

**Table S1. Results of multivariate Kruskal-Wallis tests comparing the web architectures, droplet morphometrics, and gluey silk properties of webs of pre-treated spiders allocated into the feeding treatments.**

Shows treatment allocations for (A) Experiment 1: cricket or cockroach feeding treatment, and (B) Experiment 2: adult or juvenile cricket feeding treatment.

(A) Experiment 1		Statistics			Mean rank	
		Z adjusted	P	Kruskal-Wallis H (N=36)	Cricket	Cockroach
Web architecture:	Capture area	0.967	0.328	0.986	20.111	16.889
	Mesh size	-0.237	0.812	0.641	18.056	18.994
	Number of radii	0.619	0.535	0.403	19.611	17.389
	Decoration length	2.325	0.020*	5.482	22.61	14.389
Droplet morphometrics:	Thread width	-1.297	0.195	1.724	16.194	20.805
	Droplet volume	0.964	0.334	0.961	20.222	16.777
	DV/0.5 mm	2.641	0.008*	7.063	23.167	13.833
	DSA: DV	0.964	0.334	0.962	20.222	16.778
Gluey silk properties:	Stickiness	0.310	0.765	0.107	16.941	18.058
	P concentration	-0.459	0.646	0.225	17.667	19.333
	K concentration	0.982	0.325	0.997	20.050	16.750

Median tests: Web architecture,  $\chi^2 = 0.111$ , df = 1, P = 0.738. Spiral morphometrics,  $\chi^2 = 7.111$ , df = 1, P = 0.008. Glue properties,  $\chi^2 = 0.444$ , df = 1, P = 0.505

(B) Experiment 2		Statistics			Mean rank	
		Z adjusted	P	Kruskall-Wallis H (N=37)	Adult cricket	Juvenile cricket
Web architecture:	Capture area	-1.790	0.192	3.480	22.611	14.839
	Mesh size	0.456	0.800	0.064	18.055	18.744
	Number of radii	0.991	0.525	0.403	19.611	17.838
	Decoration length	-1.091	0.320	0.986	20.111	16.888
Droplet morphometrics:	Thread width	-1.056	0.267	1.230	16.972	20.805
	Droplet volume	3.503	0.001*	10.779	25.0	13.131
	DV/0.5 mm	2.896	0.007*	7.830	26.444	11.947
	DSA: DV	3.896	0.001*	16.957	13.722	24.0
Gluey silk properties:	Stickiness	2.783	0.003*	8.333	15.572	22.289
	P concentration	1.402	0.236	1.404	16.667	21.333
	K concentration	0.935	0.638	0.473	20.250	16.750

Median tests: Web architecture,  $\chi^2 = 0.114$ , df = 1, P = 0.735. Spiral morphometrics,  $\chi^2 = 22.702$ , df = 1, P = 0.0001. Glue properties,  $\chi^2 = 0.444$ , df = 1, P = 0.505