Dataset	vH parameter	β parameter	NegLogL	K	ΔAICc	Akaike weight	σ2	μ	β	vH	SE	variance over tree
Cichlid	**fixed**	**fixed**	**23.077**	**3**	**0.000**	**0.525**	**0 (0, 0.093)**	**2.152 (1.737, 2.454)**	**1 (fixed)**	**0 (fixed)**	**0.324 (0.091, 0.558)**	**0 (0, 0.524)**
	free	fixed	23.089	4	2.800	0.129	0 (0, 0.08)	2.155 (1.751, 2.44)	1 (fixed)	0 (0, 1.052)	0.31 (0.104, 0.536)	0 (0, 0.448)
	fixed	free	22.304	4	1.230	0.284	0 (0, 0.079)	2.216 (1.82, 2.509)	0.708 (0.419, 1.196)	0 (fixed)	0.306 (0.117, 0.527)	0 (0, 0.446)
	free	free	22.304	5	4.269	0.062	0 (0, 0.068)	2.216 (1.848, 2.497)	0.707 (0.434, 1.192)	0 (0, 0.524)	0.305 (0.128, 0.501)	0 (0, 0.384)
Cichlid model average							0 (0, 0.086)	2.175 (1.77, 2.47)	0.899 (0.8, 1.068)	0 (0, 0.169)	0.316 (0.102, 0.543)	0 (0, 0.483)
Nicotiana	fixed	fixed	72.587	3	4.284	0.084	0.04 (0.008, 0.083)	2.601 (2.02, 3.191)	1 (fixed)	0 (fixed)	0.472 (0.318, 0.801)	0.347 (0.071, 0.73)
	free	fixed	72.296	4	6.007	0.036	0.053 (0.019, 0.132)	2.582 (1.945, 3.234)	1 (fixed)	0.412 (0.105, 5.568)	0.393 (0.2, 0.723)	0.462 (0.171, 1.156)
	fixed	**free**	**69.293**	**4**	**0.000**	**0.716**	**0.076 (0.037, 0.091)**	**2.601 (2.119, 3.188)**	**2.358 (1.522, 2.748)**	**0 (fixed)**	**0.329 (0.279, 0.479)**	**0.664 (0.324, 0.803)**
	free	free	69.567	5	2.939	0.165	0.08 (0.036, 0.119)	2.511 (2.045, 2.91)	2.42 (1.448, 2.982)	0.025 (0.007, 0.495)	0.332 (0.243, 0.502)	0.701 (0.314, 1.044)
Nicotiana model average							0.072 (0.034, 0.097)	2.586 (2.093, 3.144)	2.206 (1.447, 2.578)	0.019 (0.005, 0.279)	0.344 (0.274, 0.519)	0.636 (0.296, 0.849)