

Supplementary Material

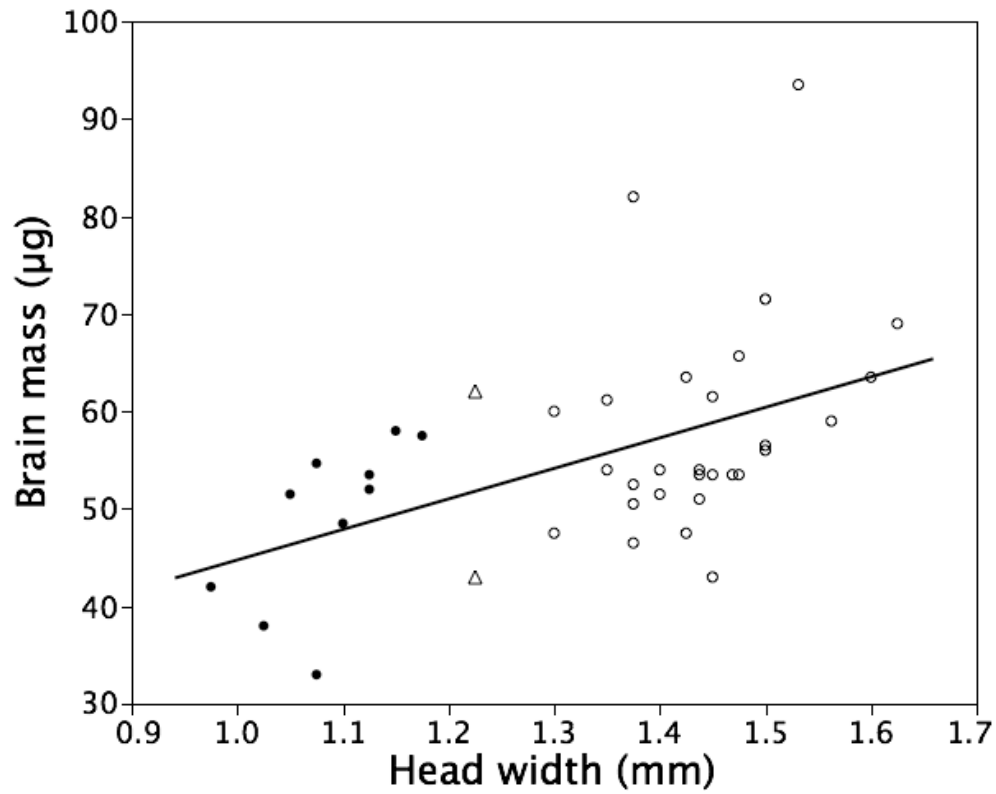


Figure S1: Best-fit regression line of head width and brain mass of *O. smaragdina* minor (black) and major (open circles) workers. Workers of intermediate head width are labeled with open triangles.

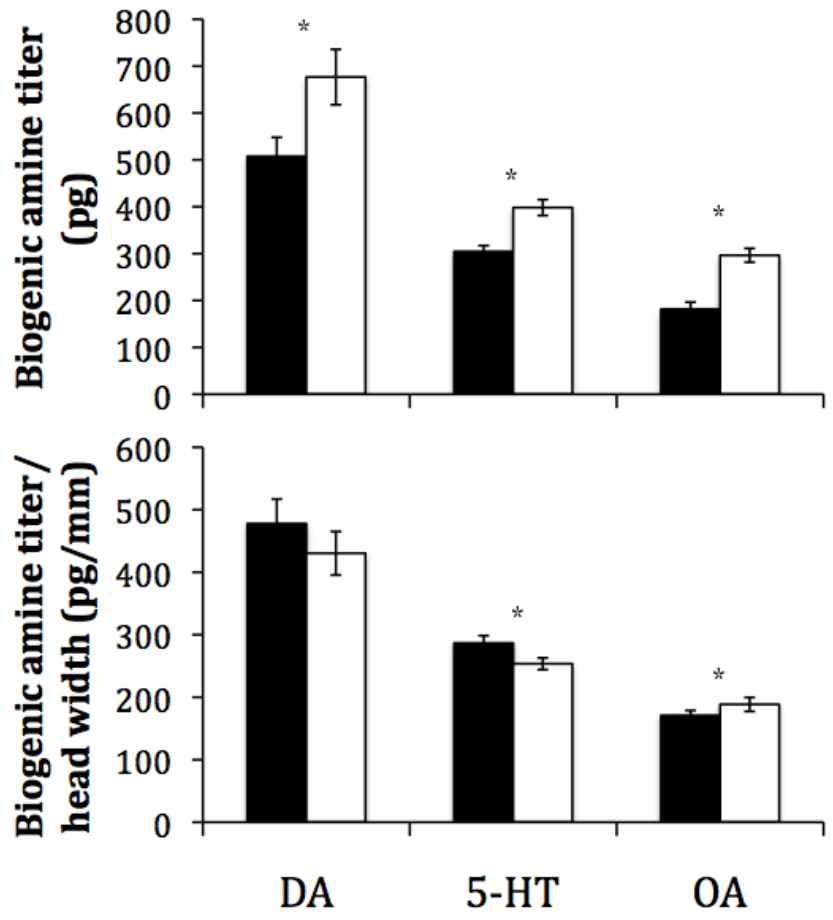


Figure S2: Mean \pm 95% confidence intervals of dopamine (DA), serotonin (5-HT), and octopamine (OA) titers (top) and titers corrected for head width (bottom) for minor (black) and major (white) workers. Asterisks denote statistical significance.

