

Appendix

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Table S1. Studies of the entomosarcosaprophagous fauna in the Mediterranean biogeographical region and the Iberian Peninsula, and the taxa studied in each work.

Taxa studied	Family	Mediterranean biogeographical region and Iberian Peninsula studies
Entire community		Tantawi <i>et al.</i> , 1996; Arnaldos-Sanabria, 2000; Arnaldos <i>et al.</i> , 2004, 2005; Castillo-Miralbes, 2002; García-Rojo, 2004; García Rojo <i>et al.</i> , 2009; Bonacci <i>et al.</i> , 2010; Pérez Bote <i>et al.</i> , 2012; Baz <i>et al.</i> , 2015; Begoña Gaminde, 2015; López Gallego, 2016; Pérez-Marcos <i>et al.</i> , 2016; Díaz-Aranda <i>et al.</i> , 2018; Martín-Vega <i>et al.</i> , 2019; Muñoz-Lozano <i>et al.</i> , 2019
Diptera	Diptera (all) community	Martínez-Sánchez <i>et al.</i> , 2000; Arnaldos <i>et al.</i> , 2001; Campobasso <i>et al.</i> , 2001; Martínez Sánchez, 2003; Prado e Castro <i>et al.</i> , 2011b, 2012; Martín Vega, 2011; Martín-Vega and Baz, 2013; Bonacci <i>et al.</i> , 2014; Farinha <i>et al.</i> , 2014
	Calliphoridae	Dominguez Martínez and Gómez Fernández, 1963; Martínez-Sánchez <i>et al.</i> , 1998; Baz <i>et al.</i> , 2007; Bonacci <i>et al.</i> , 2009; Prado e Castro and García, 2009; Saloña-Bordas <i>et al.</i> , 2009; Prado e Castro <i>et al.</i> , 2011a, Velásquez <i>et al.</i> , 2011
	Phoridae	Campobasso <i>et al.</i> , 2004
	Piophilidae	Prado e Castro and García, 2010
	Sarcophagidae	Prado e Castro <i>et al.</i> , 2010
	Sphaeroceridae	Arnaldos <i>et al.</i> , 2014
Formicidae		Martínez <i>et al.</i> , 2002; Bonacci <i>et al.</i> , 2011; Prado e Castro <i>et al.</i> , 2014; Neto-Silva <i>et al.</i> , 2017; Pérez-Marcos <i>et al.</i> , 2020
Coleoptera		Prado e Castro <i>et al.</i> , 2013
	Dermestidae	Martín-Vega and Baz, 2010; Bonacci <i>et al.</i> , 2017

Table S2. Abundance of all the taxa during the seasons and classification of the different taxa according to the different ecological groups (NC: necrophagous, NF: necrophilic, OM: omnivorous, OP: opportunistic, AC: accidental, ni: unidentified).

Order	Family	Specie	Ecological group	Season				Total %
				Aut	Win	Spr	Sum	
Diptera	Calliphoridae	<i>Calliphora vicina</i> Robineau-Desvoidy, 1830	NC	45	668	987	2	3.98
		<i>Calliphora vomitoria</i> (Linnaeus, 1758)	NC	15	304	671	0	2.31
		<i>Chrysomya albiceps</i> (Wiedemann, 1819)	NC/NF	17,765	56	587	6,473	58.15
		<i>Lucilia</i> sp.	NC	4	0	7	0	0.03
		<i>Lucilia caesar</i> (Linnaeus, 1758)	NC	4	0	1	5	0.02
		<i>Lucilia sericata</i> (Meigen, 1826)	NC	22	2	28	14	0.15
		<i>Pollenia</i> sp.	OP	1	98	133	2	0.55
	Muscidae	<i>Hydrotaea meridionalis</i> Pertschinsky, 1882	NC	0	0	4	0	0.01
		<i>Musca domestica</i> Linnaeus, 1758	NC	1,317	0	29	5,309	15.55
		<i>Muscina levida</i> (Harrys, 1780)	NC	9	4	11	1	0.06
		<i>Muscina prolapsa</i> (Harrys, 1780)	NC	0	2	1	0	0.01
		<i>Muscina stabulans</i> Fallén, 1817	NC/NF	3	0	1	53	0.13
	Muscidae Unidentified	NC	19	37	40	38	0.31	
	Anthomyiidae		NC	1	0	20	1	0.05
	Asilidae		AC	0	0	0	2	0.00
	Carnidae		NC	0	0	3	0	0.01
	Chloropidae		OP	0	0	1	0	0.00
	Dolichopodidae		NF	0	0	2	0	0.00
	Drosophilidae		OP	28	1	0	47	0.18
	Dryomyzidae		NC	0	0	1	0	0.00
	Fanniidae		NC	2	27	18	14	0.14
	Heleomyzidae		NC	36	5	54	0	0.22
	Lauxaniidae		OP	1	1	0	0	0.00
	Nematocera		ni	6	7	14	0	0.06
	Odiniidae		OP	0	0	2	0	0.00
	Piophilidae		NC	24	2	6	1	0.08
	Phoridae		NC	86	100	154	86	1.00
	Sarcophagidae		NC	70	6	62	80	0.51
	Sciaridae		OP	15	69	341	6	1.01
	Sphaeroceridae		NC	79	76	2,356	4	5.88
	Tanypezidae		OP	0	0	1	0	0.00
	Sarcophagidae larvae		NC	26	0	0	0	
<i>Chrysomya</i> larvae		NC	967	0	0	329		
<i>Calliphora</i> larvae		NC	401	2,637	3,347	80		
Coleoptera	Staphylinidae	<i>Creophilus maxillosus</i> (Linnaeus, 1758)	NF	41	21	25	3	0.21
		<i>Ocyopus</i> sp.	OP	1	0	1	0	0.00
		Aleocharidae	NC/NF/OP	10	7	16	16	0.11
		Staphylinidae Unidentified	ni	0	0	3	1	0.01
	Histeridae	<i>Carcinops (C.) pumilio</i> (Erichson, 1834)	NF	0	0	0	1	0.00
		<i>Hister grandicollis</i> Illiger, 1807	NF	0	0	1	0	0.00
		<i>Margarinotus (P.) marginatus</i> (Erichson, 1834)	NF	0	4	10	0	0.03
		<i>Saprinus (Saprinus) acuminatus</i> (Fabricius, 1798)	NF	0	0	1	0	0.00
		<i>S. (S.) algericus</i> (Paykull, 1811)	NF	0	0	0	5	0.01
		<i>S. (S.) caeruleus</i> (Hoffmann, 1803)	NF	0	0	1	0	0.00
		<i>S. (S.) detersus</i> (Illiger, 1807)	NF	3	135	118	5	0.61
		<i>S. (S.) cf. furvus</i> Erichson, 1834	NF	4	0	22	20	0.11
		<i>S. (S.) georgicus</i> Marseul, 1862	NF	0	0	0	1	0.00
		<i>S. (S.) lugens</i> Erichson, 1834	NF	0	34	4	1	0.09
		<i>S. (S.) maculatus</i> (Rossi, 1792)	NF	0	0	0	1	0.00
		<i>S. (S.) melas</i> Kuster, 1849	NF	1	20	27	2	0.12
		<i>S. (S.) politus</i> (Brahm, 1790)	NF	2	23	6	0	0.07
		<i>S. (S.) subnitescens</i> Bickhardt, 1909	NF	2	1	3	3	0.02

