

Supplementary Materials for the article:

The evaluation of genetic relationships within Acridid grasshoppers (Orthoptera, Caelifera, Acrididae) on the subfamily level using molecular markers

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Supplementary material contents:

Supplementary Table 1.
Supplementary Fig. 1.
Supplementary Fig. 2.1.
Supplementary Fig. 2.2.
Supplementary Fig. 3.1.
Supplementary Fig. 3.2.
Supplementary Fig. 4.

Supplementary Table 1. List of species and GenBank accession numbers used in the present study. Taxonomy is according to the Orthoptera Species File (CIGLIANO *et al.* 2019). CPCM – complete protein-coding mitochondrial sequences; COI, COII, and Cytb – mitochondrial genes; ITS2 – internal transcribed spacer 2 of nuclear ribosomal RNA genes. Accession numbers marked in bold correspond to the sequences obtained in the present study.

Taxa	CPCM	CytB	COII	COI	ITS2
Acrididae					
Acridinae					
Acridini					
<i>Acrida bicolor</i>		JN167855	KX272710	KC261403	KX289534
<i>Acrida cinerea</i>	KX673195	KX673195	KX673195	KX673195	KX289536
<i>Acrida oxycephala</i>					KX289535
<i>Acrida willemsei</i>	EU938372	EU938372	EU938372	EU938372	
Truxalini					
<i>Truxalis eximia</i>			KX272711	KC261407	KX289540
<i>Truxalis nasuta</i>		JN167922	JN002159	JN167848	
Hyalopterygini					
<i>Eutryxalis filata</i>		JN167881	JN002128	JN167810	
Phlaeobini					
<i>Phlaeoba albonema</i>	EU370925	EU370925	EU370925	EU370925	
<i>Phlaeoba infumata</i>	KU866166	KU866166	KU866166	KU866166	
<i>Phlaeoba tenebrosa</i>	KF937392	KF937392	KF937392	KF937392	
<i>Comacris lamottei</i>		JN167874	JN002122	JN167806	
<i>Duronia chloronota</i>		JX501152	KX272712	KX272735	KX289541
<i>Duroniella fracta</i>			DQ230807	DQ230738	
<i>Orthochtha dasycnemis</i>		JN167906	JN002145	JN167832	
<i>Sherifuria haningtoni</i>		JN167924	JN002161	JN167850	
Gymnobothrini					
<i>Zacompsa festa</i>		JN167923	JN002160	JN167849	
Pargini					
<i>Odontomelus scalatus</i>		JN167862	JN002113	JN167797	
<i>Odontomelus togoensis</i>		JN167898	JN002139	JN167826	

<i>Parga lamottei</i>		JN167906	JN002145	JN167832	
tribe unknown					
<i>Covasacris pallidinota</i>		JN191384	JN002123	DQ230739	
Oedipodinae					
Acrotylini					
<i>Acrotylus insubricus</i>		EF151870	KX272684	KX272720	KX289542
<i>Acrotylus patruelis</i>					KM385196
Arphiini					
<i>Arphia conspersa</i>		EF151873	GU476980	KU874212	
Bryodemini					
<i>Angaracris barabensis 1</i>	KM670011	KM670011	KM670011	KM670011	
<i>Angaracris barabensis 2</i>			KX272681	KM521245	
<i>Bryodema gebleri</i>			KX272683	KC261396	KX289545
<i>Bryodema luctuosum</i>	HQ833839	HQ833839	HQ833839	HQ833839	
<i>Bryodema miramae</i>	KP889242	KP889242	KP889242	KP889242	
<i>Bryodemella tuberculata</i>			KX272682	KC261397	KX289546
<i>Compsorhipis davidiana</i>	KT157830	KT157830	KT157830	KT157830	
Chortophagini					
<i>Chortophaga viridifasciata</i>		CVU18251	GU476988	JQ513034	JQ513088
<i>Encoptolophus costalis</i>		EF151884	JX047347	EF151850	
Epacromiini					
<i>Aiolopus thalassinus</i>	KY236114	KY236114	KY236114	KY236114	KM385228
Hippiscini					
<i>Camnula pellucida</i>		EF151871	EF151817	KU874524	
Locustini					
<i>Gastrimargus marmoratus</i>	EU527334	EU527334	EU527334	EU527334	
<i>Locusta migratoria</i>	GU344101	GU344101	GU344101	GU344101	KM385243
<i>Oedaleus decorus</i>	EU513374	EU513374	EU513374	EU513374	KM385261
<i>Oedaleus infernalis</i>	NC 029327	NC 029327	NC 029327	NC 029327	
<i>Pternoscirta caliginosa</i>	KX170937	KX170937	KX170937	KX170937	
Oedipodini					
<i>Oedipoda caerulescens</i>		EF151869	EF151815	KX272719	KM494666
<i>Oedipoda fedtschenki</i>			KX272678	KC261395	KX289575
<i>Oedipoda miniata</i>		EF151874	EF151820	EF151840	
<i>Mioscirtus wagneri</i>			EU913775	KC261394	KX289566
Parapleurini					
<i>Ceracris versicolor</i>	KJ188251	KJ188251	KJ188251	KJ188251	
<i>Ceracris kiangsu</i>	GU270284	GU270284	GU270284	GU270284	
<i>Ceracris nigricornis</i>		AY157540	JQ996572	JX840341	
<i>Mecostethus parapleurus</i>					KX289538
<i>Stethophyma gracile</i>		DQ230826	DQ230806	DQ230737	
<i>Stethophyma grossum</i>			KX272715	KX272733	KX289539
<i>Stethophyma lineatum</i>			JX047339	KM534435	
<i>Parapleurus alliaceus</i>			KX272714	KC261393	
Psinidiini					
<i>Metator pardalinus</i>		EF151883	EF151826	EF151849	
Sphingonotini					

