

## CORRECTION

# Correction: The energetic cost of filtration by demosponges and their behavioural response to ambient currents

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There was an error published in *J. Exp. Biol.* **220**, 995–1007.

Some values for head loss and respiration in Table 3 were carried over from an earlier version of the manuscript. The corrected table follows.

The final numbers for volume flow rate, head loss, pumping power and cost of pumping remain unchanged, and there are no changes to the results and conclusions of the paper. The data available from the University of Alberta Education Resource Archive (ERA; <https://doi.org/10.7939/R36688W8N>) are correct. The authors apologise for any inconvenience this may have caused.

Table 3. Morphometric model of the aquiferous system in five species of demosponges

Region of the aquiferous canal system	<i>Neopetrosia problematica</i>				<i>Haliclona mollis</i>				<i>Tethya californiana</i>				<i>Callyspongia vaginalis</i>				<i>Cliona delitrix</i>			
	$H$ ( $\mu\text{m H}_2\text{O}$ )				$H$ ( $\mu\text{m H}_2\text{O}$ )				$H$ ( $\mu\text{m H}_2\text{O}$ )				$H$ ( $\mu\text{m H}_2\text{O}$ )				$H$ ( $\mu\text{m H}_2\text{O}$ )			
	$A_i$ ( $\text{mm}^2$ )	$u_i$ ( $\text{mm s}^{-1}$ )	Leys et al. (2011)	Riisgård and Larson (1995)	$A_i$ ( $\text{mm}^2$ )	$u_i$ ( $\text{mm s}^{-1}$ )	Leys et al. (2011)	Riisgård and Larson (1995)	$A_i$ ( $\text{mm}^2$ )	$u_i$ ( $\text{mm s}^{-1}$ )	Leys et al. (2011)	Riisgård and Larson (1995)	$A_i$ ( $\text{mm}^2$ )	$u_i$ ( $\text{mm s}^{-1}$ )	Leys et al. (2011)	Riisgård and Larson (1995)	$A_i$ ( $\text{mm}^2$ )	$u_i$ ( $\text{mm s}^{-1}$ )	Leys et al. (2011)	Riisgård and Larson (1995)
Ostia	3.37	1.04	111	4	0.90	3.90	709	42	1.38	1.76	113	2	12.8	0.68	51	1	2.82	6.57	409	9
Subdermal space	19.7	0.18	10	1	22.2	0.16	10	96	16.7	0.14	4	2	21.8	0.40	6	7				
Large incurrent canal	15.9	0.22	19	19	14.4	0.24	9	6	21.7	0.11	1	1	14.1	0.62	14	14	3.31	5.60	288	288
Medium incurrent canal	7.21	0.49	57	57	3.21	1.09	204	45	24.8	0.10	17	17	2.70	3.25	244	244	2.57	7.22	1322	1322
Small incurrent canal	5.79	0.61	612	612	4.16	0.84	215	278	3.66	0.66	166	166	3.67	2.39	2	2	1.71	10.84	2956	2956
Prosopyles	494	0.007	5	1	346	0.010	11	330	172	0.014	8	2	55.2	0.159	228	120	17.7	1.04	937	307
Pre-collar space	255	0.014	95	95	775	0.005	2	5	504	0.005	19	19	170	0.051	2195	2195	264	0.070	1288	1288
Collar slit	376	0.009	288	541	546	0.006	471	73	1237	0.0020	147	212	492	0.018	668	2839	1095	0.017	2300	474
Post-collar space	412	0.009	12	12	405	0.009	12	9	1077	0.0022	7	7	566	0.015	15	15	1019	0.018	40	40
Chamber	408	0.009	2	2	171	0.020	3	1	488	0.005	1	1	406	0.022	4	4	674	0.027	7	7
Apophyle	208	0.02	3	0	44.6	0.08	14	0	110	0.02	63	60	40.3	0.22	85	12	52.1	0.36	195	39
Small excurrent canal	4.66	0.75	282	282	6.79	0.52	160	24	2.47	0.98	264	264	0.52	16.9	12	12	1.71	10.84	2956	2956
Medium excurrent canal	3.47	1.01	172	172	6.33	0.55	56	52	24.8	0.10	15	15	2.87	3.05	411	411	2.57	7.22	1322	1322
Large excurrent canal	1.21	2.90	471	471	13.1	0.27	6	13	21.7	0.11	1	1	3.04	2.88	132	132	3.31	5.60	288	288
Osculum	0.26	13.66	0	33	0.12	30.44	0	33	0.11	21.95	0	3	0.15	59.33	0	176	0.17	110.41	1	8
Volume flow rate, $Q$ ( $\text{ml min}^{-1}$ )			9.0		48.6		82.1		82.1		742		742		2668		2668		2668	
Respiration, $R_{\text{tot}}$ ( $\mu\text{W}$ )			87		807		1426		1426		14,218		14,218		42,102		42,102		42,102	
Head loss, $\Delta H$ ( $\mu\text{m H}_2\text{O}$ )			2138	2303	1881	1008	826	771	826	771	826	771	4066	6185	4066	6185	14,307	11,304	14,307	11,304
Pumping power, $P_p$ ( $\mu\text{W}$ )			3	3	15	8	11	11	11	11	11	11	504	766	504	766	6377	5038	6377	5038
Cost of pumping, $\eta$ (%)			3.70	3.99	1.89	1.01	0.80	0.74	0.80	0.74	0.80	0.74	3.54	5.38	3.54	5.38	15.15	11.97	15.15	11.97

$A_i$  is the estimated total cross-sectional area for each region from the dimensions listed in Table 2. The velocity of water flow through each area  $u_i$  was calculated from cross-sectional area  $A_i$  and measured excurrent velocity  $u_{\text{ex}}$  out of the osculum using Eqn 1. Head loss  $H$  in each region was calculated using Eqns A1–A5 from dimensions and velocity  $u_i$  of each region. Riisgård and Larson's (1995) model used a different equation of head loss for each region of the aquiferous canal system, whereas Leys et al.'s (2011) model used only Eqn A2. The sum of the head loss  $\Delta H$  and measured volume flow rate are used to calculate the pumping power  $P_p$  using Eqn A6. The cost of pumping  $\eta$  (%) is then estimated using Eqn A7 from the pumping power  $P_p$  and the measured respiration rate  $R_{\text{tot}}$ . The collar slit is in bold, representing the filtration apparatus.