Order	Family	Specie	Ecological group	Season				Total %
		<i>S. (S.) semistriatus</i> (Scriba, 1790)	NF	1	0	0	0	0.00
		<i>S. (S.) tenuistrius</i> Marseul, 1855	NF	0	0	4	7	0.03
		Histeridae Unidentified	NF	0	1	0	3	0.01
	Silphidae	<i>Thanatophilus ruficornis</i> (Küster, 1851)	NC	9	25	26	5	0.15
		<i>Attagenus trifasciatus</i> (Fabricius, 1787)	NC	0	0	8	0	0.02
		<i>Dermestes frischii</i> Kugelann, 1792	NC	64	208	104	174	1.29
	Dermestidae	<i>Dermestes pardalis</i> Billiberg, 1808	NC	0	0	1	0	0.00
		<i>Dermestes undulatus</i> Brahm, 1790	NC	1	20	4	3	0.07
		<i>Dermestes</i> sp.	NC	0	0	0	1	0.00
		<i>Nitidula bipunctata</i> (Linnaeus, 1758)	OM	18	5	8	0	0.07
	Nitidulidae	<i>Nitidula carnaria</i> (Schaller, 1783)	OM	0	1	0	0	0.00
		Nitidulidae Unidentified	OM	0	0	1	0	0.00
		<i>Necrobia ruficollis</i> (Fabricius, 1775)	NF	0	0	0	5	0.01
	Cleridae	<i>Necrobia rufipes</i> (Fabricius, 1781)	NF	29	0	12	4	0.11
		<i>Necrobia violacea</i> (Linnaeus, 1758)	NF	0	3	0	0	0.01
		Cleridae Unidentified	ni	0	0	0	1	0.00
	Carabidae		OP	0	0	2	0	0.00
	Cerambycidae		AC	1	0	0	0	0.00
	Tenebrionidae		OM	4	3	4	5	0.04
	Scarabaeidae	<i>Onthophagus</i> sp.	OP	0	0	0	1	0.00
	Anthicidae		OP	1	0	0	0	0.00
	Unidentified		ni	13	3	7	0	0.05
	Staphylinidae Larvae		NF	207	26	96	0	
	Dermestidae Larvae		NC	225	3	344	990	
	Coleoptera Larvae		ni	0	100	0	0	
		<i>Camponotus sylvaticus</i> (Olivier, 1792)	OM	289	4	104	91	1.14
		<i>Camponotus pilicornis</i> (Roger, 1859)	OM	1	0	0	0	0.00
		<i>Camponotus</i> sp.	OM	0	0	6	0	0.01
		<i>Solenopsis</i> sp.	OM	0	0	2	2	0.01
		<i>Iberoformica subrufa</i> Roger, 1859	OM	97	0	58	30	0.43
	Formicidae	<i>Hypoponera punctatissima</i> (Roger, 1859)	OM	0	0	0	1	0.00
		<i>Pheidole pallidula</i> (Nylander, 1849)	OM	7	0	10	46	0.15
		<i>Plagiolepis grassei</i> Le Masne, 1956	OM	0	0	1	0	0.00
		<i>Plagiolepis</i> sp.	OM	0	0	0	1	0.00
		<i>Tetramorium semilaeve</i> Andre, 1883	OM	32	0	16	0	0.11
		Formicidae Unidentified	OM	6	0	0	0	0.01
	Vespidae	<i>Vespa vulgaris</i> (Linnaeus, 1758)	NF	46	0	0	69	0.27
	Chalcidoidea		NF	1,384	0	22	259	3.89
		Hymenoptera Unidentified	ni	1	0	26	10	0.09
	Apidae	<i>Apis mellifera</i> Linnaeus, 1758	AC	1	0	1	0	0.00

Table S3. SIMPER analysis results when comparing the decomposition stages

Contrast:	Fresh & Bloated							
	average	sd	ratio	ava	avb	cumsum	p	
Chr_albi	0.312	0.376	0.830	0.000	280.571	0.348	0.001	***
Cal_vici	0.263	0.275	0.959	4.538	19.786	0.641	0.001	***
Cal_vomi	0.073	0.113	0.644	0.538	8.286	0.723	0.078	.
Phoridae	0.066	0.104	0.633	0.923	2.214	0.796	0.002	**
Cam_sylv	0.046	0.123	0.375	0.308	2.071	0.848	0.174	
Mus_dome	0.039	0.098	0.397	0.000	72.786	0.891	0.361	
Sciarida	0.027	0.056	0.479	0.615	0.786	0.921	0.185	
For_subr	0.024	0.072	0.338	0.615	0.643	0.948	0.006	**
Sarcopha	0.009	0.017	0.512	0.077	3.500	0.958	0.098	.
Ves_vulg	0.008	0.025	0.298	0.154	0.571	0.966	0.311	
Lar_Call	0.007	0.026	0.277	0.000	15.143	0.974	1.000	
Sphaeroc	0.007	0.026	0.261	0.154	0.000	0.982	0.997	
Luc_seri	0.005	0.008	0.573	0.000	2.071	0.987	0.003	**
Phe_pall	0.004	0.013	0.284	0.154	0.000	0.991	0.625	
Lar_Chry	0.003	0.010	0.277	0.000	6.714	0.995	0.896	
Mus_stab	0.001	0.003	0.446	0.000	1.786	0.996	0.203	
Muscidae	0.001	0.003	0.363	0.000	1.000	0.997	0.952	
Chalcido	0.001	0.003	0.276	0.000	0.071	0.998	0.995	
Dip_ni	0.001	0.001	0.420	0.000	0.214	0.999	0.990	
Fanniida	0.001	0.002	0.314	0.000	0.286	1.000	0.947	
Pollenii	0.000	0.001	0.277	0.000	0.071	1.000	0.995	
Heleomyz	0.000	0.000	0.393	0.000	0.214	1.000	0.997	
Drosophi	0.000	0.000	0.277	0.000	0.071	1.000	0.971	
Sap_dete	0.000	0.000	0.277	0.000	0.071	1.000	1.000	
Contrast:	Fresh & Decomposition							
	average	sd	ratio	ava	avb	cumsum	p	
Cal_vici	0.291	0.221	1.316	4.538	37.727	0.325	0.001	***
Lar_Call	0.146	0.228	0.639	0.000	19.182	0.488	0.288	
Cal_vomi	0.128	0.141	0.906	0.538	22.773	0.631	0.001	***
Chr_albi	0.122	0.258	0.474	0.000	524.500	0.767	0.441	
Phoridae	0.064	0.091	0.703	0.923	4.818	0.839	0.001	***
Mus_dome	0.052	0.147	0.356	0.000	239.409	0.898	0.201	
Sciarida	0.025	0.045	0.562	0.615	1.864	0.926	0.214	
For_subr	0.015	0.049	0.307	0.615	1.182	0.942	0.107	
Cam_sylv	0.008	0.028	0.299	0.308	2.091	0.952	1.000	
Muscidae	0.007	0.013	0.494	0.000	2.818	0.959	0.050	*
Sphaeroc	0.006	0.019	0.336	0.154	0.636	0.966	0.999	
Lar_Chry	0.005	0.017	0.305	0.000	28.409	0.972	0.888	
Sarcopha	0.004	0.011	0.406	0.077	2.864	0.977	0.951	
Ves_vulg	0.004	0.017	0.243	0.154	1.318	0.981	0.682	
Pollenii	0.004	0.008	0.461	0.000	0.955	0.986	0.920	
Heleomyz	0.003	0.009	0.315	0.000	1.409	0.989	0.716	
Phe_pall	0.003	0.009	0.278	0.154	0.045	0.992	0.827	
Dip_ni	0.002	0.005	0.501	0.000	1.773	0.994	0.702	
Luc_seri	0.001	0.004	0.325	0.000	0.455	0.995	0.696	
Fanniida	0.001	0.003	0.321	0.000	0.682	0.997	0.854	
Tan_rugo	0.001	0.003	0.330	0.000	0.364	0.998	0.969	
Lar_Cole	0.000	0.002	0.217	0.000	0.045	0.998	0.865	
Sap_dete	0.000	0.001	0.316	0.000	0.091	0.999	1.000	
Mus_stab	0.000	0.001	0.312	0.000	0.955	0.999	0.900	
Cre_maxi	0.000	0.001	0.300	0.000	0.409	0.999	1.000	
Der_fris	0.000	0.001	0.364	0.000	1.045	1.000	1.000	
Lar_Sarc	0.000	0.001	0.218	0.000	0.909	1.000	0.357	
Drosophi	0.000	0.001	0.218	0.000	0.682	1.000	0.975	
Chalcido	0.000	0.000	0.218	0.000	0.409	1.000	1.000	
Sap_mela	0.000	0.000	0.315	0.000	0.091	1.000	0.995	

