Supplementary Table 4a. Length-mass regression parameters for calculation of individual body masses from measured body lengths. For damaged individuals where body length could not be measured (66 of 7472 individuals), body mass was substituted by species median body mass or order median body mass (for species with single individuals). 'Taxon', 'Group' and 'Further grouping' specify which animals the presented regression has been used for in this study. Regressions were available from the literature that estimate both dry and fresh mass ('Mass type') for different taxa. Supplementary table 4b presents the dry mass-fresh mass conversions, used to convert all estimated body masses to fresh mass. The equations and regression parameters, 'a' and 'b', are presented, as well as the size range the regressions were calculated from ('Min' and 'Max'). All regressions were taken from the literature ('Reference'), with different specific definitions of how body length was measured ('Details of body length measurement') and specificity of the given regression ('Regression specificity').

Taxon	Group	Further grouping	Mass type	Equation M[mg], L[mm]	a	b	Min (mm)	Max (mm)	Reference	Details of body length measurement	Regression specificity
Annelida	All		ash free dry mass	M = 1000*exp(a + b * log(L))	-11.8423	2.3225			(Hale, Reich & Frelich, 2004)	Total length	General Lumbricidae
Araneae	Araneae < 2.5 mm		Fresh mass	M = exp(a + b * log(L))	-1.958	2.746	0.56	2.5	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	Group specific
Araneae	hunting		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	Group specific
Araneae	web-building		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	Group specific
Araneae	spiders random		fresh mass	M = exp(a + b * log(L))	-1.844	2.711	1.8	21.5	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Anapidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Araneidae		Fresh mass	M = exp(a + b * log(L))	-1.923	2.923	2.10	21.20	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Barychelidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Clubionidae		Fresh mass	M = exp(a + b * log(L))	-2.156	2.653	2.5	9	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Corinnidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Ctenidae		Fresh mass	M = exp(a + b * log(L))	-1.758	2.894	1.3	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	Group specific
Araneae	Deinopidae		fresh mass	M = exp(a + b * log(L))	-1.844	2.711	1.8	21.5	(Edwards, 1996)	clypeus to tip of spinnerets	inferred, spiders random sample
Araneae	Gnaphosidae		Fresh mass	M = exp(a + b * log(L))	-2.83	3.055	3	13.1	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific

Araneae	Hexathelidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Lamponidae		Fresh mass	M = exp(a + b * log(L))	-2.83	3.055	3	13.1	(Edwards, 1996)	clypeus to tip of spinnerets	inferred, Gnaphosidae
Araneae	Linyphiidae		Fresh mass	M = exp(a + b * log(L))	-1.892	2.754	1.5	5.5	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Lycosidae		Fresh mass	M = exp(a + b * log(L))	-2.043	2.842	2	23.5	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Micropholcommatidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Miturgidae		Fresh mass	M = exp(a + b * log(L))	-2.83	3.055	3	13.1	(Edwards, 1996)	clypeus to tip of spinnerets	inferred, Gnaphosidae
Araneae	Mysmenidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Nemesiidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Nephilidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Ochyroceratidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Oonopidae		Fresh mass	M = exp(a + b * log(L))	-2.039	2.666	0.67	2.5	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	Group specific
Araneae	Oxyopidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Palpimanidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Pararchaeidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Philodromidae		Fresh mass	M = exp(a + b * log(L))	-1.985	2.940	2.50	8.60	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Pholcidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Prodidomidae		Fresh mass	M = exp(a + b * log(L))	-2.83	3.055	3	13.1	(Edwards, 1996)	clypeus to tip of spinnerets	inferred, Gnaphosidae
Araneae	Salticidae		Fresh mass	M = exp(a + b * log(L))	-2.184	2.901	4.00	13.00	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Scytodidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Segestriidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders

