84	3.832	bc e
		NFG	13	22.23	13.83	ghijklm stu
		PBS	13	17.00	4.902	fg hijklm
<i>Escherichia coli</i>	LB	16	52.85	13.75	a c	
	NFG	13	29.15	12.25	d hi kl stu	
	PBS	13	29.74	14.19	de hi kl stu	