<i>Leptopternis maculata</i>					JQ513094
<i>Helioscirtus capsitanus</i>					KM494711
<i>Sphingoderus carinatus</i>					KM494692
<i>Sphingonotus corsicus</i>					JQ286696
<i>Sphingonotus nebulosus</i>		EF151901	EF151832	KC261401	
<i>Sphingonotus pamiricus</i>					KX289579
<i>Sphingonotus rubescens</i>			KX272680	JQ513069	KM494710
<i>Sphingonotus eurasius</i>			MN196474	KC261399	
<i>Sphingonotus maculatus</i>			KX272679	KC261398	
<i>Thalpomena algeriana</i>					KM494714
<i>Thalpomena coerulescens</i>					KM494713
<i>Thalpomena rungsi</i>					KM494715
<i>Vosseleriana arabica</i>					KM494716
Trilophidiini					
<i>Trilophidia annulata</i>	KP233803	KP233803	KP233803	KP233803	
Trimerotropini					
<i>Spharagemon campestris</i>		EF151872	EF151818	EF151838	
<i>Conozoa texana</i>					JQ286699
<i>Circotettix rabula</i>					JQ286710
<i>Circotettix stenometopus</i>					JQ513091
<i>Trimerotropis pallidipennis</i>		EF151898	GU476998	JQ513036	MF164246
<i>Dissosteira carolina</i>		EF151885	EF151828	HQ978845	
Gomphocerinae					
Amblytropidiini					
<i>Boopedon nubilum</i>			JN002116	AF229011	
Acrolophitini					
<i>Bootettix argentatus</i>		JN167866	JN002117	JN167802	
Aulacobothrini					
<i>Eremippus pusillus</i>			KX272697	KC261380	KX289561
<i>Eremippus sobolevi</i>			KX272698	KX272727	KX289560
<i>Eremippus mirami</i>			KX272699	KX272728	KX289563
<i>Eremippus simplex</i>			KX272700	KX272729	KX289562
<i>Pnorisa angulata</i>		JN167909	JN002148	JN167836	
Amblytropidiini					
<i>Syrbula admirabilis</i>					
Aulocarini					
<i>Aulocara femoratum</i>			DQ230792	DQ230722	
<i>Aulocara elliotti</i>		JN167865	JN002115	DQ230719	
<i>Ageneotettix deorum</i>			DQ230789	KM531951	
Arcypterini					
<i>Arcyptera albogeniculata</i>			KX272688	KX272721	KX289543
<i>Arcyptera fusca</i>		AY738384	JQ996566	AY738368	KX289544
<i>Arcyptera coreana</i>	GU324311	GU324311	GU324311	GU324311	
<i>Arcyptera brevipennis</i>		DQ230813	DQ230783	DQ230713	
<i>Ptygonotus gansuensis</i>			DQ230805	DQ230736	
Chrysochraontini					
<i>Chloealtis conspersa</i>			JN002121	KM528166	

<i>Chrysochraon dispar</i>		AY738392	DQ230800	KC261392	KX289567
<i>Chrysochraon sp</i>					KX289570
<i>Euchorthippus fusigeniculatus</i>	HM583652	HM583652	HM583652	HM583652	
<i>Euchorthippus pulvinatus</i>		JN167879	KX272693	DQ230711	KX289568
<i>Euchorthippus unicolor</i>		JQ996622	JQ996591	KC261385	KX289569
<i>Euthystira brachyptera</i>		JN187525	KX272696	KX272726	
<i>Mongolotettix japonicus</i>					KX289570
<i>Podismopsis genicularibus</i>			KX272695	KX272725	KX289578
<i>Podismopsis genicularibus kurilensis</i>			KX272694	KX272724	
Dociostaurini					
<i>Dociostaurus brevicollis</i>					KX289558
<i>Dociostaurus maroccanus</i>		DQ230814	DQ230784	DQ230714	KM385038
<i>Dociostaurus tartarus</i>			KX272690	KC261389	
<i>Mizonocara kusnetzovae</i>					MK025992
<i>Notostaurus sp.</i>			KX272691	KX272723	KX289574
<i>Notostarius albicornis</i>		AY738380	KX272692	HQ738947	KX289571
<i>Notostaurus anatolicus</i>					KX289572
<i>Notostaurus popovi</i>					KX289573
<i>Xerohippus anatolicus</i>			DQ230785	DQ230715	
Gomphocerini					
<i>Aeropedellus variegatus</i>			DQ230782	KX272731	KX289547
<i>Aeropedellus clavatus</i>		EF565468	DQ230777	DQ230708	
<i>Aeropedellus reuteri</i>		JN167858	JN002110	JN167793	
<i>Bruneria brunnea</i>		JN167867	DQ230776	DQ230707	
<i>Chorthippus macrocerus</i>			KX272704	KC261382	KX289548
<i>Glyptobothrus pamiricus</i>			KX272705	KC261383	KX289549
<i>Fallax strelkovi</i>			MN184880	KC261384	KX289550
<i>Chorthippus albomarginatus</i>		AY738374	JQ996561	AY738361	
<i>Chorthippus hammarstroemi</i>		AY738370	JQ996579	AY738353	
<i>Chorthippus intermedius</i>		AY738369	JQ996577	AY738352	
<i>Chorthippus apricarius</i>		JQ996619	JQ996588	AY738351	
<i>Megaulacobothrus aethalinus</i>		AY738371	JQ996575	AY738350	
<i>Glyptobothrus biguttulus</i>		AY738372	JQ996573	AY738349	
<i>Megaulacobothrus chinensis</i>	EU029161	EU029161	EU029161	EU029161	
<i>Pseudochorthippus parallelus</i>		AY738373	X95575	X95575	AY585651
<i>Gomphocerippus rufus</i>	GU294759	GU294759	KX272707	KC261386	KX289551
<i>Gomphocerus licenti</i>	GQ180102	GQ180102	GQ180102	GQ180102	
<i>Gomphocerus sibiricus 1</i>	JX122541	JX122541	JX122541	JX122541	
<i>Gomphocerus sibiricus 2</i>			KX272708	GU706071	
<i>Mesasippus kozhevnikovi</i>					KX289553
<i>Myrmeleotettix maculatus</i>		JN187523	JN002137	JN187508	
<i>Stauroderus scalaris</i>		JQ996610	KX272709	KM384845	KX289552
Mermiriini					
<i>Achurum carinatum</i>		JN167853	DQ230788	DQ230717	
<i>Achurum minimipenne</i>			JN002105	JN167788	
Ochrlidini					
<i>Gonista sp.</i>			KX272713	KX272736	KX289537