Araneae	Sparassidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Stenochilidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Araneae	Symphytognathidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Telemidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Tetrablemmidae		Fresh mass	M = exp(a + b * log(L))	-2.039	2.666	0.67	2.5	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, Oonopidae
Araneae	Tetragnathidae		Fresh mass	M = exp(a + b * log(L))	-2.615	2.574	3.50	9.00	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Theridiidae		Fresh mass	M = exp(a + b * log(L))	-1.577	2.907	1.50	7.50	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Theridiosomatidae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Thomisidae		Fresh mass	M = exp(a + b * log(L))	-1.644	2.973	1.80	8.00	(Edwards, 1996)	clypeus to tip of spinnerets	Group specific
Araneae	Uloboridae		Fresh mass	M = exp(a + b * log(L))	-1.784	2.255	0.56	10.67	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, web-building
Araneae	Unidentifiable < 1.8		Fresh mass	M = exp(a + b * log(L))	-1.958	2.746	0.56	2.5	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, Araneae < 2.5 mm
Araneae	Unidentifiable > 1.8		fresh mass	M = exp(a + b * log(L))	-1.844	2.711	1.8	21.5	(Edwards, 1996)	clypeus to tip of spinnerets	inferred, spiders random sample
Araneae	Zodariidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Archaeognatha	All		Dry mass	M = exp(a + b * log(L))	-3.628	2.494	2.13	54.51	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, all insect taxa
Blattodea	Blaberidae		Dry mass	M = exp(a + b * log(L))	-3.980	2.760	2.20	14.00	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Blattodea
Blattodea	Blattellidae		Dry mass	M = exp(a + b * log(L))	-3.980	2.760	2.20	14.00	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Blattodea
Blattodea	Blattidae		Dry mass	M = exp(a + b * log(L))	-3.980	2.760	2.20	14.00	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Blattodea
Blattodea	Unidentifiable		Dry mass	M = exp(a + b * log(L))	-3.980	2.760	2.20	14.00	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Blattodea
Chilopoda	Ballophilidae		Dry mass	M = exp(a + b * log(L))	-4.049	2.18	4	47	(Gowing & Recher, 1984)	not mentioned	inferred, Chilopoda
Chilopoda	Cryptopidae		Dry mass	M = exp(a + b * log(L))	-4.049	2.18	4	47	(Gowing & Recher, 1984)	not mentioned	inferred, Chilopoda

Chilopoda	Henicopidae		Dry mass	M = exp(a + b * log(L))	-4.049	2.18	4	47	(Gowing & Recher, 1984)	not mentioned	inferred, Chilopoda
Chilopoda	Lithobiomorpha		Dry mass	M = exp(a + b * log(L))	-4.049	2.18	4	47	(Gowing & Recher, 1984)	not mentioned	inferred, Chilopoda
Chilopoda	Mecistocephalidae		Dry mass	M = exp(a + b * log(L))	-4.049	2.18	4	47	(Gowing & Recher, 1984)	not mentioned	inferred, Chilopoda
Chilopoda	Scolopendridae		Dry mass	M = exp(a + b * log(L))	-4.049	2.18	4	47	(Gowing & Recher, 1984)	not mentioned	inferred, Chilopoda
Chilopoda	Unidentifiable		Dry mass	M = exp(a + b * log(L))	-4.049	2.18	4	47	(Gowing & Recher, 1984)	not mentioned	inferred, Chilopoda
Coleoptera	Anobiidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Anthicidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Bostrichidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Byrrhidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Carabidae		Dry mass	M = a * L^b	0.0237	2.7054	2.88	24	(Lang, Krooss & Stumpf, 1997)	Measured from anterior tip of head to posterior of abdomen excluding any appendages	Group specific
Coleoptera	Cerylonidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Chelonariidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Chrysomelidae		Dry mass	M = exp(a + b * log(L))	-2.427	2.171	3.34	7.84	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific
Coleoptera	Ciidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Cleridae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Coccinellidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Colydiidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Curculionidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Dermestidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Discolomidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera

