

**Additional file 2. Table S2.** Statistical models performed on lizard colouration and patterning. The effect of any significantly associated variable in a model is shown.

model ID	response variable	explanatory variables	test	sign. associated variables	num. df	den. Df	t - or F - value	p - value
1	dorsal colouration (H)	sex, body length, body weight	GLM	body length	2	301	4.61	<0.001 ***
				sex			2.29	<0.05 *
	dorsal colouration (S)	sex, body length, body weight	GLM	body length	4	299	3.49	<0.01 **
2	dorsal colouration (L)	sex, body length, body weight	GLM	body weight			-3.44	<0.001 ***
	dorsal patterning	sex, body length, body weight	GLM	-	-	-	-	-
3	dorsal colouration (H)	dorsal patterning	ANOVA	dorsal patterning	2	299	3.04	<0.05 *
	dorsal colouration (S)	dorsal patterning	ANOVA	-	-	-	-	-
	dorsal colouration (L)	dorsal patterning	ANOVA	dorsal patterning	2	299	6.08	<0.01 **
4	basking site colouration (H)	habitat colouration (H)	LM	habitat colouration (H)	2	155	8.747	<0.001 ***
	basking site colouration (S)	habitat colouration (S)	LM	habitat colouration (S)	2	155	11.35	<0.001 ***
	basking site colouration (L)	habitat colouration (L)	LM	habitat colouration (L)	2	155	11.51	<0.001 ***
5	dorsal colouration (H)	basking site colouration (H), sex	GLM	basking site colouration (H)	2	162	3.567	<0.001 ***
	dorsal colouration (S)	basking site colouration (S), sex	GLM	-	-	-	-	-
	dorsal colouration (L)	basking site colouration (L), sex	GLM	basking site colouration (L)	2	160	-2.139	<0.05 *
6	dorsal colouration (H)	habitat colouration (H), sex	GLM	habitat colouration	2	157	5.293	<0.001 ***
	dorsal colouration (S)	habitat colouration (S), sex	GLM	-	-	-	-	-
	dorsal colouration (L)	habitat colouration (L), sex	GLM	-	-	-	-	-
7	dorsal patterning	basking site colouration (H, S, L), sex	GLM	-	-	-	-	-
8	dorsal patterning	habitat colouration (H, S, L), sex	GLM	-	-	-	-	-

Abbreviations: H = hue, S = saturation, L = lightness.