Ecography

E7779
Korallo-Vinarskaya, N. P, Vinarski, M. V., Khokhlova, I. S. and Krasnov, B. R. 2012. Body size and coexistence in gamasid mites parasitic on small mammals: null model analyses at three hierarchical scales. – Ecography 35: xxx–xxx.

Supplementary material

Appendix 1

Table A1: Data on body size of 72 gamasid mite species

Mite species	Mean length of the dorsal shield (mm)	Source
Androlaelaps angustiscutus	0.75	Bregetova 1956
Androlaelaps casalis	0.64	our data
Androlaelaps dogieli	0.54	our data
Androlaelaps fahrenholzi	0.60	Berlese 1911
Androlaelaps glasgowi	0.60	our data
Androlaelaps karawajevi	0.49	Bregetova 1956
Androlaelaps longipes	0.87	Bregetova 1956
Androlaelaps pavlovskyi	0.88	Bregetova 1956
Androlaelaps razumovae	0.50	Bregetova 1956
Androlaelaps sardous	0.88	Bregetova 1956
Androlaelaps semidesertus	0.65	Bregetova 1956
Eulaelaps cricetuli	1.18	Bregetova 1956
Eulaelaps kolpakovae	0.87	our data
Eulaeps stabularis	0.75	our data
Haemogamasus ambulans	0.93	our data
Haemogamasus citelli	0.91	our data
Haemogamasus dauricus	1.04	Bregetova 1956
Haemogamasus hirsutosimilis	1.05	Bregetova 1956
Haemogamasus hirsutus	1.06	our data
Haemogamasus horridus	1.40	Bregetova 1956
Haemogamasus ivanovi	1.09	Bregetova 1956

Haemogamasus kitanoi	1.00	Bregetova 1956
Haemogamasus kusumotoi	1.12	Bregetova 1956
Haemogamasus liponyssoides	1.12	our data
Haemogamasus mandshuricus	0.91	our data
Haemogamasus nidi	0.82	our data
Haemogamasus nidiformes	0.82	our data
Haemogamasus pontiger	1.05	Masan and Fenda 2010
Haemogamasus serdjukovae	0.96	our data
Haemogamasus zachvatkini	0.91	Bregetova 1956
Hirstionyssus apodemi	0.49	our data
Hirstionyssus bregetovae	0.63	Bregetova 1956
Hirstionyssus carnifex	0.59	Bregetova 1956
Hirstionyssus criceti	0.54	our data
Hirstionyssus eusoricis	0.5	our data
Hirstionyssus eversmanni	0.57	Bregetova 1956
Hirstionyssus gudauricus	0.59	our data
Hirstionyssus isabellinus	0.51	our data
Hirstionyssus latiscutatus	0.53	our data
Hirstionyssus macedonicus	0.72	Bregetova 1956
Hirstionyssus meridianus	0.64	Bregetova 1956
Hirstionyssus minor	0.43	Zemskaja and Piontkovskaya 1957
Hirstionyssus myospalacis	0.7	our data
Hirstionyssus pavlovskyi	0.56	our data
Hirstionyssus sciurinus	0.61	our data
Hirstionyssus talpae	0.65	Bregetova, 1956

Hirstionyssus tatricus	0.58	Uchikawa 1974
Hirstionyssus transiliensis	0.5	our data
Hyperlaelaps amphibius	0.51	our data
Hyperlaelaps arvalis	0.51	our data
Hyperlaelaps microti	0.59	Owen et al. 1966
Laelaps agilis	0.62	our data
Laelaps alaskensis	0.54	our data
Laelaps algericus	0.65	our data
Laelaps clethrionomydis	0.52	our data
Laelaps echidninus	0.92	our data
Laelaps hilaris	0.59	our data
Laelaps jettmari	0.65	Bregetova 1956
Laelaps lemmi	0.73	our data
Laelaps micromydis	0.66	our data
Laelaps multispinosus	0.63	our data
Laelaps muris	0.64	our data
Laelaps nuttallii	0.59	Lange 1955
Laelaps pavlovskyi	0.66	our data
Laelaps pitymydis	0.55	Bregetova 1956
Laelaps semitectus	0.68	our data
Macrocheles glaber	0.81	Ghilarov 1977
Myonyssus decumani	1.2	Bregetova 1956
Myonyssus dubinini	0.95	our data
Myonyssus gigas	1.14	Bregetova 1956
Myonyssus ingricus	0.93	our data
Myonyssus rossicus	1.18	Bregetova 1956

