

Supplemental Materials:

Postembryonic development in pseudoscorpions: allometry in *Geogarypus italicus*

(Pseudoscorpiones: Geogarypidae)

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Table S1.—Trichobothrial ratios: Tukey’s HSD pairwise comparison after significant One-Way ANOVA between instars for several trichobothria (P < 0.05 = *, P < 0.01 = **).

		P	D	T	F
<i>t</i>	D	2.41E-13**	-	-	-
	T	2.40E-13**	2.20E-07**	-	-
	F	2.40E-13**	2.74E-13**	6.71E-05**	-
	M	2.40E-13**	2.43E-13**	2.66E-07**	4.83E-01
<i>it</i>		D	T	F	
	T	5.32E-12**	-	-	
	F	0.00E-00	3.31E-04**	-	
<i>b</i>		D	T	F	
	T	4.65E-01	-	-	
	F	4.79E-02*	1.00E-03**	-	
<i>st</i>		T	F		
	F	2.25E-02*	-		
	M	1.00E-04**	1.24E-01		
<i>sb</i>		M	F		
	F	2.40E-03**	-		

Table S2.—The relationship between the distance of each trichobothrium from the finger tip (a_n) and the respective chelal axis (b_n) are given as trichobothrial ratios in the protonymph (a_0/b_0), deutonymph (a_1/b_1), tritonymph (a_2/b_2), males (a_3/b_3) and female (a_4/b_4).

	<i>et</i>	<i>it</i>	<i>est</i>	<i>ist</i>	<i>isb</i>	<i>ib</i>	<i>esb</i>	<i>eb</i>	<i>t</i>	<i>st</i>	<i>sb</i>	<i>b</i>
P	0.3619	-	-	0.5050	-	-	-	0.8750	0.5325	-	-	-
D	0.2806	0.3289	0.7084	0.3937	-	0.7634	-	0.9118	0.4032	-	-	0.9219
T	0.2324	0.2763	0.6558	0.3477	-	0.7207	0.8132	0.8886	0.3454	0.6714	-	0.9008
M	0.2110	0.2540	0.6854	0.3088	0.6510	0.7518	0.8719	0.9539	0.3012	0.6401	0.8723	0.9637
F	0.1905	0.2391	0.6651	0.2759	0.6099	0.7134	0.8116	0.9026	0.2872	0.6176	0.8280	0.9166

Table S3.—Wilcoxon Mann-Whitney for paired samples between observed and predicted trichobothria values (* = significant p-value).

Instar	Trichobothrium	p-val	W
D	et	1.37E-02*	51
	ist	1.95E-03*	0
	eb	4.32E-01	36
	t	1.95E-03*	0
	et	1.31E-01	43
T	it	5.57E-01	34
	est	3.22E-01	17
	ist	8.46E-01	25
	ib	1.00E+00	22
	eb	1.05E-01	44
	t	1.60E-01	13
	b	8.40E-02*	45
	et	3.91E-03*	54
	it	3.91E-03*	54
	est	1.05E-01	44
M	ist	6.45E-02*	9
	ib	4.32E-01	36
	esb	7.70E-01	31
	eb	6.25E-01	33
	t	5.57E-01	21
	st	8.40E-02*	10
	b	6.95E-01	32
	et	1.95E-03*	55
	it	1.95E-03*	55
	est	3.91E-03*	54
F	ist	8.40E-02	45
	ib	6.45E-02	46
	esb	4.88E-02*	47
	eb	6.45E-02	46
	t	3.71E-02*	48
	st	4.92E-01	20
	b	6.45E-02*	46

Table S4.—The mean, minimum and maximum estimated position (Est.) of each trichobothrium calculated by the formula proposed by Gabbutt (1969) is provided together with the relative error (as percentage).