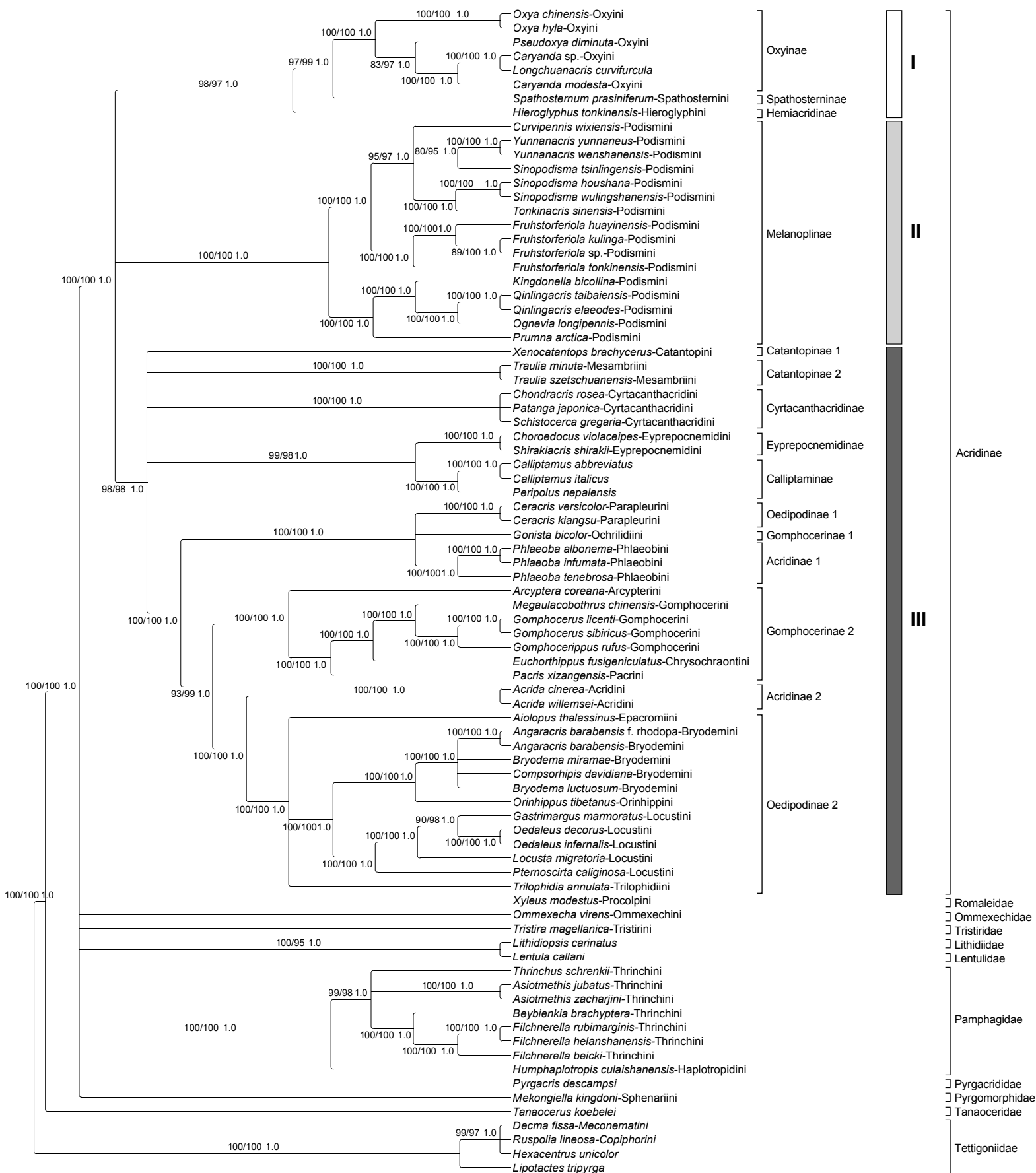
<i>Gonista bicolor</i>	KR347439	KR347439	KR347439	KR347439	
<i>Rhaphotittha levis</i>		JN167908	JN002147	JN167835	
<i>Thyridota dispar</i>		JN167921	KX272716	KX272739	
Orinhippini					
<i>Orinhippus tibetanus</i>	KF857227	KF857227	KF857227	KF857227	
Orphulellini					
<i>Orphulella speciosa</i>		JN167901	JN002141	JN167828	
<i>Dichromorpha viridis</i> Nam		JN167875	JN002124	JN167807	
Pacrini					
<i>Pacris xizangensis</i>	HQ833838	HQ833838	HQ833838	HQ833838	
Paropomalini					
<i>Cordillacris occipitalis</i>			DQ230790	DQ230720	
<i>Parapomala wyomingensis</i>		JN167904	JN002144	JN167831	
Ramburiellini					
<i>Ramburiella turcomana</i>		JN167912	DQ230780	DQ230710	
<i>Ramburiella bolivari</i>			MN184881	HQ738959	KX289554
Scyllinini					
<i>Rhammatocerus schistocercoides</i>		JN167914	JN002152	JN167840	
<i>Rhammatocerus pictus</i>		JN167913	JN002151	JN167839	
Stenobothrini					
<i>Omocestus minutissimus</i>			DQ230802	KM384843	KM385104
<i>Omocestus haemorrhoidalis</i>		AY738382	JQ996560	AY738364	
<i>Omocestus nanus</i>			KX272701	KX272730	KX289559
<i>Omocestus raymondi</i>					KM385117
<i>Omocestus rufipes</i>		JN187521	KF855915	FJ555544	
<i>Stenobothrus lineatus</i>			JN002154	GU706143	
<i>Stenobothrus festivus</i>					KM385167
<i>Stenobothrus nigromaculatus</i>		JQ996612	JQ996580	HQ738965	
<i>Stenobothrus sviridenkoi</i>		AY738395	KX272702	AY738395	
Calliptaminae					
<i>Calliptamus abbreviatus</i>	KX289321	KX289321	KX289321	KX289321	
<i>Calliptamus barbarus</i>		DQ366770	JX033923	KC261372	
<i>Calliptamus italicus</i>	EU938373	EU938373	EU938373	EU938373	
<i>Peripolus nepalensis</i>	HQ833843	HQ833843	HQ833843	HQ833843	
Catantopinae					
Catantopini					
<i>Diabolocatantops pinguis</i>			FJ554815	KC139975	
<i>Phaulacridium vittatum</i>					KP784380
<i>Phaulacridium otagoense</i>					KP784383
<i>Sigauss australis</i>					KM576254
<i>Stenocatantops splendens</i>			FJ554816	KC139978	
<i>Xenocatantops brachycerus</i>	KC542806	KC542806	KC542806	KC542806	
<i>Xenocatantops humilis</i>		EU366112	FJ554817	EU366111	
Mesambrini					
<i>Traulia minuta</i>	MF113247	MF113247	MF113247	MF113247	
<i>Traulia ornata</i>			MN184882	MK059456	
<i>Traulia szetschuariensis</i>	EU914849	EU914849	EU914849	EU914849	