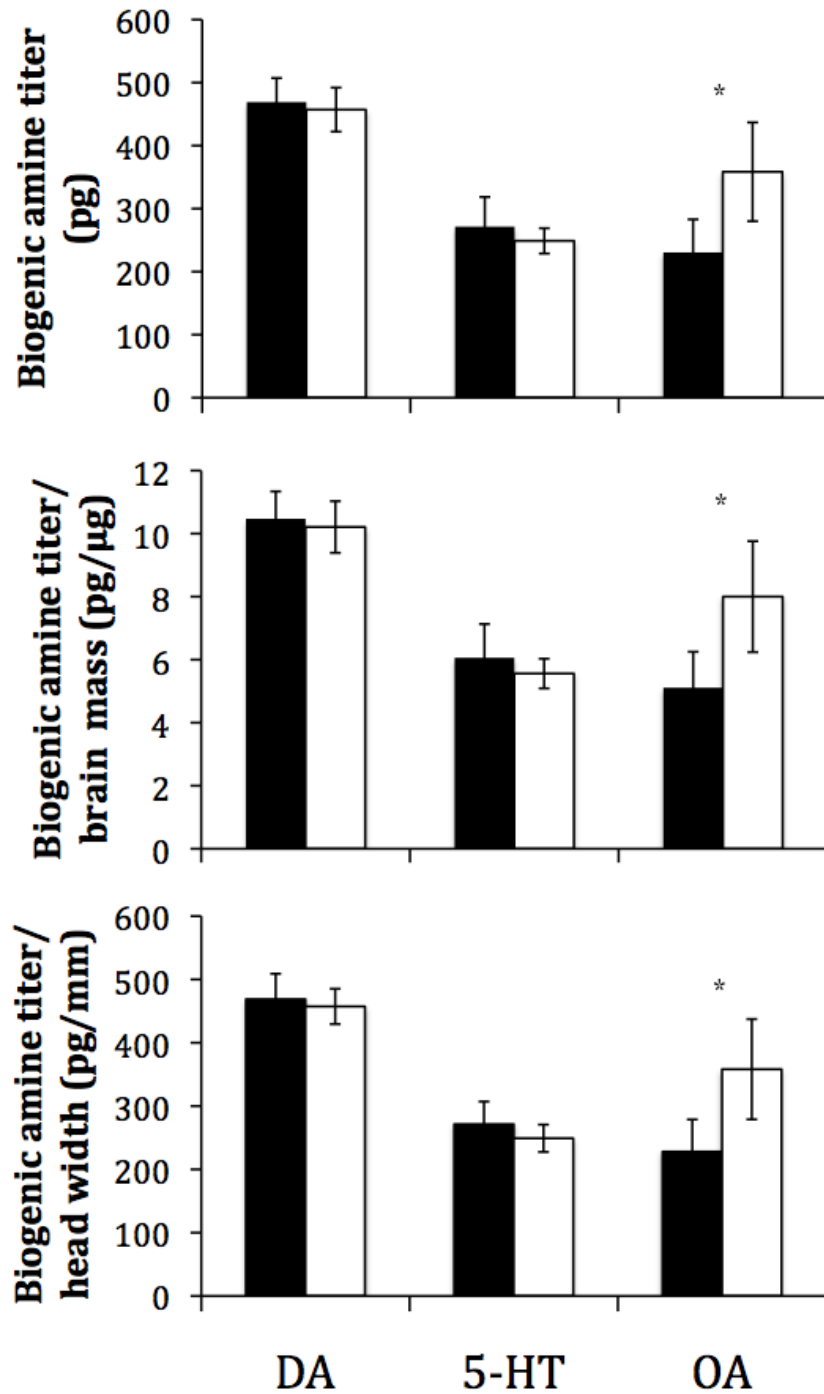


Figure S3: Mean \pm 95% confidence intervals of dopamine (DA), serotonin (5-HT), and octopamine (OA) titers (top), titers corrected for estimated brain mass (middle), and corrected for head width (bottom) for control (black) and OA topically treated (white) minors. Asterisks denote statistical significance.

	Biogenic amine	Control	OA-treated	t-statistic	p-value
Absolute titer (pg)	DA	469.14±38.11	457.03±34.92	0.49	0.63
	5-HT	271.45±47.10	248.93±20.08	0.94	0.35
	OA	230.56±52.43	358.49±78.39	2.92	<0.01
Titer/brain mass (pg/μg)	DA	10.47±0.87	10.22±0.82	0.45	0.65
	5-HT	6.06±1.07	5.56±0.47	0.92	0.36
	OA	5.11±1.14	8.00±1.76	2.96	<0.01
Titer/head width (pg/mm)	DA	468.73±40.3	457.37±37.87	0.43	0.67
	5-HT	271.42±35.78	249.10±21.59	0.91	0.37
	OA	228.06±50.72	358.17±79.21	2.98	<0.01

Table S1: For control and OA-treated minors, the mean ± 95% confidence intervals of dopamine (DA), serotonin (5-HT), and octopamine (OA) titers, titer corrected by brain mass, and titer scaled by head width are presented. T-statistics and p-values are also shown. Bolded p-values indicate statistical significance.