Contrast:	Fresh & Late Decomposition							
	average	sd	ratio	ava	avb	cumsum	p	
Lar_Call	0.435	0.309	1.406	0.000	301.889	0.445	0.001	***
Chr_albi	0.135	0.220	0.614	0.000	104.722	0.584	0.363	
Cal_vomi	0.052	0.095	0.549	0.538	18.944	0.637	0.363	
Cal_vici	0.049	0.069	0.711	4.538	19.056	0.687	0.932	
Lar_Chry	0.046	0.131	0.351	0.000	24.167	0.734	0.104	
Pollenii	0.038	0.038	0.998	0.000	11.111	0.773	0.001	***
Sap_dete	0.034	0.039	0.857	0.000	10.222	0.808	0.001	***
Lar_Derm	0.025	0.104	0.245	0.000	4.500	0.834	0.998	
Sciarida	0.023	0.034	0.673	0.615	7.500	0.857	0.355	
Mus_dome	0.022	0.046	0.469	0.000	17.389	0.879	0.653	
Sphaeroc	0.020	0.021	0.966	0.154	8.500	0.900	0.988	
Der_fris	0.019	0.030	0.618	0.000	6.500	0.919	0.840	
Lar_Cole	0.010	0.031	0.332	0.000	1.778	0.930	0.217	
Tan_rugo	0.009	0.013	0.708	0.000	2.278	0.939	0.001	***
Fanniida	0.008	0.013	0.629	0.000	1.889	0.947	0.001	***
Muscidae	0.007	0.013	0.534	0.000	2.833	0.954	0.038	*
Cre_maxi	0.006	0.009	0.703	0.000	1.611	0.961	0.229	
For_subr	0.006	0.008	0.672	0.615	3.167	0.967	0.876	
Phoridae	0.005	0.006	0.852	0.923	1.556	0.972	1.000	
Chalcido	0.005	0.013	0.353	0.000	3.222	0.977	0.977	
Cam_sylv	0.004	0.008	0.534	0.308	2.500	0.981	1.000	
Sap_mela	0.003	0.004	0.664	0.000	1.778	0.984	0.087	
Dip_ni	0.003	0.005	0.630	0.000	0.444	0.987	0.482	
Ves_vulg	0.003	0.005	0.533	0.154	1.278	0.990	0.815	
Sarcopha	0.003	0.003	0.777	0.077	1.556	0.992	0.999	
Luc_seri	0.002	0.003	0.640	0.000	1.333	0.995	0.257	
Heleomyz	0.002	0.004	0.511	0.000	0.833	0.997	0.823	
Drosophi	0.001	0.002	0.293	0.000	0.111	0.997	0.873	
Phe_pall	0.001	0.002	0.324	0.154	0.000	0.998	0.986	
Lar_Sarc	0.001	0.002	0.242	0.000	0.333	0.999	0.138	
Mar_marg	0.001	0.001	0.450	0.000	0.500	0.999	0.361	
Lar_Stap	0.001	0.002	0.289	0.000	0.111	1.000	1.000	
Mus_stab	0.000	0.001	0.269	0.000	0.222	1.000	0.850	
Contrast:	Fresh & Dry remains							
	average	sd	ratio	ava	avb	cumsum	p	
Lar_Derm	0.202	0.227	0.887	0.000	23.508	0.210	0.001	***
Sphaeroc	0.156	0.262	0.598	0.154	37.238	0.373	0.040	*
Cam_sylv	0.095	0.126	0.749	0.308	5.778	0.472	0.001	***
Cal_vici	0.068	0.113	0.601	4.538	0.571	0.543	0.861	
Chalcido	0.064	0.155	0.413	0.000	25.349	0.610	0.113	
Der_fris	0.055	0.076	0.716	0.000	6.508	0.667	0.004	**
Lar_Stap	0.052	0.119	0.435	0.000	5.190	0.721	0.029	*
Phoridae	0.045	0.059	0.770	0.923	3.952	0.768	0.002	**
Lar_Call	0.034	0.113	0.296	0.000	6.302	0.803	1.000	
Sciarida	0.031	0.043	0.725	0.615	3.746	0.835	0.010	**
For_subr	0.021	0.040	0.523	0.615	1.349	0.857	0.004	**
Lar_Chry	0.019	0.076	0.257	0.000	2.254	0.877	0.529	
Mus_dome	0.013	0.046	0.277	0.000	0.889	0.890	0.965	
Phe_pall	0.012	0.026	0.456	0.154	0.952	0.903	0.022	*
Ves_vulg	0.012	0.030	0.394	0.154	0.841	0.915	0.050	*
Sarcopha	0.012	0.016	0.719	0.077	1.222	0.927	0.001	***
Cal_vomi	0.011	0.026	0.414	0.538	0.397	0.938	1.000	
Sap_dete	0.009	0.036	0.245	0.000	1.175	0.947	0.600	
Lar_Cole	0.008	0.045	0.181	0.000	1.063	0.956	0.230	
Cre_maxi	0.008	0.019	0.401	0.000	0.825	0.964	0.062	
Drosophi	0.007	0.030	0.249	0.000	0.921	0.972	0.183	
Chr_albi	0.007	0.026	0.272	0.000	0.952	0.979	1.000	
Heleomyz	0.005	0.012	0.414	0.000	0.730	0.984	0.141	
Dip_ni	0.004	0.010	0.418	0.000	0.349	0.988	0.076	
Tan_rugo	0.003	0.009	0.323	0.000	0.254	0.991	0.575	
Sap_mela	0.002	0.007	0.287	0.000	0.254	0.993	0.286	
Muscidae	0.002	0.007	0.276	0.000	0.111	0.995	0.969	
Pollenii	0.001	0.008	0.162	0.000	0.190	0.997	1.000	
Fanniida	0.001	0.004	0.249	0.000	0.127	0.998	0.944	

Contrast:		Fresh & Late Decomposition						
Mus_stab	0.001	0.004	0.266	0.000	0.111	0.999	0.413	
Luc_seri	0.001	0.004	0.175	0.000	0.048	0.999	0.988	
Mar_marg	0.001	0.003	0.241	0.000	0.079	1.000	0.225	
Contrast:		Bloated & Decomposition						
	average	sd	ratio	ava	avb	cumsum	p	
Chr_albi	0.302	0.334	0.906	280.571	524.500	0.352	0.001	***
Cal_vici	0.200	0.225	0.888	19.786	37.727	0.585	0.002	**
Cal_vomi	0.098	0.123	0.797	8.286	22.773	0.699	0.003	**
Lar_Call	0.084	0.164	0.511	15.143	19.182	0.797	0.852	
Mus_dome	0.077	0.153	0.502	72.786	239.409	0.887	0.034	*
Phoridae	0.036	0.076	0.477	2.214	4.818	0.929	0.111	
Cam_sylv	0.013	0.056	0.224	2.071	2.091	0.944	1.000	
Sciarida	0.012	0.026	0.468	0.786	1.864	0.958	0.977	
Lar_Chry	0.007	0.018	0.401	6.714	28.409	0.966	0.850	
Sarcopha	0.006	0.009	0.642	3.500	2.864	0.973	0.785	
Muscidae	0.005	0.011	0.489	1.000	2.818	0.979	0.200	
Luc_seri	0.003	0.006	0.597	2.071	0.455	0.983	0.007	**
Pollenii	0.003	0.006	0.426	0.071	0.955	0.986	0.960	
Heleomyz	0.002	0.007	0.304	0.214	1.409	0.988	0.884	
Dip_ni	0.002	0.004	0.509	0.214	1.773	0.991	0.842	
Sphaeroc	0.002	0.005	0.319	0.000	0.636	0.993	1.000	
Mus_stab	0.001	0.003	0.490	1.786	0.955	0.994	0.223	
Fanniida	0.001	0.003	0.385	0.286	0.682	0.995	0.854	
Ves_vulg	0.001	0.002	0.373	0.571	1.318	0.996	0.990	
Tan_rugo	0.001	0.003	0.297	0.000	0.364	0.997	0.985	
For_subr	0.001	0.001	0.580	0.643	1.182	0.998	1.000	
Chalcido	0.000	0.002	0.269	0.071	0.409	0.999	1.000	
Lar_Cole	0.000	0.002	0.184	0.000	0.045	0.999	0.897	
Sap_dete	0.000	0.001	0.311	0.071	0.091	0.999	1.000	
Der_fris	0.000	0.001	0.358	0.000	1.045	0.999	1.000	
Cre_maxi	0.000	0.001	0.293	0.000	0.409	1.000	1.000	
Lar_Sarc	0.000	0.001	0.216	0.000	0.909	1.000	0.448	
Drosophi	0.000	0.001	0.264	0.071	0.682	1.000	0.983	
Sap_mela	0.000	0.000	0.313	0.000	0.091	1.000	0.998	
Phe_pall	0.000	0.000	0.217	0.000	0.045	1.000	1.000	
Contrast:		Bloated & Late decomposition						
	average	sd	ratio	ava	avb	cumsum	p	
Lar_Call	0.327	0.296	1.107	15.143	301.889	0.355	0.001	***
Chr_albi	0.234	0.264	0.886	280.571	104.722	0.608	0.006	**
Cal_vici	0.063	0.092	0.682	19.786	19.056	0.676	0.867	
Cal_vomi	0.047	0.078	0.601	8.286	18.944	0.727	0.458	
Mus_dome	0.044	0.085	0.516	72.786	17.389	0.774	0.307	
Lar_Chry	0.037	0.109	0.339	6.714	24.167	0.814	0.171	
Pollenii	0.026	0.031	0.838	0.071	11.111	0.842	0.001	***
Sap_dete	0.023	0.031	0.736	0.071	10.222	0.867	0.030	*
Lar_Derm	0.017	0.078	0.216	0.000	4.500	0.885	1.000	
Sciarida	0.015	0.026	0.597	0.786	7.500	0.902	0.889	
Sphaeroc	0.014	0.017	0.827	0.000	8.500	0.917	0.996	
Der_fris	0.013	0.023	0.561	0.000	6.500	0.931	0.961	
Lar_Cole	0.007	0.023	0.294	0.000	1.778	0.939	0.325	
Tan_rugo	0.006	0.010	0.612	0.000	2.278	0.945	0.019	*
Phoridae	0.006	0.009	0.663	2.214	1.556	0.952	1.000	
Muscidae	0.005	0.010	0.522	1.000	2.833	0.958	0.183	
Fanniida	0.005	0.010	0.541	0.286	1.889	0.963	0.009	**
Cam_sylv	0.005	0.009	0.586	2.071	2.500	0.969	1.000	
Cre_maxi	0.004	0.007	0.610	0.000	1.611	0.974	0.511	
Sarcopha	0.004	0.004	0.896	3.500	1.556	0.978	0.967	
Chalcido	0.004	0.011	0.351	0.071	3.222	0.982	0.987	
For_subr	0.003	0.006	0.526	0.643	3.167	0.986	0.981	
Luc_seri	0.003	0.003	0.874	2.071	1.333	0.989	0.055	
Ves_vulg	0.002	0.004	0.493	0.571	1.278	0.991	0.927	
Sap_mela	0.002	0.004	0.580	0.000	1.778	0.993	0.277	
Dip_ni	0.002	0.003	0.537	0.214	0.444	0.995	0.830	
Heleomyz	0.002	0.003	0.490	0.214	0.833	0.997	0.924	
Mus_stab	0.001	0.002	0.486	1.786	0.222	0.998	0.315	