Diexini					
<i>Diexis varentzovi</i>			MN184883	KC261369	
tribe unknown					
<i>Apalacris varicornis</i>			FJ554811	EU366077	
<i>Apalacris sp.</i>			FJ554812	FJ571152	
<i>Kosciuscola cuneatus</i>			JX827331	JX827275	
<i>Kosciuscola tasmanicus</i>			JX827322	JX827267	
<i>Kosciuscola usitatus</i>			JX827367	JX827313	
<i>Longchuanacris curvifurcula</i>	MF989227	MF989227	MF989227	MF989227	
Coptacrinae					
<i>Ecphantacris mirabilis</i>			FJ554819	FJ571157	
Conophymatinae					
Conophymatini					
<i>Comophyma kusnezovi</i>			KX272674	KC261363	
<i>Conophyma stebaevi</i>			KX272675	KX272737	
<i>Conophyma reinigi</i>					KX289557
<i>Conophyma poimazaricum</i>			KX272675	KX272738	KX289556
Cyrtacanthacridinae					
Cyrtacanthacridini					
<i>Acanthacris ruficornis</i>		KY981017	KY980944	KY980907	JQ796361
<i>Anacridium aegyptium</i>		JX033930	JX033922	KC261371	
<i>Anacridium sp</i>					JQ796362
<i>Austracris guttulosa</i>		KY981015	KY980942	KY980905	JQ796364
<i>Chondracris rosea</i>	GU249619	GU249619	GU249619	GU249619	AF385197
<i>Cyrtacanthacris tatarica</i>					JQ796363
<i>Halmenus robustus</i>		KY981004	KY980931	KY980894	JQ796360
<i>Patanga japonica</i>	MF113246	MF113246	MF113246	MF113246	
<i>Nomadacris septemfasciata</i>		KY981018	KY980945	KY980908	
<i>Schistocerca melanocera</i>		KY981003	KY980930	KY980893	JQ796354
<i>Schistocerca gregaria</i>	GQ491031	GQ491031	GQ491031	GQ491031	EU204047
<i>Schistocerca pallens</i>		KY981011	KY980928	KY980917	JQ796350
<i>Valanga sp.</i>					JQ796365
Eyprepocnemidinae					
Eyprepocnemidini					
<i>Choroedocus violaceipes</i>	KY236113	KY236113	KY236113	KY236113	
<i>Eyprepocnemis plorans meridionalis</i>					KM384968
<i>Eyprepocnemis plorans plorans</i>		JX033936	KX272677	KC261374	KM384951
<i>Heteracris adspersa</i>					KM384984
<i>Heteracris littoralis</i>					KM385005
<i>Shirakiacris shirakii</i>	JN022583	JN022583	JN022583	JN022583	
<i>Shirakiacris yunkweiensis</i>		DQ366754	DQ099581	KC139848	
Hemiacridinae					
Hieroglyphini					
<i>Hieroglyphus tonkinensis</i>	KX170936	KX170936	KX170936	KX170936	
Melanoplinae					
Conalcaeini					
<i>Barytettix humphreysi</i>			AF317195	AF228999	