	Est.			Err.			Err.			
	Mean	Min.	Max.	Mean	Min.	Max.	Mean (%)	Min. (%)	Max. (%)	
D	et	0.0880	0.0792	0.1034	-0.0090	-0.0171	0.0068	-10.97	-21.59	6.58
	ist	0.1499	0.1388	0.1653	0.0137	0.0007	0.0300	8.90	0.48	18.15
	eb	0.3100	0.2704	0.3289	-0.0053	-0.0377	0.0174	-1.99	-13.94	5.30
	t	0.1617	0.1446	0.1756	0.0223	0.0079	0.0338	13.63	5.46	19.25
	et	0.0979	0.0945	0.1014	-0.0031	-0.0142	0.0053	-3.24	-14.82	5.25
T	it	0.1191	0.1127	0.1243	-0.0010	-0.0170	0.0106	-1.00	-14.98	8.70
	est	0.2857	0.2804	0.2931	0.0006	-0.0289	0.0128	0.20	-10.28	4.48
	ist	0.1475	0.1424	0.1549	-0.0036	-0.0420	0.0075	-2.49	-28.49	5.00
	ib	0.3098	0.2972	0.3199	-0.0034	-0.0413	0.0067	-1.10	-13.49	2.19
	eb	0.3750	0.3650	0.3832	-0.0112	-0.0665	0.0082	-3.03	-18.22	2.21
M	t	0.1517	0.1429	0.1592	0.0016	-0.0274	0.0081	0.95	-18.69	5.09
	b	0.3793	0.3626	0.3926	-0.0121	-0.0634	0.0127	-3.24	-17.02	3.37
	et	0.0865	0.0787	0.0993	-0.0101	-0.0169	0.0011	-11.98	-21.47	1.11
	it	0.1110	0.0987	0.1255	-0.0102	-0.0219	0.0014	-9.55	-22.19	1.12
	est	0.3218	0.3039	0.3550	-0.0154	-0.0653	0.0206	-4.92	-20.20	5.80
M	ist	0.1506	0.1348	0.1983	0.0107	-0.0120	0.0663	5.98	-8.74	33.43
	ib	0.3578	0.3362	0.4028	-0.0039	-0.0373	0.0438	-1.35	-10.93	10.87
	esb	0.4092	0.3874	0.4642	-0.0023	-0.0483	0.0610	-0.86	-12.47	13.14
	eb	0.4511	0.4213	0.5103	-0.0065	-0.0514	0.0633	-1.77	-12.08	12.40
	t	0.1493	0.1311	0.1811	0.0036	-0.0242	0.0354	1.78	-18.46	19.55
M	st	0.3305	0.2910	0.3824	0.0174	-0.0325	0.0710	4.74	-11.17	18.57
	b	0.4579	0.4246	0.5158	-0.0068	-0.0525	0.0511	-1.79	-12.36	9.91

	Est.			Err.					
	Mean	Min.	Max.	Mean	Min.	Max.	Mean (%)	Min. (%)	Max. (%)
et	0.0798	0.0709	0.0944	-0.0324	-0.0430	-0.0206	-41.15	-56.58	-21.82
it	0.1067	0.0929	0.1232	-0.0283	-0.0361	-0.0141	-27.06	-36.38	-11.44
est	0.3388	0.3188	0.3758	-0.0257	-0.0498	0.0160	-7.80	-15.62	4.26
ist	0.1504	0.1326	0.2023	-0.0139	-0.0324	0.0329	-10.52	-23.79	16.26
ib	0.3784	0.3542	0.4284	-0.0214	-0.0482	0.0431	-5.97	-13.61	10.06
F esb	0.4350	0.4114	0.4959	-0.0288	-0.0881	0.0580	-7.01	-21.20	11.70
eb	0.4811	0.4479	0.5467	-0.0232	-0.0752	0.0632	-5.21	-16.79	11.56
t	0.1489	0.1285	0.1844	-0.0114	-0.0333	0.0191	-8.39	-25.91	10.36
st	0.3483	0.3053	0.4059	0.0079	-0.0328	0.0814	1.69	-10.74	20.05
b	0.4885	0.4523	0.5527	-0.0240	-0.0690	0.0549	-5.26	-15.26	9.93

Table S5.—Ontogenetic allometry. Regression fitted to data from protonymph to male. The square correlation coefficient (R^2) is given in terms of the probability (p-val.) together with calculated upper (Up. CI) and lower (Lo. CI) confidence interval for slope and elevation as well as test against isometry.

