

Supplementary table 3: Accessions numbers of the sequences used in phylogenetic and comparative analyses. Blue background = new strains from chewing lice. Green background = taxa included into the phylogenetic analyse (2 gene = fbpA_coxA matrix, multigene = multigene matrix). SG = supergroup. * = assembly done in this study based on the SRA data. MLST = genes retrieved from pubMLST database (see methods).

2 gene	multi gene	Host species	Host taxon	Abbrev.	SG	Accession number				
						NCBI			MLST	
						SRA*/genome assembly	fbpA	coxA	fbpA	coxA
		<i>Alcedoecus</i> sp.	louse	wAlce	F	SRR5308110*				
		<i>Menacanthus eurysternus</i>	louse	wMeur1	F	BioProject: PRJNA768995				
		<i>Menacanthus eurysternus</i>	louse	wMeur2	F	BioProject: PRJNA768995				
		<i>Meromenopon meropis</i>	louse	wMmer	F	SRR8334265*				
		<i>Penenirmus auritus</i>	louse	wPa ur	F	SRR5308137*				
		<i>Acisoma panorpoides panorpoides</i>	dragonfly		F		KC915265	KC915236		
		<i>Amblyomma americanum</i>	tick		F		HM061163	HM061159		
		<i>Anax guttatus</i>	dragonfly		F		KC915285	KC915256		
		<i>Apilitermes longiceps</i>	termites		F		EF417907	EF417914		
		<i>Apoica</i> sp.	wasp		F		EU126428	EU126210		
		<i>Armadillidium vulgare</i>	carpenter bug	wVulC	B	ALWU00000000				
		<i>Atemnus politus</i>	pseudoscorpion	wAPoK3	S	JAAXCS00000000				
		<i>Atemnus politus</i>	pseudoscorpion	wAPoK5	S	WQM000000000				
		<i>Brachythemis contaminata</i>	dragonfly		F		KC915280	KC915250		
		<i>Brugia malayi</i>	filarial nematode	wBm	D	NC_006833				
		<i>Carposina sasakii</i>	moth	wCa uA	A	NZ_CP041215				
		<i>Cavitermes tuberosus</i>	termites		F		MF953231	MF953228		
		<i>Chorthippus parallelus</i>	grasshopper		F		JN698879	JN698878		
		<i>Chrysocoris stollii</i>	jewel bugs		F				410	226
		<i>Cimex hemipterus</i>	bed bug	wChem	T	NZ_CP061738				
		<i>Cimex lectularius</i>	bed bug	wCle	F	NZ_AP013028				
		<i>Cimex lectularius</i>	bed bug	wCle	F		DQ842349	DQ842275		
		<i>Cruorifilaria tubero cauda</i>	filarial nematode	wCtub	J	CP046579				
		<i>Ctenocephalides felis</i>	flea	wCfeJ	?	NZ_CP051157				
		<i>Ctenocephalides felis</i>	flea	wCfeT	?	NZ_CP051156				
		<i>Culex quinquefasciatus</i>	mosquito	wPi p	B	NC_010981				
		<i>Dipetalonema caudispina</i>	filarial nematode	wDcau	J	CP046580				
		<i>Diplacodes trivialis</i>	dragonfly		F		KC915276	KC915246		
		<i>Drosophila melanogaster</i>	fly	wMel	A	NC_002978				
		<i>Drosophila simulans</i>	fly	wRi	A	NC_012416				
		<i>Drosophila simulans</i>	fly	wNo	B	NC_021084				
		<i>Epophthalmia vittata</i>	dragonfly		F		KC915284	KC915255		
		<i>Folsomia candida</i>	springtail	wFol	E	NZ_CP015510				
		<i>Icosta</i> sp.	fly		F		MF461509	MF461499		
		<i>Ictinogomphus rapax</i>	dragonfly		F		KC915282	KC915252		
		<i>Laodelphax striatellus</i>	planthopper	wStri	B	MUIX00000000				
		<i>Madathamugadia hiepei</i>	filarial nematode	wMhi	F	NZ_WQMP00000000				
		<i>Madathamugadia hiepei</i>	filarial nematode	wMhi	F		JQ888342	JQ888307		
		<i>Mansonella (Cutifilaria) perforata</i>	filarial nematode		F		KU255337	KU255278		
		<i>Melophagus ovinus</i>	fly	wMelo	F	CACREU02				
		<i>Mengenilla moldrzyki</i>	Strepsiptera	wMen	F	SRX095325*				
		<i>Nasutitermes ephratae</i>	termites		F		KX036780	KX024837		
		<i>Nasutitermes itapocuensis</i>	termites		F		KX036782	KX024839		
		<i>Nasutitermes jaraguae</i>	termites		F		KX036784	KX024841		
		<i>Neotroponiscus carolii</i>	Terrestrial isopods		F		KX036778	KX024835		
		<i>Neotroponiscus littoralis</i>	Terrestrial isopods		F		KX036776	KX024833		
		<i>Nesobasis recava</i>	damsel flies		F		MH291053	MH290892		
		<i>Nesobasis telegastrum</i>	damsel flies		F		MH291048	MH290890		
		<i>Neurothemis tullia</i>	dragonfly		F		KC915283	KC915254		
		<i>Nilaparvata lugens</i>	planthopper	wLug	B	MUIY01000000				
		<i>Nomada flava</i>	bee	wNfla	A	NZ_LYUW00000000				
		<i>Nycteribia kolenatii</i>	fly		F		MF461503	MF461494		
		<i>Ocymyrmex picardi</i>	ant		F		EU127822	EU127606		
		<i>Odontotermes horni</i>	termites		F		GQ422843	GQ422835		
		<i>Odontotermes</i> sp.	termites		F		GQ422844	GQ422836		
		<i>Onchocerca ochengi</i>	filarial nematode	wOo	C	NC_018267				
		<i>Onchocerca volvulus</i>	filarial nematode	wOv	C	NZ_HG810405				
		<i>Opisthophthalmus capensis</i>	scorpions		F				31	30
		<i>Opisthophthalmus granifrons</i>	scorpions		F				33	31
		<i>Opisthophthalmus littoralis</i>	scorpions		F				57	56
		<i>Orthetrum glaucum</i>	dragonfly		F		KC915286	KC915257		
		<i>Osmia caerulescens</i>	bee	wOc	F	SRR1221705*	KP265901			
		<i>Paratrechina longicornis</i>	ant		F				226	147
		<i>Pratylenchus penetrans</i>	lesion nematodes	wPpe	L	MJMG01000000				
		<i>Procornitermes araujoi</i>	termites		F		KX036785	KX024842		
		<i>Procornitermes lesespii</i>	termites		F		KX036786	KX024843		
		<i>Pseudolychnia</i> sp.	fly		F		MF461506	MF461497		
		<i>Supella longipalpa</i>	cockroach		F				414	147
		<i>Teratodes monticolis</i>	grasshopper		F				125	147
		<i>Trichogramma pretiosum</i>	wasp	wTpre	B	NZ_CM003641				
		<i>Trithemis pallidinervis</i>	dragonfly		F		KC915267	KC915237		
		<i>Wuchereria bancrofti</i>	filarial nematode	wWb	D	NZ_NJBR00000000				
		<i>Zelotes</i> sp.	spider		F				475	306