Ornitonyssus bacoti	0.54	our data
Parasitus consanguineus	1.13	Hyatt 1980
Parasitus convexus	1.1	Davydova 1984
Parasitus fimetorum	1.04	Ghilarov 1977
Parasitus oudemansi	1.14	Micherdzinski 1969, Ghilarov 1977
Parasitus remberti	0.67	Ghilarov 1977; Davydova 1976
Poecilochirus necrophori	1.54	Micherdzinski 1969, Davydova, 1976
Poecilochirus subterraneus	0.78	Ghilarov 1977; Davydova 1976
Proctolaelaps pygmaeus	0.6	Ghilarov 1977

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Table A2. Summary of regression analyses of the relationships between mite body size and abundance (in log-log space) in infracommunities (IF), component communities (CnC), and compound communities (CpC). Note number of cases where the slope of the relationships, albeit non-significant, was negative. These results are being developed further for independent publication.

Community	Host species	r^2	df	F	Slope	p
IF	*Apodemus agrarius*	0.01	1,17	0.61	0.01	0.69
	Apodemus uralensis	0.01	1,29	0.58	0.00	0.99
	Arvicola terrestris	0.01	1,17	1.29	0.02	0.93
	Microtus agrestis	0.07	1,17	1.14	0.27	0.26
	Microtus arvalis	0.03	1,17	0.25	-0.17	0.48
	Microtus gregalis	0.06	1,17	0.40	-0.26	0.29
	Microtus middendorffi	0.12	1,9	4.86	-0.35	0.30
	Microtus oeconomus	0.02	1,17	1.35	0.13	0.58
	Myodes glareolus	0.01	1,21	0.58	-0.10	0.66
	Myodes rutilus	0.09	1,17	1.94	0.30	0.22
	Neomys fodiens	0.07	1,11	0.04	-0.26	0.39
	Sicista betulina	0.24	1,13	0.01	0.49	0.06
	Sorex araneus	0.01	1,16	0.15	0.09	0.72
CnC	*Apodemus agrarius*	0.02	1,31	0.61	-0.14	0.44
	Apodemus flavicollis	0.04	1,14	0.58	-0.20	0.46
	Apodemus peninsulae	0.06	1,19	1.29	-0.25	0.27
	Apodemus sylvaticus	0.06	1,17	1.14	-0.25	0.30
	Arvicola terrestris	0.01	1,25	0.25	-0.10	0.62
	Cricetus cricetus	0.01	1,27	0.40	-0.12	0.53
	Dicrostonyx torquatus	0.13	1,25	4.86	-0.35	0.04

	Lemmus sibiricus	0.04	1,31	1.35	-0.20	0.25
	Micromys minutus	0.05	1,10	0.58	-0.24	0.46
	Microtus agrestis	0.32	1,4	1.94	-0.57	0.23
	Microtus arvalis	0.01	1,8	0.04	0.07	0.84
	Microtus gregalis	0.01	1,14	0.01	0.07	0.97
	Microtus oeconomus	0.01	1,16	0.15	-0.10	0.69
	Mus musculus	0.15	1,24	4.32	-0.39	0.04
	Myodes glareolus	0.01	1,23	0.01	-0.03	0.89
	Myodes rufocanus	0.13	1,23	4.32	-0.36	0.05
	Myodes rutilus	0.01	1,23	0.01	-0.01	0.98
	Myopus schisticolor	0.03	1,5	0.15	0.17	0.71
	Neomys fodiens	0.04	1,12	0.54	-0.21	0.47
	Ondatra zibethica	0.01	1,11	0.18	-0.13	0.68
	Rattus norvegicus	0.01	1,21	0.10	-0.07	0.75
	Sicista betulina	0.05	1,15	0.87	-0.23	0.36
	Sorex araneus	0.01	1,25	0.42	-0.13	0.52
	Sorex arcticus	0.13	1,15	2.43	-0.37	0.14
	Sorex caecutiens	0.35	1,11	5.89	-0.59	0.03
	Sorex minutus	0.01	1,11	0.07	0.08	0.79
	Tamias sibiricus	0.34	1,12	6.31	-0.59	0.03
CpC		0.19	1,71	8.30	-0.44	0.001