	Upper								
	R^2	p-val.	Est.	Slope		Intercept			Test
				Lo CI	Up CI	Est.	Lo CI	Up CI	p-val.
Carapace width	0.93	3.33E-23	0.9781	0.8951	1.0687	-0.0308	-0.0615	-0.0001	6.16E-01*
Carapace furrow	0.92	1.60E-22	1.3813	1.2596	1.5149	0.7740	0.6686	0.8794	1.32E-08**
Chelicera length	0.94	4.02E-25	1.3217	1.2214	1.4302	0.8039	0.7115	0.8964	1.16E-08**
Chelicera width	0.83	5.40E-16	1.7022	1.4848	1.9515	1.6381	1.3636	1.9127	5.70E-10**
	Pedipalps								
	R^2	p-val.	Est.	Slope		Intercept			Test
				Lo CI	Up CI	Est.	Lo CI	Up CI	p-val.
Trochanter length	0.94	8.52E-25	0.8690	0.8018	0.9418	0.3116	0.2567	0.3664	1.07E-03**
Trochanter width	0.94	1.98E-24	0.8116	0.7475	0.8812	0.3772	0.3157	0.4386	7.82E-06**
Femur length	0.95	4.03E-26	0.8242	0.7652	0.8878	-0.0289	-0.0547	-0.0030	5.23E-06**
Femur width	0.92	9.55E-23	0.8526	0.7784	0.9339	0.4199	0.3481	0.4918	1.03E-03**
Patella length	0.93	1.23E-23	0.8070	0.7403	0.8797	0.1045	0.0632	0.1457	1.09E-05**
Patella width	0.95	1.84E-26	0.8374	0.7786	0.9006	0.4413	0.3824	0.5003	1.51E-05**
Hand width	0.95	6.00E-26	0.8099	0.7514	0.8731	0.2386	0.1929	0.2844	1.37E-06**
	Leg I								
	R^2	p-val.	Est.	Slope		Intercept			Test
				Lo CI	Up CI	Est.	Lo CI	Up CI	p-val.
Trochanter length	0.92	2.00E-22	1.1634	1.0603	1.2766	0.8752	0.7598	0.9906	2.06E-03**
Trochanter depth	0.91	1.80E-21	1.1645	1.0555	1.2849	1.0289	0.8915	1.1663	3.24E-03**
Femur length	0.92	2.32E-22	0.9326	0.8496	1.0237	0.4378	0.3626	0.5130	1.38E-01**
Femur depth	0.87	1.07E-18	1.1329	1.0086	1.2725	1.0864	0.9173	1.2555	3.59E-02*
Patella length	0.94	5.48E-25	0.8878	0.8199	0.9613	0.5961	0.5194	0.6728	4.36E-03**
Patella depth	0.90	1.82E-20	1.1907	1.0726	1.3218	1.0968	0.9438	1.2498	1.63E-03**
Tibia length	0.93	8.17E-24	1.0637	0.9766	1.1585	0.6595	0.5717	0.7472	1.52E-01
Tibia depth	0.03	2.51E-01	0.5765	0.4198	0.7918	0.4096	0.1572	0.6619	8.26E-04**
Basitarsus length	0.00	8.34E-01	-1.0264	-1.4171	-0.7434	-1.2747	-1.5774	-0.9719	8.73E-01
Basitarsus depth	0.88	5.13E-19	1.6547	1.4764	1.8545	2.0020	1.7316	2.2723	2.43E-11**
	Leg IV								
	R^2	p-val.	Est.	Slope		Intercept			Test
				Lo CI	Up CI	Est.	Lo CI	Up CI	p-val.
Trochanter length	0.95	7.08E-26	0.8980	0.8328	0.9683	0.4487	0.3870	0.5103	6.29E-03**
Trochanter depth	0.91	2.49E-21	0.8435	0.7639	0.9315	0.5496	0.4585	0.6407	1.26E-03**
Femur length	0.89	6.40E-20	1.2077	1.0841	1.3454	0.9037	0.7664	1.0411	1.04E-03**

Femur depth	0.79	1.29E-14	1.0077	0.8687	1.1689	0.8795	0.6939	1.0651	9.18E-01
Patella length	0.94	6.10E-25	0.7890	0.7285	0.8546	0.1564	0.1143	0.1986	4.67E-07**
Patella depth	0.90	2.19E-20	0.8973	0.8079	0.9967	0.6123	0.5093	0.7153	4.35E-02*
Tibia length	0.94	3.32E-25	0.8117	0.7504	0.8780	0.2333	0.1859	0.2807	3.64E-06**
Tibia depth	0.91	2.79E-21	1.3633	1.2342	1.5059	1.3176	1.1499	1.4853	1.62E-07**
Basitarsus length	0.93	2.44E-23	0.8094	0.7414	0.8838	0.4501	0.3781	0.5221	1.81E-05**
Basitarsus breadth	0.72	5.90E-12	2.1855	1.8366	2.6006	2.5996	2.0816	3.1177	3.36E-12**
Telotarsus length	0.91	2.01E-21	1.1071	1.0031	1.2219	0.7348	0.6260	0.8436	4.35E-02*
Telotarsus depth	0.71	1.27E-11	1.9050	1.5954	2.2748	2.4288	1.9308	2.9269	1.89E-09**
