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Fronhofer, E. A., Sperr, E. B., Kreis, A., Ayasse, M., Poethke, H. J. and Tschapka, M. 2013. Picky hitch-hikers: vector choice leads to directed dispersal and fat-tailed kernels in a passively dispersing mite. – Oikos 000: 000–000.

Appendix 1

Table A1. Distribution of the data from the dual-choice experiments.

Vectors	Normality of difference distribution
Artibeus sp. vs *Glossophaga* sp.	W = 0.98, p = 0.68
Trigona fulviventris vs *Chasmodia collaris*	W = 0.99, p = 0.99
Cholus curialis vs *Chasmodia collaris*	W = 0.98, p = 0.67
Artibeus sp. vs *Trigona fulviventris*	W = 0.97, p = 0.16
Cholus curialis vs *Trigona fulviventris*	W = 0.98, p = 0.54
Artibeus sp. vs *Chasmodia collaris*	W = 0.96, p = 0.004
Artibeus sp. vs *Cholus curialis*	W = 0.93, p = 0.007

Since two values (one for each extract) were collected per tested mite, the data are paired and we analyse the differences, as in a paired t-test for example. The distribution of these differences is tested for normality (Shapiro–Wilk test of normality). Significantly non-normally distributed differences indicate bimodality as in Fig. 4.

Table A2. Individual-based simulation model: sensitivity analysis.

		Artibeus sp.	*C. collaris*	*C. curialis*	*T. fulviventris*
Standard run		0.033 ± 0.013	0.452 ± 0.409	0.192 ± 0.298	0.985 ± 0.008
λ	3	0.035 ± 0.019	0.208 ± 0.271	0.362 ± 0.347	0.986 ± 0.003
	4	0.058 ± 0.008	0.460 ± 0.359	0.046 ± 0.015	0.982 ± 0.007
t_{max}	2	0.015 ± 0.004	0.043 ± 0.015	0.148 ± 0.202	0.982 ± 0.010
	4	0.130 ± 0.048	0.867 ± 0.302	0.072 ± 0.062	0.879 ± 0.306
H	0	0.041 ± 0.014	0.585 ± 0.372	0.088 ± 0.126	0.982 ± 0.009
	0.5	0.044 ± 0.015	0.284 ± 0.312	0.098 ± 0.098	0.979 ± 0.008
p_H	0.3	0.031 ± 0.011	0.319 ± 0.346	0.691 ± 0.337	0.981 ± 0.009
	0.4	0.023 ± 0.009	0.294 ± 0.307	0.440 ± 0.402	0.977 ± 0.010
	0.6	0.041 ± 0.009	0.229 ± 0.254	0.167 ± 0.270	0.983 ± 0.005
M(*Artibeus*)	4	0.046 ± 0.012	0.316 ± 0.342	0.288 ± 0.390	0.980 ± 0.006
	6	0.034 ± 0.011	0.266 ± 0.258	0.044 ± 0.018	0.984 ± 0.006
M(*Chasmodia*)	9	0.036 ± 0.014	0.550 ± 0.420	0.147 ± 0.281	0.980 ± 0.010
	11	0.039 ± 0.016	0.446 ± 0.430	0.142 ± 0.294	0.986 ± 0.004
M(*Cholus*)	2	0.033 ± 0.006	0.250 ± 0.250	0.122 ± 0.227	0.977 ± 0.005
M(*Trigona*)	3	0.045 ± 0.164	0.531 ± 0.366	0.155 ± 0.255	0.985 ± 0.005
	5	0.045 ± 0.020	0.739 ± 0.357	0.249 ± 0.333	0.980 ± 0.011
μ(*Artibeus*)	0.4	0.218 ± 0.044	0.402 ± 0.384	0.059 ± 0.023	0.986 ± 0.008
	0.6	0.016 ± 0.005	0.525 ± 0.423	0.121 ± 0.159	0.982 ± 0.007
μ(*Chasmodia*)	0.3	0.045 ± 0.014	0.963 ± 0.023	0.191 ± 0.307	0.980 ± 0.008
	0.5	0.031 ± 0.009	0.063 ± 0.030	0.247 ± 0.357	0.982 ± 0.008
μ(*Cholus*)	0.5	0.032 ± 0.008	0.235 ± 0.249	0.936 ± 0.043	0.981 ± 0.010
	0.7	0.045 ± 0.011	0.221 ± 0.243	0.025 ± 0.009	0.981 ± 0.008
μ(*Trigona*)	0.4	0.018 ± 0.006	0.172 ± 0.287	0.021 ± 0.006	0.981 ± 0.010
	0.6	0.118 ± 0.061	0.526 ± 0.322	0.803 ± 0.270	0.880 ± 0.306

The table basically shows the same results as Fig. 2B (cafeteria experiment; simulation results). For every phoretic vector the mean and the standard deviation of the evolutionarily stable preference is shown (mean ± SD). The first results row shows the standard run for comparison. The first column indicates which parameter was changed and the second column the corresponding tested value. The results are means from 10 simulation runs.