Contrast:		Fresh & Late Decomposition						
Mar_marg	0.000	0.001	0.427	0.000	0.500	0.999	0.479	
Lar_Sarc	0.000	0.002	0.228	0.000	0.333	0.999	0.203	
Drosophi	0.000	0.001	0.272	0.071	0.111	1.000	0.929	
Lar_Stap	0.000	0.001	0.258	0.000	0.111	1.000	1.000	
Contrast:		Bloated & Dry remains						
	average	sd	ratio	ava	avb	cumsum	p	
Chr_albi	0.232	0.314	0.738	280.571	0.952	0.241	0.006	**
Lar_Derm	0.122	0.180	0.678	0.000	23.508	0.369	0.109	
Cal_vici	0.105	0.174	0.603	19.786	0.571	0.478	0.236	
Sphaeroc	0.104	0.211	0.495	0.000	37.238	0.587	0.380	
Cam_sylv	0.049	0.092	0.540	2.071	5.778	0.638	0.040	*
Chalcido	0.043	0.128	0.332	0.071	25.349	0.683	0.275	
Mus_dome	0.042	0.096	0.435	72.786	0.889	0.726	0.255	
Cal_vomi	0.040	0.078	0.512	8.286	0.397	0.767	0.646	
Der_fris	0.033	0.059	0.564	0.000	6.508	0.802	0.224	
Lar_Stap	0.031	0.086	0.359	0.000	5.190	0.834	0.284	
Phoridae	0.030	0.052	0.572	2.214	3.952	0.865	0.337	
Lar_Call	0.029	0.090	0.319	15.143	6.302	0.895	1.000	
Sciarida	0.018	0.029	0.601	0.786	3.746	0.913	0.828	
Lar_Chry	0.014	0.055	0.261	6.714	2.254	0.928	0.724	
Sarcopha	0.010	0.012	0.801	3.500	1.222	0.938	0.010	**
For_subr	0.008	0.019	0.433	0.643	1.349	0.947	0.671	
Phe_pall	0.006	0.019	0.336	0.000	0.952	0.954	0.332	
Ves_vulg	0.006	0.020	0.305	0.571	0.841	0.960	0.407	
Sap_dete	0.006	0.026	0.211	0.071	1.175	0.966	0.937	
Lar_Cole	0.005	0.033	0.157	0.000	1.063	0.971	0.552	
Cre_maxi	0.005	0.014	0.337	0.000	0.825	0.976	0.450	
Drosophi	0.005	0.022	0.214	0.071	0.921	0.981	0.315	
Luc_seri	0.004	0.006	0.621	2.071	0.048	0.985	0.006	**
Heleomyz	0.003	0.009	0.365	0.214	0.730	0.988	0.611	
Dip_ni	0.003	0.007	0.381	0.214	0.349	0.991	0.589	
Muscidae	0.002	0.005	0.383	1.000	0.111	0.993	0.968	
Mus_stab	0.002	0.004	0.488	1.786	0.111	0.995	0.033	*
Tan_rugo	0.002	0.006	0.266	0.000	0.254	0.996	0.955	
Sap_mela	0.001	0.005	0.245	0.000	0.254	0.998	0.711	
Fanniida	0.001	0.003	0.312	0.286	0.127	0.999	0.975	
Pollenii	0.001	0.006	0.169	0.071	0.190	1.000	1.000	
Mar_marg	0.000	0.002	0.208	0.000	0.079	1.000	0.575	
Contrast:		Decomposition & Late decomposition						
	average	sd	ratio	ava	avb	cumsum	p	
Lar_Call	0.294	0.288	1.021	19.182	301.889	0.330	0.001	***
Chr_albi	0.195	0.262	0.744	524.500	104.722	0.549	0.039	*
Cal_vici	0.083	0.099	0.840	37.727	19.056	0.642	0.651	
Mus_dome	0.061	0.132	0.463	239.409	17.389	0.711	0.098	
Cal_vomi	0.060	0.085	0.708	22.773	18.944	0.778	0.157	
Lar_Chry	0.038	0.106	0.353	28.409	24.167	0.821	0.135	
Pollenii	0.023	0.029	0.808	0.955	11.111	0.847	0.001	***
Sap_dete	0.021	0.028	0.732	0.091	10.222	0.870	0.020	*
Lar_Derm	0.016	0.073	0.214	0.000	4.500	0.887	1.000	
Sciarida	0.014	0.023	0.622	1.864	7.500	0.903	0.958	
Sphaeroc	0.013	0.016	0.809	0.636	8.500	0.918	1.000	
Der_fris	0.012	0.022	0.561	1.045	6.500	0.932	0.987	
Phoridae	0.009	0.012	0.745	4.818	1.556	0.942	1.000	
Muscidae	0.006	0.011	0.597	2.818	2.833	0.949	0.042	*
Lar_Cole	0.006	0.021	0.298	0.045	1.778	0.956	0.402	
Tan_rugo	0.006	0.009	0.615	0.364	2.278	0.962	0.018	*
Fanniida	0.005	0.009	0.550	0.682	1.889	0.968	0.004	**
Cre_maxi	0.004	0.006	0.612	0.409	1.611	0.973	0.629	
Chalcido	0.004	0.011	0.333	0.409	3.222	0.977	1.000	
For_subr	0.003	0.006	0.515	1.182	3.167	0.980	0.997	
Cam_sylv	0.003	0.006	0.434	2.091	2.500	0.983	1.000	
Sarcopha	0.003	0.003	0.874	2.864	1.556	0.986	1.000	
Dip_ni	0.002	0.004	0.622	1.773	0.444	0.989	0.703	
Heleomyz	0.002	0.004	0.520	1.409	0.833	0.991	0.839	
Sap_mela	0.002	0.003	0.565	0.091	1.778	0.993	0.304	