Coleoptera	Elateridae		Dry mass	M = a * L^b	0.0138	2.595	1.65	10.3	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, slender beetles
Coleoptera	Endomychidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Histeridae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Hydrophilidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Languriidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Larvae		Dry mass	M = a * L^b	0.0035	2.4033	1.5	25.27	(Lang, Krooss, & Stumpf, 1997)	Measured from anterior tip of head to posterior of abdomen excluding any appendages	inferred, Coleoptera
Coleoptera	Leiodidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Lucanidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Melyridae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Mordellidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Mycetophagidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Pselaphidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Ptiliidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Scarabaeidae		Dry mass	M = exp(a + b * log(L))	-2.448	2.494	4.24	24.79	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific
Coleoptera	Scydmaenidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Silvanidae		Dry mass	M = a * L^b	0.0138	2.595	1.65	10.3	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, slender beetles
Coleoptera	Staphylinidae		Dry mass	M = a * L^b	0.0134	2.26	2.2	13.6	(Lang, Krooss, & Stumpf, 1997)	Measured from anterior tip of head to posterior of abdomen excluding any appendages	Group specific
Coleoptera	Tenebrionidae		Dry mass	M = exp(a + b * log(L))	-0.043	1.2	5.65	13.39	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific
Coleoptera	Throscidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Trogossitidae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera

Coleoptera	Unidentifiable		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Coleoptera	Zopheridae		Dry mass	M = exp(a + b * log(L))	-3.247	2.492	3.34	34.82	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Coleoptera
Dermaptera	Anisolabididae		Dry mass	M = exp(a + b * log(L))	-3.628	2.494	2.13	54.51	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, all insect taxa
Dermaptera	Forficulidae		Dry mass	M = exp(a + b * log(L))	-3.628	2.494	2.13	54.51	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, all insect taxa
Diplopoda	Chordeumatida		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplopoda	Glomerida		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplopoda	Polidesmatidae		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplopoda	Polydesmatida		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplopoda	Polydesmida		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplopoda	Polydesmidae		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplopoda	Polyxenida		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplopoda	Siphonophorida		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplopoda	Spirobolida		Dry mass	M = exp(a + b * log(L))	-4.591	2.543	11.0	47.0	(Gowing & Recher, 1984)	not mentioned	inferred, Diplopoda
Diplura	Heterojapygidae		Dry mass	M = a * (L)^b	0.034	2.191	0.9	17.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, general arthropod
Diptera	Larvae		Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae
Diptera	Adults		Dry mass	M = a * (L)^b	0.0153	2.573	1.75	8.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	Group specific, Diptera adult
Diptera	Agromyzidae	Larvae	Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae
Diptera	Cecidomyiidae	A / L	Dry mass	M = a * (L)^b	0.035	2.173	0.9	17.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, all insect taxa
Diptera	Ceratopogonidae	Larvae	Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae
Diptera	Chironomidae	Larvae	Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae

Diptera	Drosophilidae	Larvae	Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae
Diptera	Muscidae	Adult	Dry mass	M = a * (L)^b	0.0153	2.573	1.75	8.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	Group specific, Diptera adult
Diptera	Mycetophilidae	Larvae	Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae
Diptera	Phoridae	Adult	Dry mass	M = a * (L)^b	0.0153	2.573	1.75	8.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	Group specific, Diptera adult
Diptera	Pipunculidae	Larvae	Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae
Diptera	Sciaridae	Adult	Dry mass	M = a * (L)^b	0.0153	2.573	1.75	8.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	Group specific, Diptera adult
Diptera	Simuliidae	Adult	Dry mass	M = a * (L)^b	0.0153	2.573	1.75	8.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	Group specific, Diptera adult
Diptera	Syrphidae	Larvae	Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae
Diptera	Tachinidae	Adult	Dry mass	M = a * (L)^b	0.0153	2.573	1.75	8.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	Group specific, Diptera adult
Diptera	Tephritidae	Larvae	Dry mass	M = a * (L)^b	0.029	1.73	1.7	16.65	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, holomet. Larvae
Diptera	Thaumaleidae	A / L	Dry mass	M = a * (L)^b	0.035	2.173	0.9	17.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, all insect taxa
Gastropoda	All		Dry mass	M = exp(a + b * log(L*W))	-2.75	1.59	2.1	18	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Gastropoda
Hemiptera	Acanthosomatidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific, Hemiptera
Hemiptera	Anthocoridae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific, Hemiptera
Hemiptera	Aradidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific, Hemiptera
Hemiptera	Ceratocombidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific, Hemiptera
Hemiptera	Cicadellidae		Dry mass	M = exp(a + b * log(L))	-3.735	2.561	2.13	13.25	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific
Hemiptera	Cimicidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Cydnidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Delphacidae		Dry mass	M = exp(a + b * log(L))	-2.823	2.225	2.13	13.25	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Inferred, Homoptera