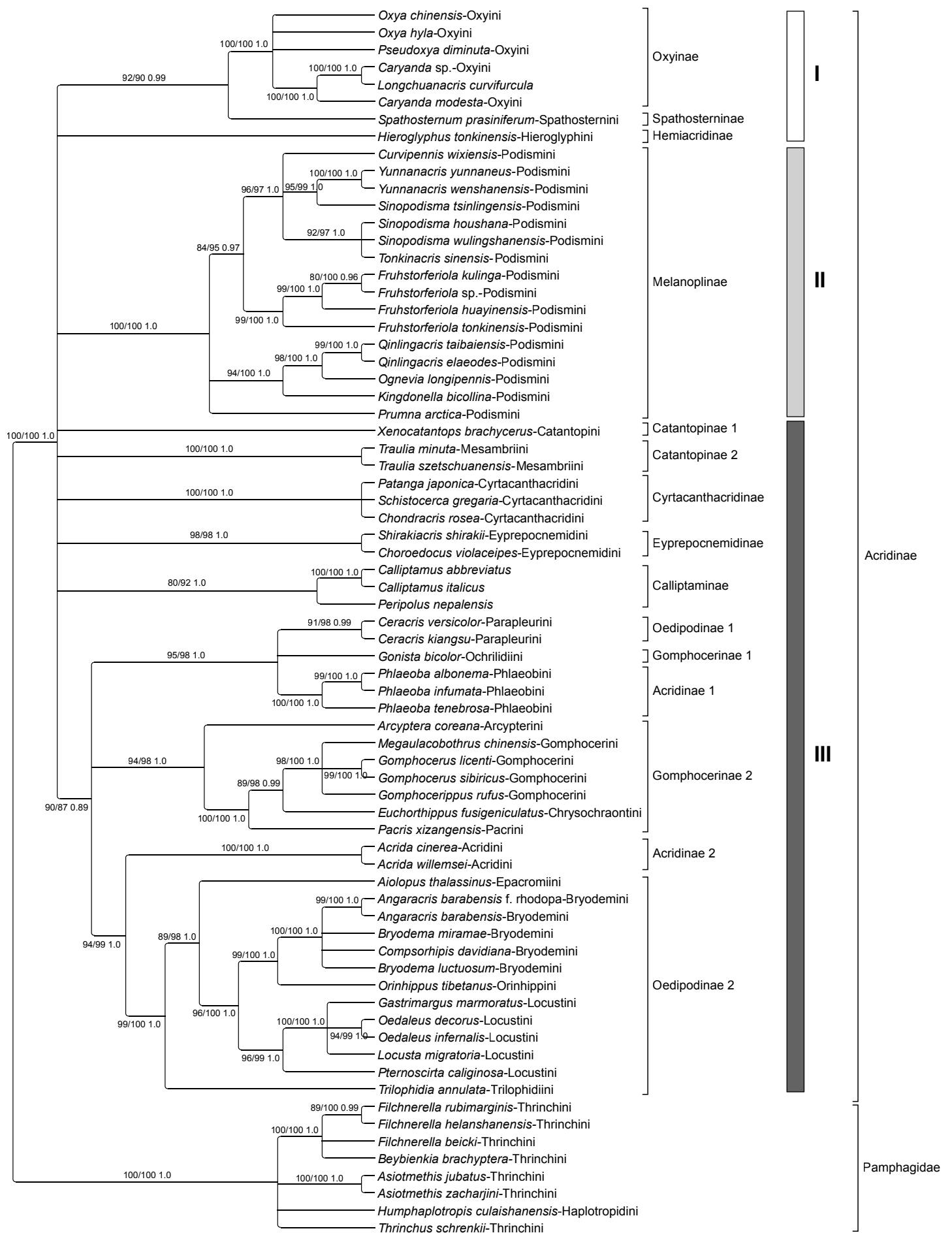
Dactylotini					
<i>Dactylotum bicolor</i>			KJ531431	AY014317	
<i>Liladownsia fraile</i>			KJ531433	KJ531423	
<i>Perixerus squamipennis</i>			KJ531437	KJ531427	
Podismini					
Miramellina					
<i>Anapodisma miramae</i>			KF960009	MG888100	
<i>Curvipennis wixiensis</i>	KX553995	KX553995	KX553995	KX553995	
<i>Miramella alpina</i>		JX033935	AF227292	AF260543	
<i>Zubovskya koeppeni</i>			KF960029	JQ301456	
Podismina					
<i>Ognevia longipennis 1</i>	EU914848	EU914848	EU914848	EU914848	
<i>Ognevia longipennis 2</i>			KX272673	KX272718	
<i>Ognevia sergii</i>			KX272672	KC261364	
<i>Podisma pedestris</i>		AY738393	AF227277	AY738348	
<i>Pseudopodisma nagy</i>			AY004198	AY004200	
<i>Yunnanacris yunnaneus</i>	KX223964	KX223964	KX223964	KX223964	
<i>Yunnanacris wenshanensis</i>	KX296781	KX296781	KX296781	KX296781	
Tonkinacridina					
<i>Fruhstorferiola kulinga</i>	KP347043	KP347043	KP347043	KP347043	
<i>Fruhstorferiola huayinensis</i>	KU668856	KU668856	KU668856	KU668856	
<i>Fruhstorferiola sp</i>	KU355786	KU355786	KU355786	KU355786	
<i>Fruhstorferiola tonkinensis</i>	KU942377	KU942377	KU942377	KU942377	
<i>Parapodisma mikado</i>			AY004181	KY558878	
<i>Tonkinacris sinensis</i>	KX375764	KX375764	KX375764	KX375764	
<i>Sinopodisma punctata</i>			KX272670	KC261365	
<i>Sinopodisma tsinlingensis</i>	KX857635	KX857635	KX857635	KX857635	
<i>Sinopodisma wulingshanensis</i>	KX857637	KX857637	KX857637	KX857637	
<i>Sinopodisma houshana</i>	KX857634	KX857634	KX857634	KX857634	
genus group Bradynotae					
<i>Bradynotes obesa</i>			KJ531429	MG888123	
<i>Kingdonella bicollina</i>	HQ833840	HQ833840	HQ833840	HQ833840	
subtribe unknown					
<i>Prumna arctica</i>	GU294758	GU294758	GU294758	GU294758	
<i>Prumna primnoa</i>			KX272671	KX272717	
<i>Qinlingacris elaeodes</i>	KM363599	KM363599	KM363599	KM363599	
<i>Qinlingacris taibaiensis</i>	KR108252	KR108252	KR108252	KR108252	
Dichroplini					
<i>Atrachelacris grammineus</i>			AY014358	AY014360	
<i>Baeacris pseudopunctulatus</i>			DQ083436	DQ083452	
<i>Digamacris amoena</i>			AY014339	AY014341	
<i>Dichroplus elongatus</i>			KY595076	KY595084	
<i>Leiotettix viridis</i>			AY014351	AY014353	
<i>Hazelacris nigrovittatus</i>			AF373007	AF373009	
<i>Neopedies brunneri</i>			DQ083447	DQ083466	
<i>Ronderosia forcipatus</i>			DQ083449	DQ083468	
<i>Pseudoscopas nigrigena</i>			AY014347	FJ829342	

<i>Scotussa lemniscata</i>		DQ389239	DQ389215	FJ829338	
Melanoplini					
<i>Hesperotettix viridis</i>			KJ531432	MG888125	EF213123
<i>Hypochlora alba</i>			AF260545	KM530673	
<i>Melanoplus frigidus</i>			KF960030	KC261366	KX289565
<i>Melanoplus bivittatus</i>			KJ531434	KR140392	
<i>Melanoplus mexicanus</i>			KJ531436	AY147154	
<i>Phoetaliotes nebrascensis</i>			AF260553	KM529274	
Jivarini					
<i>Jivarus gurneyi</i>			DQ389217	DQ389231	
<i>Nahuelia rubriventris</i>			AF539838	AF539840	
tribe unknown					
<i>Aidemona alticola</i>			AY014319	AY014321	
Pezotettiginae					
<i>Pezotettix anatolica</i>			MN184884	KC261370	KX289577
<i>Pezotettix giornae</i>		JX033927	JX033920	KM384834	EF134449
<i>Arminda brunneri</i>					EF134436
<i>Arminda latifrons</i>					EF134444
<i>Arminda hierroensis</i>					EF134445
Oxyinae					
Oxyini					
<i>Caryanda modesta</i>	MF095791	MF095791	MF095791	MF095791	
<i>Caryanda sp</i>	KU375571	KU375571	KU375571	KU375571	
<i>Oxya chinensis</i>	EF437157	EF437157	EF437157	EF437157	AF385193
<i>Oxya japonica</i>		AY615851	KX272685	KC261378	AF385194
<i>Oxya hyla</i>	KX673203	KX673203	KX673203	KX673203	AF385196
<i>Oxya fuscovittata</i>			KX272686	KC261379	
<i>Oxya yezoensis</i>					AF385195
<i>Oxya sp</i>					KX289576
<i>Pseudoxya diminuta</i>	KM244694	KM244694	KM244694	KM244694	
Spathosterninae					
<i>Spathosternum prasiniferum</i>	KM588074	KM588074	KM588074	KM588074	
Spathosterninae					
<i>Coscineuta sp.</i>			KJ531430	KJ531420	
Pamphagidae					
Thrinchinae					
Thrinchini					
<i>Asiotmethis jubatus</i>	KF658071	KF658071	KF658071	KF658071	
<i>Asiotmethis zacharjini</i>	JX468876	JX468876	JX468876	JX468876	
<i>Sinotmethis brachypterus</i>	KP170509	KP170509	KP170509	KP170509	
<i>Thrinchus schrenkii</i>	GU181288	GU181288	GU181288	GU181288	
<i>Filchnerella helanshanensis</i>	JX468877	JX468877	JX468877	JX468877	
<i>Filchnerella beicki</i>	KC831767	KC831767	KC831767	KC831767	
<i>Pseudotmethis rubimarginis</i>	JX468878	JX468878	JX468878	JX468878	
Haplotropidini					
<i>Humphaplotropis culaishanensis</i>	KF931338	KF931338	KF931338	KF931338	
Pamphaginae					