Contrast:		Fresh & Late Decomposition						
Ves_vulg	0.002	0.004	0.452	1.318	1.278	0.995	0.968	
Luc_seri	0.002	0.003	0.635	0.455	1.333	0.998	0.368	
Lar_Sarc	0.001	0.002	0.294	0.909	0.333	0.998	0.049	*
Mus_stab	0.000	0.001	0.391	0.955	0.222	0.999	0.828	
Drosophi	0.000	0.001	0.323	0.682	0.111	0.999	0.936	
Mar_marg	0.000	0.001	0.418	0.000	0.500	1.000	0.550	
Lar_Stap	0.000	0.001	0.257	0.000	0.111	1.000	1.000	
Phe_pall	0.000	0.000	0.217	0.045	0.000	1.000	1.000	
Contrast:		Decomposition & Dry remains						
	average	sd	ratio	ava	avb	cumsum	p	
Cal_vici	0.159	0.170	0.936	37.727	0.571	0.166	0.001	***
Chr_albi	0.120	0.250	0.481	524.500	0.952	0.292	0.438	
Lar_Derm	0.107	0.161	0.666	0.000	23.508	0.405	0.239	
Sphaeroc	0.097	0.199	0.485	0.636	37.238	0.506	0.453	
Cal_vomi	0.081	0.110	0.738	22.773	0.397	0.591	0.002	**
Lar_Call	0.069	0.119	0.582	19.182	6.302	0.663	0.996	
Mus_dome	0.056	0.143	0.393	239.409	0.889	0.722	0.054	.
Cam_sylv	0.043	0.072	0.591	2.091	5.778	0.767	0.089	.
Chalcido	0.038	0.123	0.311	0.409	25.349	0.807	0.457	.
Der_fris	0.029	0.053	0.555	1.045	6.508	0.837	0.408	
Phoridae	0.028	0.043	0.648	4.818	3.952	0.867	0.443	
Lar_Stap	0.027	0.076	0.356	0.000	5.190	0.895	0.399	
Sciarida	0.019	0.028	0.672	1.864	3.746	0.914	0.779	
Lar_Chry	0.015	0.050	0.310	28.409	2.254	0.930	0.803	
For_subr	0.007	0.017	0.436	1.182	1.349	0.938	0.891	
Sarcopha	0.007	0.009	0.709	2.864	1.222	0.945	0.537	
Phe_pall	0.005	0.016	0.329	0.045	0.952	0.951	0.507	
Muscidae	0.005	0.011	0.504	2.818	0.111	0.956	0.062	.
Sap_dete	0.005	0.024	0.214	0.091	1.175	0.962	0.988	.
Ves_vulg	0.005	0.018	0.286	1.318	0.841	0.967	0.692	.
Lar_Cole	0.005	0.030	0.164	0.045	1.063	0.972	0.699	.
Heleomyz	0.004	0.010	0.462	1.409	0.730	0.977	0.200	.
Drosophi	0.004	0.020	0.216	0.682	0.921	0.981	0.452	.
Cre_maxi	0.004	0.012	0.350	0.409	0.825	0.986	0.650	.
Dip_ni	0.003	0.006	0.533	1.773	0.349	0.989	0.175	.
Pollenii	0.003	0.008	0.430	0.955	0.190	0.993	0.997	.
Tan_rugo	0.002	0.006	0.370	0.364	0.254	0.995	0.943	.
Fanniida	0.001	0.003	0.387	0.682	0.127	0.996	0.954	.
Luc_seri	0.001	0.004	0.335	0.455	0.048	0.998	0.891	.
Sap_mela	0.001	0.004	0.247	0.091	0.254	0.999	0.879	.
Mus_stab	0.001	0.002	0.324	0.955	0.111	0.999	0.670	.
Mar_marg	0.000	0.002	0.206	0.000	0.079	1.000	0.737	.
Lar_Sarc	0.000	0.001	0.218	0.909	0.000	1.000	0.475	.
Contrast:		Late Decomposition & Dry remains						
	average	sd	ratio	ava	avb	cumsum	p	
Lar_Call	0.342	0.287	1.193	301.889	6.302	0.368	0.001	***
Chr_albi	0.114	0.198	0.577	104.722	0.952	0.491	0.532	
Sphaeroc	0.065	0.128	0.510	8.500	37.238	0.561	0.920	
Lar_Derm	0.061	0.094	0.653	4.500	23.508	0.627	0.992	
Lar_Chry	0.042	0.113	0.369	24.167	2.254	0.672	0.047	*
Cal_vomi	0.040	0.076	0.527	18.944	0.397	0.715	0.669	
Cal_vici	0.035	0.061	0.567	19.056	0.571	0.752	1.000	
Chalcido	0.027	0.098	0.278	3.222	25.349	0.782	0.736	
Pollenii	0.026	0.027	0.986	11.111	0.190	0.810	0.001	***
Sap_dete	0.023	0.027	0.859	10.222	1.175	0.835	0.002	**
Mus_dome	0.020	0.041	0.496	17.389	0.889	0.857	0.858	
Der_fris	0.020	0.028	0.705	6.500	6.508	0.878	0.939	
Sciarida	0.017	0.022	0.782	7.500	3.746	0.897	0.881	
Cam_sylv	0.016	0.019	0.833	2.500	5.778	0.914	1.000	
Lar_Stap	0.013	0.033	0.377	0.111	5.190	0.928	0.961	
Phoridae	0.009	0.013	0.697	1.556	3.952	0.937	1.000	
Lar_Cole	0.009	0.025	0.357	1.778	1.063	0.947	0.201	
Tan_rugo	0.006	0.009	0.714	2.278	0.254	0.953	0.001	***
For_subr	0.006	0.009	0.652	3.167	1.349	0.959	0.982	
Muscidae	0.006	0.010	0.556	2.833	0.111	0.965	0.073	.

Contrast:	Fresh & Late Decomposition							
Fanniida	0.005	0.009	0.593	1.889	0.127	0.971	0.001	***
Cre_maxi	0.005	0.006	0.711	1.611	0.825	0.976	0.524	
Ves_vulg	0.004	0.008	0.436	1.278	0.841	0.980	0.913	
Sarcopha	0.003	0.004	0.867	1.556	1.222	0.984	1.000	
Heleomyz	0.003	0.005	0.576	0.833	0.730	0.986	0.872	
Sap_mela	0.002	0.004	0.651	1.778	0.254	0.989	0.075	.
Drosophi	0.002	0.010	0.243	0.111	0.921	0.992	0.773	
Phe_pall	0.002	0.007	0.318	0.000	0.952	0.994	0.973	
Dip_ni	0.002	0.003	0.668	0.444	0.349	0.996	0.893	
Luc_seri	0.002	0.003	0.634	1.333	0.048	0.998	0.375	
Mar_marg	0.001	0.001	0.478	0.500	0.079	0.999	0.237	
Mus_stab	0.001	0.002	0.347	0.222	0.111	1.000	0.862	
Lar_Sarc	0.000	0.002	0.240	0.333	0.000	1.000	0.075	.