Hemiptera	Dipsocoridae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Enicocephalidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Eurybrachyidae		Dry mass	M = exp(a + b * log(L))	-2.823	2.225	2.13	13.25	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Inferred, Homoptera
Hemiptera	Hebridae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Hydrometridae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Lophopidae		Dry mass	M = exp(a + b * log(L))	-2.823	2.225	2.13	13.25	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Inferred, Homoptera
Hemiptera	Lygaeidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Meenoplidae		Dry mass	M = exp(a + b * log(L))	-2.823	2.225	2.13	13.25	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Inferred, Homoptera
Hemiptera	Membracidae		Dry mass	M = exp(a + b * log(L))	-2.823	2.225	2.13	13.25	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Inferred, Homoptera
Hemiptera	Mesoveliidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Miridae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Nabidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Pentatomidae		Dry mass	M = exp(a + b * log(L))	-4.197	3.053	6.35	16.73	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Group specific
Hemiptera	Reduviidae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Schizopteridae		Dry mass	M = exp(a + b * log(L))	-4.784	3.075	3.2	40.23	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, Hemiptera
Hemiptera	Triozidea		Dry mass	M = exp(a + b * log(L))	-2.823	2.225	2.13	13.25	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	Inferred, Homoptera
Hymenoptera	Bethylidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Hymenoptera	Diapriidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Hymenoptera	Eucoilidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Hymenoptera	Eupelmidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae

Hymenoptera	Figitidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Hymenoptera	Formicidae		Dry mass	M = exp(a + b * log(L))	-3.996	2.489	2	18	(Gowing & Recher, 1984)	not mentioned	Group specific
Hymenoptera	Mymariidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Hymenoptera	Scelionidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Hymenoptera	Specidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Hymenoptera	Trichogrammatidae		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Hymenoptera	Unidentifiable		Dry mass	M = exp(a + b * log(L))	-3.336	2.104	1	12	(Gowing & Recher, 1984)	not mentioned	inferred, Hym. excl Formicidae
Isopoda	All		Dry mass	M = exp(a + b * log(L))	-4.81	3.44	2.7	8	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	Group specific, Isopoda
Isoptera	Rhinotermitidae		Dry mass	M = e^a * L^b	-5.802	3.177	3.30	5.60	(Johnson & Strong, 2000)	head to end of abdomen	inferred, Isoptera
Isoptera	Termitidae		Dry mass	M = e^a * L^b	-5.802	3.177	3.30	5.60	(Johnson & Strong, 2000)	head to end of abdomen	inferred, Isoptera
Isoptera	Unidentifiable		Dry mass	M = e^a * L^b	-5.802	3.177	3.30	5.60	(Johnson & Strong, 2000)	head to end of abdomen	inferred, Isoptera
Lepidoptera	Alucitidae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Arctiidae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Arctiidae		Dry mass	M = exp(a + b * log(L))	-3.755	2.658	5.05	20.06	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera
Lepidoptera	Gelechiidae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Geometridae		Dry mass	M = exp(a + b * log(L))	-5.493	2.625	7.66	29.50	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	Group specific
Lepidoptera	Hesperiidae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Lasiocampidae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Lymantriidae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Noctuidae		Dry mass	M = exp(a + b * log(L))	-5.424	2.845	7.96	42.80	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	Group specific