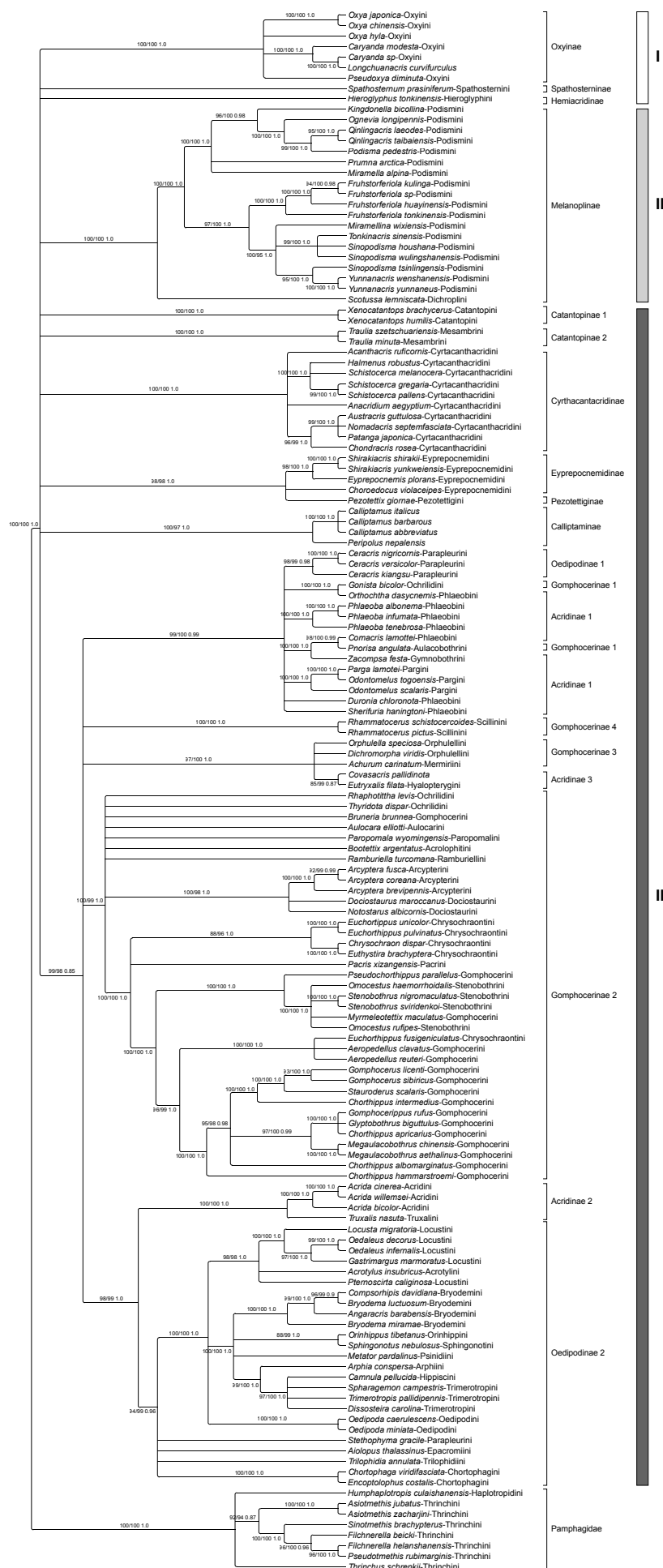
Nocarodeini					
<i>Nocaracris bulgaricus</i>					MG905239
<i>Nocaracris elegans</i>					MG905240
<i>Nocaracris rubripes</i>					MG905243
Ommexechidae					
Ommexechinae					
<i>Ommexecha virens</i>	JX913775	JX913775	JX913775	JX913775	
Romaleidae					
Procolpini					
<i>Xyleus modestus</i>	GU945503	GU945503	GU945503	GU945503	
Tristiridae					
Tristirini					
<i>Tristira magellanica</i>	JX913765	JX913765	JX913765	JX913765	
Lithidiidae					
<i>Lithidiopsis carinatus</i>	JX913770	JX913770	JX913770	JX913770	
Lentulidae					
<i>Lentula callani</i>	JX913769	JX913769	JX913769	JX913769	
Pyrgacrididae					
<i>Pyrgacris descampsi</i>	JX913771	JX913771	JX913771	JX913771	
Pyrgomorphidae					
Sphenariini					
<i>Mekongiella kingdoni</i>	HQ833842	HQ833842	HQ833842	HQ833842	
Tanaoceridae					
<i>Tanaocerus koebelei</i>	JX913774	JX913774	JX913774	JX913774	
Tettigoniidae					
<i>Ruspolia lineosa</i>	KX057729	KX057729	KX057729	KX057729	
<i>Decma fissa</i>	KX057710	KX057710	KX057710	KX057710	
<i>Hexacentrus unicolor</i>	KX057739	KX057739	KX057739	KX057739	
<i>Lipotactes tripyrga</i>	KX057736	KX057736	KX057736	KX057736	



