

### SI Table1

Linear mixed effect model results for log<sub>10</sub> protein concentration (mg gm<sup>-1</sup> F.W.) in spleens of northern leopard frogs (*Rana pipiens*). Significant terms are in bold. GORG=gorgoderids; ECH=*Echinostoma* spp.; OSW=*Oswaldocruzia* sp.; RHB=*Rhabdias* sp.

	DF	DenDF	F	p value
Atrazine level	1	4.745	1.1943	0.33
Log <sub>10</sub> (GORG+1)	1	9.21	0.44	0.52
<b>Log<sub>10</sub>(ECH+1)</b>	<b>1</b>	<b>26.67</b>	<b>6.68</b>	<b>0.02</b>
Log <sub>10</sub> (OSW+1)	1	141.89	1.13	0.29
Log <sub>10</sub> (RHB+1)	1	149.99	1.32	0.25

Linear mixed effect model results for thiol concentration (U.I. x 10<sup>-3</sup> mg<sup>-1</sup> protein) in spleens of northern leopard frogs (*Rana pipiens*). Significant terms are in bold. GORG=gorgoderids; ECH=*Echinostoma* spp.; OSW=*Oswaldocruzia* sp.; RHB=*Rhabdias* sp.

	DF	DenDF	F	p value
Atrazine level	1	5.77	0.10	0.76
Log <sub>10</sub> (GORG+1)	1	91.48	0.53	0.47
Log <sub>10</sub> (ECH+1)	1	138.94	0.29	0.59
<b>Log<sub>10</sub>(OSW+1)</b>	<b>1</b>	<b>145.91</b>	<b>10.92</b>	<b>0.001</b>
Log <sub>10</sub> (RHB+1)	1	143.67	1.57	0.21
<b>Pesticide* Log<sub>10</sub>(OSW+1)</b>	<b>1</b>	<b>145.96</b>	<b>7.96</b>	<b>0.005</b>
<b>log<sub>10</sub>(GORG + 1)*log<sub>10</sub>(OSW + 1)</b>	<b>1</b>	<b>145.17</b>	<b>9.03</b>	<b>0.003</b>

### SI Table 3

Linear mixed effect model results for log<sub>10</sub> catalase activity (nmol H<sub>2</sub>O<sub>2</sub> min<sup>-1</sup> mg protein<sup>-1</sup>) in spleens of northern leopard frogs (*Rana pipiens*). Significant terms are in bold. GORG=gorgoderids; ECH=*Echinostoma* spp.; OSW=*Oswaldocruzia* sp.; RHB=*Rhabdias* sp.

	DF	DenDF	F	p value
Atrazine level	1	8.48	2.90	0.12
Log <sub>10</sub> (GORG+1)	1	25.74	0.28	0.60
Log <sub>10</sub> (ECH+1)	1	56.23	1.99	0.16
<b>Log<sub>10</sub>(OSW+1)</b>	<b>1</b>	<b>91.01</b>	<b>10.35</b>	<b>0.002</b>
Log <sub>10</sub> (RHB+1)	1	91.83	0.05	0.83

### SI Table 4

Linear mixed effect model results for GST concentration (μmol CDNB min<sup>-1</sup>mg protein<sup>-1</sup>) in spleens of northern leopard frogs (*Rana pipiens*). GORG=gorgoderids; ECH=*Echinostoma* spp.; OSW=*Oswaldocruzia* sp.; RHB=*Rhabdias* sp.

	<b>DF</b>	<b>DenDF</b>	<b>F</b>	<b>p value</b>
Atrazine level	1	5.12	0.002	0.97
Log10(GORG+1)	1	116.90	1.84	0.18
Log10(ECH+1)	1	131.59	2.91	0.09
Log10(OSW+1)	1	130.74	1.81	0.18
Log10(RHB+1)	1	129.32	0.18	0.68

**SI Table 5**

Linear mixed effect model results for log10 lysozyme activity (U.I. mg-1 protein) in spleens of northern leopard frogs (*Rana pipiens*). GORG=gorgoderids; ECH=*Echinostoma* spp.; OSW=*Oswaldocruzia* sp.; RHB=*Rhabdias* sp.

	<b>DF</b>	<b>DenDF</b>	<b>F</b>	<b>p value</b>
Atrazine level	1	4.98	1.17	0.33
Log10(GORG+1)	1	86.42	0.60	0.44
Log10(ECH+1)	1	88.95	0.35	0.55
Log10(OSW+1)	1	87.93	0.47	0.49
Log10(RHB+1)	1	85.44	0.35	0.56