Table S4. SIMPER analysis results when comparing the four seasons

Contrast:	Autumn & Winter							
	average	sd	ratio	ava	avb	cumsum	p	
Lar_Call	0.176	0.241	0.730	11.794	77.559	0.184	0.008	**
Chr_albi	0.141	0.283	0.498	356.794	1.647	0.332	0.209	
Cal_vici	0.097	0.164	0.589	1.324	17.382	0.433	0.365	
Cam_sylv	0.075	0.117	0.644	8.500	0.118	0.512	0.001	***
Chalcido	0.065	0.167	0.389	40.706	0.000	0.580	0.010	**
Lar_Derm	0.053	0.115	0.466	6.618	0.088	0.636	0.999	
Lar_Stap	0.049	0.111	0.443	6.088	0.765	0.687	0.001	***
Cal_vomi	0.041	0.072	0.569	0.441	8.941	0.730	0.680	
Phoridae	0.041	0.069	0.595	2.529	2.941	0.773	0.002	**
Der_fris	0.032	0.064	0.501	1.882	6.118	0.807	0.236	
Sphaeroc	0.021	0.058	0.368	2.324	2.235	0.829	1.000	
Sap_dete	0.019	0.041	0.465	0.088	3.971	0.849	0.001	***
For_subr	0.018	0.050	0.364	2.853	0.000	0.868	0.001	***
Lar_Chry	0.018	0.084	0.210	28.441	0.000	0.886	0.702	
Sciarida	0.016	0.034	0.473	0.441	2.029	0.903	0.967	
Lar_Cole	0.014	0.047	0.296	0.000	2.941	0.917	0.001	***
Mus_dome	0.014	0.033	0.416	38.735	0.000	0.932	0.971	
Pollenii	0.012	0.026	0.459	0.029	2.882	0.944	0.028	*
Sarcopha	0.008	0.015	0.509	2.059	0.176	0.952	0.103	
Cre_maxi	0.008	0.018	0.432	1.206	0.618	0.960	0.003	**
Ves_vulg	0.005	0.018	0.300	1.353	0.000	0.966	0.628	
Tan_rugo	0.005	0.010	0.493	0.265	0.735	0.971	0.001	***
Muscidae	0.005	0.011	0.441	0.559	1.088	0.976	0.076	
Drosophi	0.005	0.022	0.220	0.824	0.029	0.982	0.387	
Heleomyz	0.003	0.009	0.356	1.059	0.147	0.985	0.711	
Dip_ni	0.003	0.006	0.537	0.206	0.500	0.988	0.291	
Fanniida	0.003	0.008	0.395	0.059	0.794	0.992	0.083	
Phe_pall	0.002	0.009	0.253	0.206	0.000	0.994	0.977	
Sap_mela	0.002	0.006	0.396	0.029	0.588	0.996	0.061	
Luc_seri	0.002	0.005	0.368	0.647	0.059	0.999	0.254	
Mar_marg	0.001	0.002	0.253	0.000	0.118	0.999	0.312	
Mus_stab	0.001	0.002	0.232	0.088	0.000	1.000	0.925	
Lar_Sarc	0.000	0.002	0.231	0.765	0.000	1.000	0.006	**
Contrast:	Autumn & Spring							
	average	sd	ratio	ava	avb	cumsum	p	
Sphaeroc	0.179	0.253	0.705	2.324	65.444	0.194	0.001	***
Chr_albi	0.132	0.266	0.496	356.794	9.722	0.338	0.303	
Cal_vici	0.111	0.175	0.633	1.324	25.194	0.459	0.092	
Lar_Call	0.089	0.197	0.451	11.794	92.972	0.555	0.943	
Lar_Derm	0.065	0.108	0.602	6.618	9.556	0.626	0.988	
Cal_vomi	0.056	0.107	0.525	0.441	18.639	0.687	0.120	
Chalcido	0.050	0.149	0.339	40.706	0.611	0.742	0.247	
Cam_sylv	0.041	0.063	0.649	8.500	2.889	0.787	0.122	
Lar_Stap	0.037	0.082	0.454	6.088	2.667	0.827	0.044	*
Sciarida	0.032	0.035	0.907	0.441	9.472	0.862	0.001	***
Phoridae	0.025	0.037	0.687	2.529	4.278	0.889	0.765	
Lar_Chry	0.016	0.076	0.210	28.441	0.000	0.907	0.739	
Mus_dome	0.013	0.031	0.421	38.735	0.806	0.921	0.966	
For_subr	0.012	0.024	0.491	2.853	1.611	0.934	0.157	
Der_fris	0.012	0.016	0.728	1.882	2.889	0.947	1.000	
Sarcopha	0.007	0.009	0.758	2.059	1.722	0.954	0.297	
Heleomyz	0.006	0.011	0.564	1.059	1.500	0.961	0.003	**
Cre_maxi	0.006	0.013	0.440	1.206	0.694	0.967	0.248	
Pollenii	0.005	0.012	0.455	0.029	3.694	0.973	0.935	
Sap_dete	0.004	0.008	0.450	0.088	3.278	0.977	0.997	
Drosophi	0.003	0.017	0.203	0.824	0.000	0.981	0.674	
Ves_vulg	0.003	0.009	0.350	1.353	0.000	0.984	0.948	
Muscidae	0.003	0.007	0.448	0.559	1.111	0.987	0.803	
Phe_pall	0.003	0.008	0.360	0.206	0.278	0.991	0.952	
Tan_rugo	0.002	0.006	0.434	0.265	0.722	0.993	0.832	
Luc_seri	0.002	0.005	0.502	0.647	0.778	0.996	0.071	

Dip_ni	0.001	0.004	0.319	0.206	0.083	0.997	0.999	
Fanniida	0.001	0.002	0.400	0.059	0.500	0.998	0.992	
Sap_mela	0.001	0.002	0.279	0.029	0.750	0.999	0.986	
Mar_marg	0.000	0.001	0.298	0.000	0.278	0.999	0.700	
Mus_stab	0.000	0.002	0.234	0.088	0.028	1.000	0.972	
Lar_Sarc	0.000	0.001	0.231	0.765	0.000	1.000	0.106	
Contrast:	Autumn & Summer							
	average	sd	ratio	ava	avb	cumsum	p	
Chr_albi	0.227	0.297	0.762	356.794	187.500	0.259	0.001	***
Lar_Derm	0.186	0.208	0.894	6.618	38.077	0.472	0.001	***
Mus_dome	0.079	0.140	0.565	38.735	204.192	0.562	0.001	***
Chalcido	0.074	0.163	0.456	40.706	9.962	0.647	0.005	**
Lar_Chry	0.053	0.106	0.501	28.441	12.654	0.708	0.001	***
Cam_sylv	0.045	0.080	0.566	8.500	3.500	0.759	0.055	.
Lar_Stap	0.037	0.093	0.399	6.088	0.000	0.801	0.106	
Der_fris	0.035	0.050	0.701	1.882	6.692	0.841	0.118	
Phoridae	0.025	0.040	0.613	2.529	3.308	0.870	0.737	
For_subr	0.014	0.034	0.424	2.853	1.154	0.886	0.050	*
Ves_vulg	0.014	0.029	0.475	1.353	2.654	0.902	0.001	***
Sphaeroc	0.013	0.050	0.266	2.324	0.154	0.917	1.000	
Phe_pall	0.012	0.025	0.457	0.206	1.769	0.930	0.001	***
Drosophi	0.009	0.028	0.323	0.824	1.808	0.940	0.017	*
Sarcopha	0.008	0.012	0.700	2.059	3.077	0.950	0.037	*
Cal_vici	0.008	0.034	0.228	1.324	0.077	0.959	1.000	
Lar_Call	0.005	0.018	0.306	11.794	3.077	0.965	1.000	
Cre_maxi	0.005	0.014	0.359	1.206	0.115	0.971	0.399	
Sciarida	0.005	0.019	0.264	0.441	0.231	0.976	1.000	
Dip_ni	0.004	0.008	0.509	0.206	1.731	0.981	0.014	*
Heleomyz	0.002	0.008	0.299	1.059	0.000	0.984	0.932	
Cal_vomi	0.002	0.015	0.151	0.441	0.000	0.987	1.000	
Muscidae	0.002	0.005	0.458	0.559	1.462	0.989	0.945	
Tan_rugo	0.002	0.006	0.345	0.265	0.192	0.992	0.901	
Mus_stab	0.002	0.004	0.555	0.088	2.038	0.994	0.001	***
Luc_seri	0.002	0.005	0.399	0.647	0.538	0.996	0.376	
Fanniida	0.001	0.004	0.293	0.059	0.538	0.997	0.945	
Sap_dete	0.001	0.003	0.334	0.088	0.192	0.999	1.000	
Sap_mela	0.001	0.003	0.165	0.029	0.077	0.999	0.975	
Lar_Sarc	0.000	0.001	0.227	0.765	0.000	1.000	0.207	
Pollenii	0.000	0.001	0.270	0.029	0.077	1.000	1.000	
Contrast:	Winter & Spring							
	average	sd	ratio	ava	avb	cumsum	p	
Lar_Call	0.210	0.252	0.832	77.559	92.972	0.239	0.001	***
Sphaeroc	0.186	0.254	0.733	2.235	65.444	0.452	0.001	***
Cal_vici	0.149	0.187	0.798	17.382	25.194	0.623	0.001	***
Cal_vomi	0.077	0.107	0.717	8.941	18.639	0.710	0.001	***
Lar_Derm	0.046	0.094	0.495	0.088	9.556	0.763	0.999	
Sciarida	0.033	0.037	0.911	2.029	9.472	0.801	0.001	***
Der_fris	0.025	0.051	0.497	6.118	2.889	0.830	0.719	
Phoridae	0.024	0.035	0.677	2.941	4.278	0.858	0.845	
Cam_sylv	0.017	0.037	0.457	0.118	2.889	0.877	1.000	
Sap_dete	0.017	0.033	0.518	3.971	3.278	0.897	0.006	**
Chr_albi	0.014	0.030	0.450	1.647	9.722	0.912	1.000	
Pollenii	0.014	0.022	0.629	2.882	3.694	0.928	0.001	***
Lar_Stap	0.011	0.021	0.535	0.765	2.667	0.941	0.974	
Lar_Cole	0.011	0.037	0.297	2.941	0.000	0.953	0.079	.
Heleomyz	0.005	0.009	0.556	0.147	1.500	0.959	0.044	*
Sarcopha	0.005	0.007	0.759	0.176	1.722	0.965	0.982	
Muscidae	0.005	0.010	0.473	1.088	1.111	0.970	0.132	
For_subr	0.004	0.008	0.518	0.000	1.611	0.975	0.997	
Cre_maxi	0.004	0.006	0.644	0.618	0.694	0.980	0.804	
Tan_rugo	0.003	0.007	0.515	0.735	0.722	0.984	0.303	
Fanniida	0.003	0.007	0.470	0.794	0.500	0.987	0.071	.
Phe_pall	0.002	0.008	0.294	0.000	0.278	0.990	0.974	
Sap_mela	0.002	0.005	0.480	0.588	0.750	0.993	0.033	*
Dip_ni	0.002	0.003	0.591	0.500	0.083	0.995	0.951	
Luc_seri	0.001	0.003	0.465	0.059	0.778	0.997	0.745	