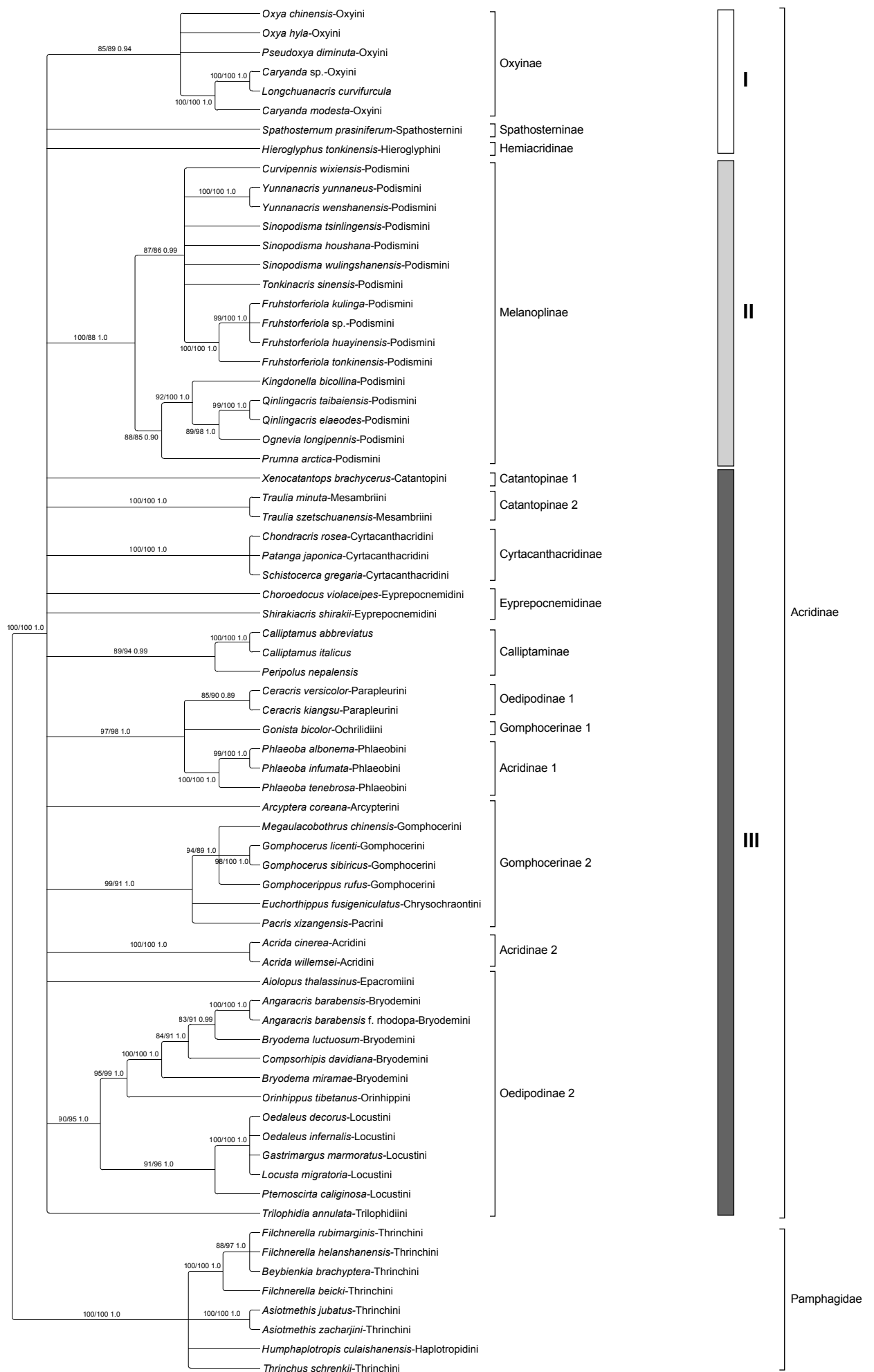
Supplementary Fig. 1. Phylogenetic tree of Acrididae based on the complete protein-coding mitochondrial (CPCM) nucleotide sequences reconstructed using Maximum likelihood and Bayesian methods. Clade support values shown as follows: ML aLRT support/UF-bootstrap Bayesian inference. Only the clusters with statistical support values higher than 80/85 0.85 are shown. The tree was rooted with four species from the family Tettigoniidae (suborder Ensifera), and 16 species of nine different Caelifera families were used as an outgroup for Acrididae. Phylogenetic groups are marked by grayscale colored blocks on the right, and additionally denoted with roman numerals (I-III). Arabic numerals denote different lineages of the subfamilies that are polyphyletic in the present analysis. Accession numbers for the sequences are presented in Supplementary Table 1.



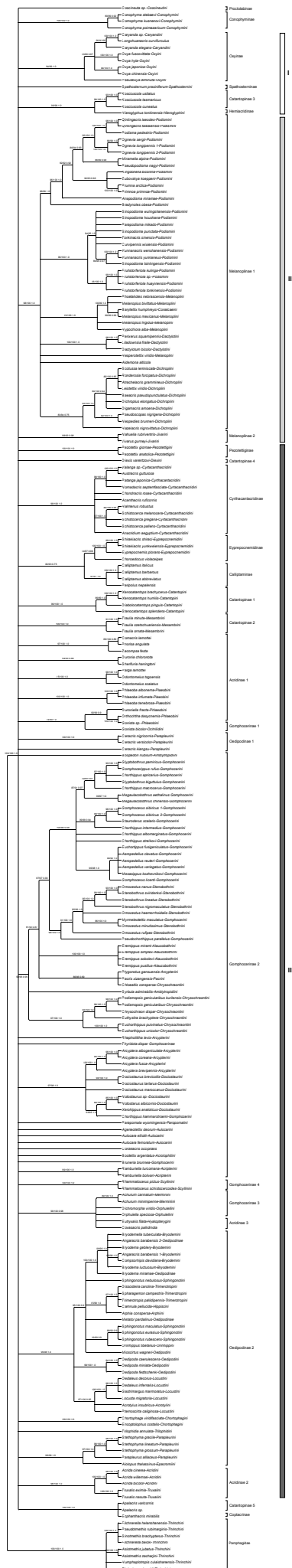
Supplementary Fig. 2.1. Phylogenetic tree of Acrididae based on concatenated COI, COII and Cytb nucleotide mitochondrial gene sequences of 63 Acrididae species reconstructed using Maximum likelihood and Bayesian methods. Clade support values shown as follows: ML aLRT support/UF-bootstrap Bayesian inference. Only the clusters with statistical support values higher than 80/85 0.85 are shown. The tree was rooted with eight Pamphagidae species. Phylogenetic groups are marked by grayscale colored blocks on the right, and additionally denoted with roman numerals (I-III). Arabic numerals denote different lineages of the subfamilies that are polyphyletic in the present analysis. Accession numbers for the sequences are presented in Supplementary Table 1.