Lepidoptera	Nolidae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Pterophoridae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Pyralidae		Dry mass	M = exp(a + b * log(L))	-5.909	2.959	6.26	44.62	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera Larvae
Lepidoptera	Pyralidae		Dry mass	M = exp(a + b * log(L))	-5.036	3.122	2.76	40.73	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Lepidoptera
Mantodea	Mantidae		Dry mass	M = exp(a + b * log(L))	-6.340	3.010	6.00	66.00	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	Group specific
Neuroptera	Chrysopidae		Dry mass	M = exp(a + b * log(L))	-4.483	2.570	3.45	54.51	(Sample, Cooper, Greer, & Whitmore, 1993)	frons to tip of abdomen (excl. antennae, ovipositors, wings etc.)	inferred, Neuroptera
Opiliones	All		Fresh mass	M = exp(a + b * log(L))	-0.899	2.984	0.57	6.9	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, Opiliones
Orthoptera	Acrididae		Dry mass	M = exp(a + b * log(L))	-3.17	2.61	2.3	33	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Orthoptera
Orthoptera	Eumastacidae		Dry mass	M = exp(a + b * log(L))	-3.17	2.61	2.3	33	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Orthoptera
Orthoptera	Gryllidae		Dry mass	M = exp(a + b * log(L))	-3.17	2.61	2.3	33	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Orthoptera
Orthoptera	Tetrigidae		Dry mass	M = exp(a + b * log(L))	-3.17	2.61	2.3	33	(Wardhaugh, 2013)	front of labrum to tip of abdomen (excl. cerci or ovipositors) or tip of elytra (longest)	inferred, Orthoptera
Plecoptera	All		Dry mass	M = a * L^b	0.0094	2.754	1.95	3.232	(Benke, Huryn, Smock, & Wallace, 1999)	Total length	Group specific
Plecoptera	Austroperlidae		Dry mass	M = a * L^b	0.0094	2.754	1.95	3.232	(Benke, Huryn, Smock, & Wallace, 1999)	Total length	Group specific
Plecoptera	Gripopterygidae		Dry mass	M = a * L^b	0.0094	2.754	1.95	3.232	(Benke, Huryn, Smock, & Wallace, 1999)	Total length	Group specific
Plecoptera	Notonemouridae		Dry mass	M = a * L^b	0.0094	2.754	1.95	3.232	(Benke, Huryn, Smock, & Wallace, 1999)	Total length	Group specific
Pseudoscorpionida	All		fresh mass	M = exp(a + b * log(L))	-1.892	2.515	0.86	2.10	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	Group specific
Psocoptera	Archipsocidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Caeciliidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Ectopsocidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Elipsocidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera

Psocoptera	Epipsocidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Hemipsocidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Lepidopsocidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Pachytroctidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Psocidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Psyllipsocidae		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Psocoptera	Unidentifiable		Dry mass	M = a * (L)^b	0.014	3.115	1.50	3.15	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, Psocoptera
Schizomida	Hubbardiidae		Fresh mass	M = exp(a + b * log(L))	-2.108	3.017	0.67	36	(Höfer & Ott, 2009)	edge of prosoma (without chelicerae) to edge of opisthosoma (excl spinnerets)	inferred, hunting spiders
Symphyla	Scutegerillidae		Dry mass	M = a * (L)^b	0.035	2.173	0.9	17.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, all insect taxa
Thysanoptera	Aeolothripidae		Dry mass	M = a * (L)^b	0.035	2.173	0.9	17.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, all insect taxa
Thysanoptera	Phlaeothripidae		Dry mass	M = a * (L)^b	0.035	2.173	0.9	17.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, all insect taxa
Thysanoptera	Thripidae		Dry mass	M = a * (L)^b	0.035	2.173	0.9	17.6	(Gruner, 2003)	tip of abdomen to end of head or carapace, excl. any appendages	inferred, all insect taxa
Thysanura	Nicoletiidae		Dry mass	M = exp(a + b * log(L))	-3.628	2.494	2.13	54.51	(Sample, Cooper, Greer, & Whitmore, 1993)	From frons to tip of abdomen excluding appendages	inferred, all insect taxa

Supplementary Table 4b. Dry-to-fresh mass conversions from the literature[12] for transformation of dry body masses (DM) (from length-dry mass regression calculations) to fresh mass (FM).

Taxon	Equation FM[mg], DM[mg]	a	b	Reference	Regression specificity
Annelida	FM = exp(a + b * log(DM))	0.9282	1.0899	(Mercer et al., 2001)	Oligochaeta
All other groups with dry-mass length-mass regressions, (see Supplementary Table S4a)	FM = exp(a + b * log(DM))	0.6111	1.0213	(Mercer et al., 2001)	Insects