Chalcido	0.001	0.003	0.330	0.000	0.611	0.998	1.000	
Mus_dome	0.001	0.003	0.396	0.000	0.806	0.999	1.000	
Mar_marg	0.001	0.002	0.382	0.118	0.278	1.000	0.020	*
Drosophi	0.000	0.001	0.152	0.029	0.000	1.000	1.000	
Mus_stab	0.000	0.000	0.168	0.000	0.028	1.000	0.999	
Contrast: Winter & Summer								
	average	sd	ratio	ava	avb	cumsum	p	
Lar_Derm	0.193	0.217	0.893	0.088	38.077	0.201	0.001	***
Lar_Call	0.153	0.225	0.682	77.559	3.077	0.360	0.148	
Chr_albi	0.128	0.216	0.590	1.647	187.500	0.493	0.380	
Cal_vici	0.079	0.145	0.547	17.382	0.077	0.575	0.753	
Mus_dome	0.074	0.147	0.500	0.000	204.192	0.652	0.001	***
Der_fris	0.052	0.067	0.766	6.118	6.692	0.706	0.001	***
Lar_Chry	0.040	0.083	0.481	0.000	12.654	0.747	0.031	*
Cal_vomi	0.034	0.064	0.534	8.941	0.000	0.783	0.846	
Chalcido	0.028	0.081	0.343	0.000	9.962	0.811	0.705	
Phoridae	0.027	0.056	0.477	2.941	3.308	0.839	0.544	
Cam_sylv	0.024	0.044	0.534	0.118	3.500	0.864	0.978	
Sap_dete	0.016	0.036	0.451	3.971	0.192	0.881	0.047	*
Ves_vulg	0.012	0.029	0.434	0.000	2.654	0.894	0.001	***
Lar_Cole	0.012	0.041	0.295	2.941	0.000	0.906	0.078	.
Sciarida	0.012	0.025	0.475	2.029	0.231	0.919	0.998	
Phe_pall	0.011	0.026	0.439	0.000	1.769	0.931	0.001	***
Pollenii	0.011	0.023	0.465	2.882	0.077	0.942	0.158	
Sphaeroc	0.010	0.021	0.476	2.235	0.154	0.952	1.000	
Sarcopha	0.007	0.009	0.716	0.176	3.077	0.959	0.537	
Drosophi	0.006	0.022	0.271	0.029	1.808	0.965	0.237	
For_subr	0.006	0.012	0.503	0.000	1.154	0.971	0.961	
Dip_ni	0.005	0.008	0.576	0.500	1.731	0.976	0.002	**
Muscidae	0.004	0.009	0.425	1.088	1.462	0.980	0.373	
Fanniida	0.004	0.008	0.452	0.794	0.538	0.984	0.031	*
Tan_rugo	0.003	0.007	0.435	0.735	0.192	0.987	0.485	
Lar_Stap	0.003	0.013	0.241	0.765	0.000	0.991	1.000	
Cre_maxi	0.003	0.006	0.491	0.618	0.115	0.994	0.932	
Sap_mela	0.003	0.006	0.421	0.588	0.077	0.996	0.052	.
Mus_stab	0.002	0.004	0.526	0.000	2.038	0.998	0.001	***
Luc_seri	0.001	0.002	0.334	0.059	0.538	0.999	0.974	
Mar_marg	0.001	0.002	0.251	0.118	0.000	1.000	0.434	
Heleomyz	0.001	0.002	0.251	0.147	0.000	1.000	1.000	
Contrast: Spring & Summer								
	average	sd	ratio	ava	avb	cumsum	p	
Sphaeroc	0.159	0.235	0.675	65.444	0.154	0.173	0.002	**
Lar_Derm	0.142	0.168	0.841	9.556	38.077	0.327	0.004	**
Chr_albi	0.112	0.192	0.586	9.722	187.500	0.450	0.545	
Cal_vici	0.091	0.152	0.601	25.194	0.077	0.549	0.519	
Lar_Call	0.083	0.192	0.433	92.972	3.077	0.640	0.964	
Mus_dome	0.066	0.141	0.466	0.806	204.192	0.711	0.003	**
Cal_vomi	0.049	0.098	0.500	18.639	0.000	0.765	0.366	
Lar_Chry	0.030	0.064	0.475	0.000	12.654	0.798	0.244	
Sciarida	0.028	0.031	0.904	9.472	0.231	0.828	0.023	*
Der_fris	0.026	0.038	0.693	2.889	6.692	0.856	0.646	
Chalcido	0.023	0.070	0.332	0.611	9.962	0.882	0.803	
Cam_sylv	0.020	0.030	0.681	2.889	3.500	0.904	0.999	
Phoridae	0.018	0.025	0.713	4.278	3.308	0.923	0.991	
Ves_vulg	0.009	0.021	0.421	0.000	2.654	0.933	0.093	.
Phe_pall	0.009	0.019	0.450	0.278	1.769	0.942	0.045	*
Lar_Stap	0.008	0.017	0.462	2.667	0.000	0.951	0.987	
Sarcopha	0.007	0.007	0.890	1.722	3.077	0.958	0.581	
For_subr	0.006	0.010	0.638	1.611	1.154	0.965	0.966	
Pollenii	0.005	0.011	0.476	3.694	0.077	0.970	0.922	
Drosophi	0.005	0.018	0.258	0.000	1.808	0.975	0.436	
Heleomyz	0.004	0.008	0.507	1.500	0.000	0.980	0.329	
Sap_dete	0.003	0.008	0.438	3.278	0.192	0.984	0.990	
Dip_ni	0.003	0.006	0.496	0.083	1.731	0.987	0.392	
Muscidae	0.003	0.006	0.462	1.111	1.462	0.990	0.887	
Cre_maxi	0.002	0.005	0.498	0.694	0.115	0.992	0.991	

Mus_stab	0.002	0.003	0.527	0.028	2.038	0.994	0.016	*
Luc_seri	0.001	0.003	0.482	0.778	0.538	0.996	0.660	
Fanniida	0.001	0.003	0.439	0.500	0.538	0.997	0.877	
Tan_rugo	0.001	0.003	0.412	0.722	0.192	0.999	0.991	
Sap_mela	0.001	0.003	0.300	0.750	0.077	1.000	0.903	
Mar_marg	0.000	0.001	0.305	0.278	0.000	1.000	0.700	

Dynamic of the entomosarcosaprophagous community

1. Order Diptera

Adults of the order Diptera were dominant in abundance in all the studied seasons, meanwhile its larvae were the most abundant preimaginal in spring, winter and autumn. Among families of this order, Calliphoridae accounted for 65.19% of the total sarcosaprophagous adults recollected. Next, but with a much lower abundance, was Muscidae, representing 16.07%, and the Sphaeroceridae family with 5.88%, meanwhile other Diptera families represented less than 2.38% of the total (Table S2, Figure S1).

1.1. Family Calliphoridae

Chrysomya albiceps (Wiedemann 1819) was the most abundant species (58.15% of the total adults collected) and was present in the four seasons. It constitutes the predominant species during the autumn and summer, when it was collected since the bloated stage. In both seasons, a second peak of abundance was observed during the dry remains stage, corresponding to the emergence of the generation bred in the corpse. During winter and spring, *C. albiceps* was collected since the decomposition stage and the maximum abundance was reached during late decomposition (Figure S1).

Calliphora vicina Robineau-Desvoidy 1830 and *Calliphora vomitoria* (L. 1758), with 3.98% and 2.31% of the total adults, respectively, were mainly represented in the colder seasons, winter and spring, when they reached their maximum abundance in the decomposition stage. During the autumn, *C. vicina* and *C. vomitoria* were collected in very low numbers and, in summer, their presence was vestigial and null, respectively.

