

# Testicular melanization in anuran species: ontogeny and sexual maturity

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## **Supplementary material**

**Table S1.** Table with the result of the linear model to test for differences in external and interstitial pigmentation, considering the species.

<b>melanin</b>			
<i>Predictors</i>	<i>Incidence Rate Ratios</i>	<i>CI</i>	<i>p</i>
(Intercept)	97.64	39.13–243.61	<b>&lt;0.001</b>
P_biligonigerus	0.73	0.35–1.54	0.408
P_minuta	0.27	0.12–0.59	<b>0.001</b>
surface pigmentation	1.57	1.21–2.04	<b>0.001</b>
<b>Random Effects</b>			
$\sigma^2$	0.14		
$\tau_{00}$ animal	0.66		
ICC animal	0.82		
Observations	538		
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>	0.355 / 0.884		

**Table S2.** Table with the result of the linear model to test relation between interstitial pigmentation and life stage, considering the species.

<b>melanin</b>			
<i>Predictors</i>	<i>Incidence Rate Ratios</i>	<i>CI</i>	<i>p</i>
(Intercept)	509.87	182.46–1424.78	<b>&lt;0.001</b>
P_biligonigerus	0.54	0.21–1.37	0.193
P_minuta	0.19	0.07–0.50	<b>0.001</b>
stage metamorphosis	0.50	0.17–1.52	0.224
stage pre-metamorphosis	0.92	0.21–3.98	0.908
stage pro-metamorphosis	0.68	0.21–2.23	0.523
stage youth	0.58	0.11–3.10	0.525
<b>Random Effects</b>			
$\sigma^2$	0.14		
$\tau_{00}$ animal	0.90		
ICC animal	0.86		
Observations	538		
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>	0.279 / 0.900		

**Table S3.** Table with the result of the linear model to test relation between interstitial pigmentation and germ cells maturity, considering the species.

<b>melanin</b>			
<i>Predictors</i>	<i>Incidence Rate Ratios</i>	<i>CI</i>	<i>p</i>
(Intercept)	229.27	82.30–638.73	<b>&lt;0.001</b>
P_biligonigerus	0.36	0.12–1.03	0.057
P_minuta	0.21	0.08–0.60	<b>0.003</b>
germ_cells spg	1.89	0.60–5.97	0.276
germ_cells spt	1.57	0.21–11.97	0.664
germ_cells sptII	1.29	0.24–6.91	0.764
germ_cells spz	2.07	0.53–8.01	0.293
<b>Random Effects</b>			
$\sigma^2$	0.14		
$\tau_{00}$ animal	0.91		
ICC animal	0.86		
Observations	538		
Marginal R <sup>2</sup> / Conditional R <sup>2</sup>	0.275 / 0.900		