

Table S1. Summary of taxonomic groups used in this study with Genbank accession numbers.

Order	Family	Subfamily	Species	Accession Number
Outgroup:				
Coleoptera	Meloidae		<i>Meloe violaceus</i>	GATA02000000
Diptera	Chloropidae		<i>Lipara lucens</i>	GAZD02000000
Hymenoptera	Braconidae		<i>Cotesia vestalis</i>	GAUP02000000
Lepidoptera	Papilionidae		<i>Parides eurimedes</i>	GAXH02000000
Mecoptera	Panorpidae		<i>Panorpa vulgaris</i>	GAUH02000000
Siphonaptera	Pulicidae		<i>Ctenocephalides felis</i>	GAYP02000000
Strepsiptera	Stylopidae		<i>Stylops melittae</i>	GAZM02000000
Trichoptera	Limnephilidae		<i>Platycentropus radiatus</i>	GASS02000000
Ingroup:				
Megaloptera	Corydalidae	Corydalinae	<i>Corydalus cornutus</i>	GATG02000000
	Corydalidae	Corydalinae	<i>Corydalinae sp.</i>	GADH01000000
	Corydalidae	Chauliodinae	<i>Ctenochauliodes similis</i>	This study
	Sialidae		<i>Sialis lutaria</i>	GABK01000000
Neuroptera	Chrysopidae		<i>Pseudomallada prasinus</i>	GAVV02000000
	Chrysopidae		<i>Chrysopa pallens</i>	GAGF01000000
	Chrysopidae		<i>Chrysopa nipponensis</i>	SRR1653342
	Coniopterygidae		<i>Conwentzia psociformis</i>	GAYH02000000
	Myrmeleontidae		<i>Euroleon nostras</i>	GAXW02000000
	Nevrorthidae		<i>Nevrorthus apatelios</i>	GACU01000000
	Osmylidae		<i>Osmylus fulvicephalus</i>	GAYC02000000
Raphidioptera	Inocelliidae		<i>Inocellia crassicornis</i>	GAZH02000000
	Raphidiidae		<i>Xanthostigma xanthostigma</i>	GAUI02000000
	Raphidiidae		<i>Raphidia ariadne</i>	GACX01000000