The rest of species (*Pollenia* sp., *Lucilia sericata* (Meigen 1826), *Lucilia* sp. and *L. caesar* (L. 1758)) were registered with an even lower abundance (Table S2, Figure S1).

1.2. Family Muscidae

Musca domestica Linnaeus, 1758 was the most abundant species (15.55%), collected mainly during the warmer seasons of autumn and summer, appearing in both cases since the bloated stage (Figure S1).

The rest of species, *Muscina stabulans* Fallen 1817, *Muscina levida* (Harrys 1780), *Hydrotaea meridionalis* Portschinsky 1882 and *Muscina prolapsa* (Harrys 1780), were collected with a markedly lower abundance (Table S2, Figure S1).

1.3. Other Diptera families of forensic interest

Sphaeroceridae, Phoridae and Sarcophagidae families had a smaller representation, although they appeared in all seasons. The Sphaeroceridae had its biggest presence in spring. The Phoridae showed similar abundances in the four seasons, although it was slightly more abundant also in spring. However, it should be emphasized that the latter was the second in abundance of all the registered families during the winter, when it appeared from the fresh stage (Table S2, Figure S1).

Finally, the Sarcophagidae family deserves a mention for its recognized forensic interest, although in our case it did not reach significant abundances (0.51% of the total adults). It was present with similar abundance in summer, autumn and spring, being only symbolic in winter (Table S2, Figure S1).

2. Order Coleoptera

Coleoptera adults constituted the second order in abundance in winter and spring, and their larvae were the most abundant preimaginals in summer. Within this order, the most abundant family was Dermestidae (1.37% of the total adults registered in the study), followed by the families Histeridae (1.11%) and Staphylinidae (0.34%). The remaining families showed less than 0.46% of the total abundance (Table S2, Figure S1).

2.1. Family Dermestidae

This family reached its highest abundance in winter. The most representative species was *Dermestes frischii* Kugelann 1792 (1.29%), distributed among the four seasons, appearing from the decomposition stage in autumn and summer and from the late decomposition in winter and spring, being always most abundant in the dry remains (Table S2, Figure S1). *Dermestes undulatus* Brahm 1790 was the second one, with a 0.07%, while the remaining specimens of this family were collected in even lower abundance. The dermestid larvae stand out for their relative abundance (1,562 individuals). They appeared only in the dry remains stage, except in the case of summer when they also appeared in the late decomposition. However, it should be noted that the appearance of larvae in winter was scarce (Table S2, Figure S1).

2.2. Family Histeridae

The predominant species was *Saprinus detersus* (Illiger 1807). Its greatest abundance was observed during the winter, closely followed by the spring, and its presence was more important during the late decomposition and the dry

remains stage. The other species found in this family had lower abundances, some of them being represented by only one specimen (Table S2, Figure S1).

2.3. Other Coleoptera families of forensic interest

Our results place the Staphylinidae family as the third most abundant among Coleoptera. *Creophilus maxillosus* (L. 1758), the most abundant species within this family, was usually present from decomposition stage onwards, being much less abundant in summer (Table S2). As a general rule, the rest of Coleoptera had a very low abundance and were mainly found during the most advanced decomposition stages (Table S2, Figure S1).

3. Order Hymenoptera

It was recorded more abundantly in autumn, and with very low abundances in winter (just 4 individuals). The taxa presented in our samples belonged to the superfamily Chalcidoidea (3.89%) and family Formicidae (1.88%), followed in much lower abundance by the families Vespidae and Apidae (less than the 0.27% of the whole adult sarcosaprophagous community) (Table S2, Figure S1).

3.1. Superfamily Chalcidoidea

In general, they were usually associated with the dry remains stage mainly in autumn and summer (Table S2, Figure S1). It should be noted that during the dry remains stage of the autumn, 1,172 individuals of this group were collected exclusively on day 37 (Table S2, Figure S1).

3.2. Family Formicidae

None of the species of this family seemed to be associated with any particular decomposition stage, although they presented its highest number of individuals in the dry remains. Formicidae specimens were collected in all seasons but they were much less abundant in winter (Figure S1).

Camponotus sylvaticus (Olivier 1792) was the most abundant species in all seasons, being present from the first few days until the end of sampling. It was followed in abundance by *Iberoformica subrufa* Roger 1859 and *Pheidole pallidula* (Nylander 1849) (Table S2). The remaining species were collected in very low numbers (Table S2, Figure S1).

Figure S1. Abundance and dynamic of the family Calliphoridae, *Musca domestica*, family Dermestidae, Histeridae and Formicidae during the four sampling seasons.

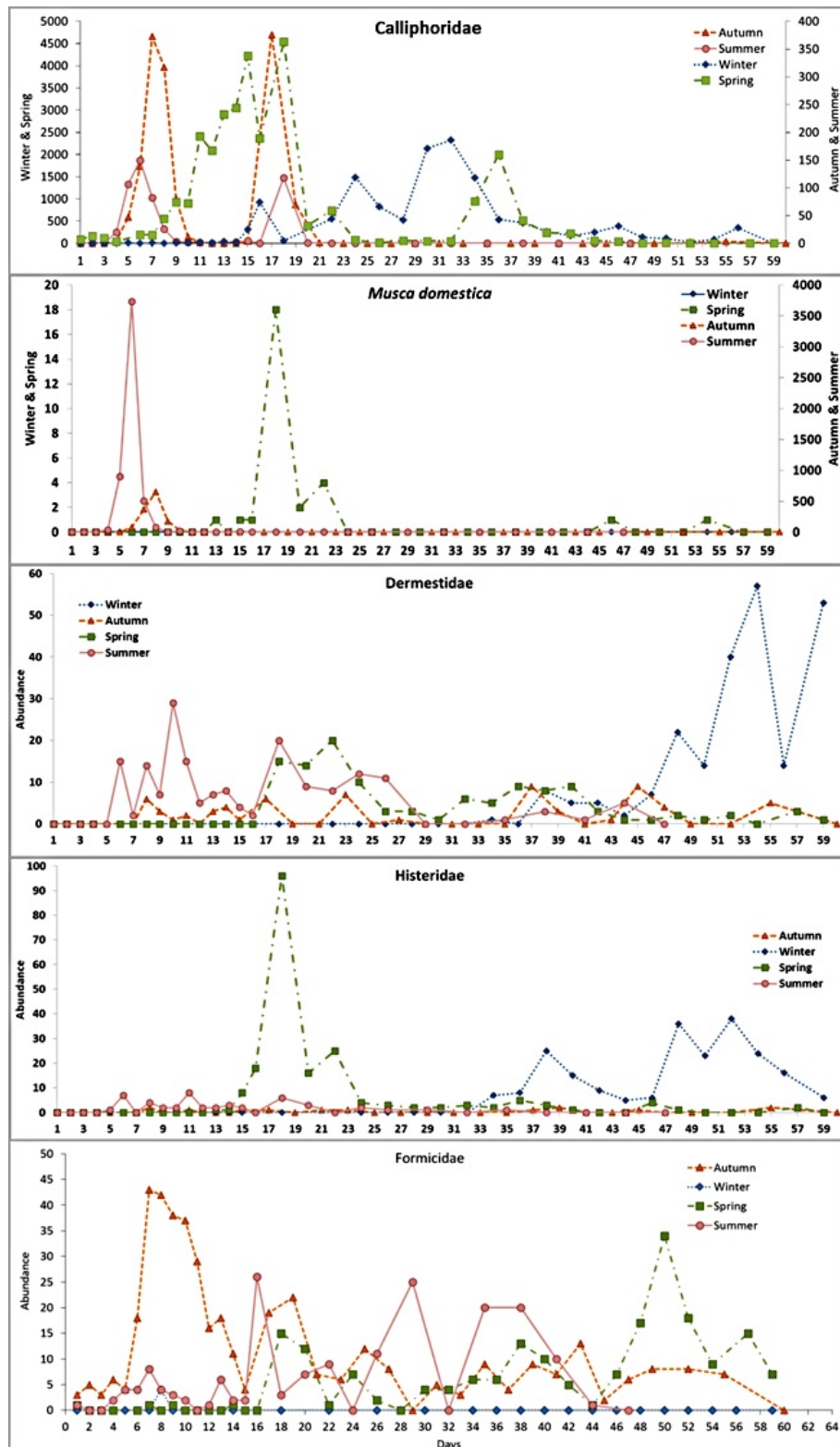


Figura S1. Abundancia y dinámica de la familia Calliphoridae, *Musca domestica*, familia Dermestidae, Histeridae y Formicidae durante las cuatro estaciones muestreadas.