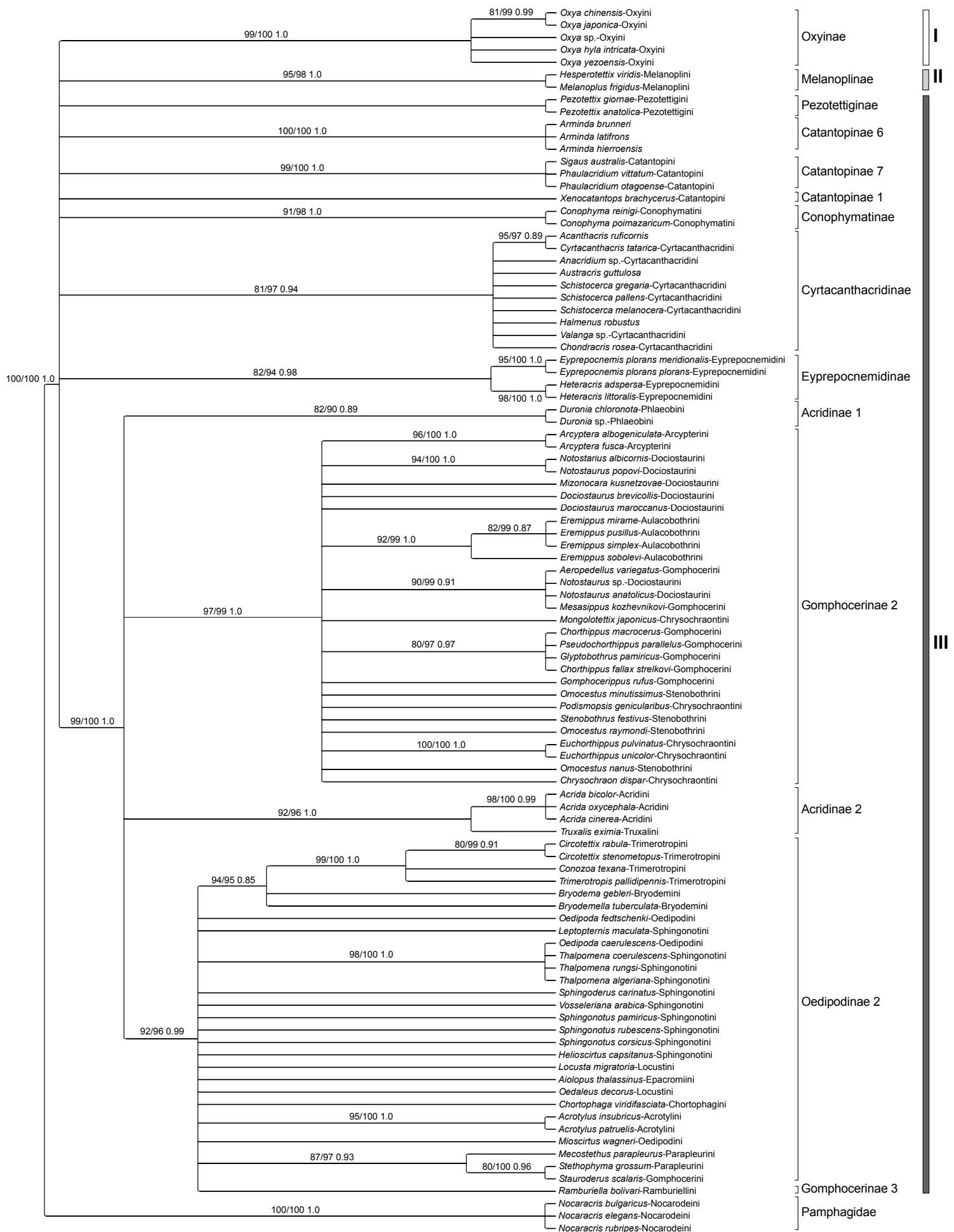
Supplementary Fig. 2.2. Phylogenetic tree of Acrididae based on concatenated COI, COII and Cytb nucleotide mitochondrial gene sequences of 141 Acrididae species reconstructed using Maximum likelihood and Bayesian methods. Clade support values shown as follows: ML aLRT support/UF-bootstrap Bayesian inference. Only the clusters with statistical support values higher than 80/85 0.85 are shown. The tree was rooted with eight Pamphagidae species. Phylogenetic groups are marked by grayscale colored blocks on the right, and additionally denoted with roman numerals (I-III). Arabic numerals denote different lineages of the subfamilies that are polyphyletic in the present analysis. Accession numbers for the sequences are presented in Supplementary Table 1.



Supplementary Fig. 3.1. Phylogenetic tree of Acrididae based on concatenated COI and COII nucleotide mitochondrial gene sequences of 63 Acrididae species reconstructed using Maximum likelihood and Bayesian methods. Clade support values shown as follows: ML aLRT support/UF-bootstrap Bayesian inference. Only the clusters with statistical support values higher than 80/85 0.85 are shown. The tree was rooted with eight Pamphagidae species. Phylogenetic groups are marked by grayscale colored blocks on the right, and additionally denoted with roman numerals (I-III). Arabic numerals denote different lineages of the subfamilies that are polyphyletic in the present analysis. Accession numbers for the sequences are presented in Supplementary Table 1.



Supplementary Fig. 3.2. Phylogenetic tree of Acrididae based on concatenated COI and COII nucleotide mitochondrial gene sequences of 231 Acrididae species reconstructed using Maximum likelihood and Bayesian methods. Clade support values shown as follows: ML aLRT support/UF-bootstrap Bayesian inference. Only the clusters with statistical support values higher than 80/85 0.85 are shown. The tree was rooted with eight Pamphagidae species. Phylogenetic groups are marked by grayscale colored blocks on the right, and additionally denoted with roman numerals (I-III). Arabic numerals denote different lineages of the subfamilies that are polyphyletic in the present analysis. Accession numbers for the sequences are presented in Supplementary Table 1.



Supplementary Fig. 4. Phylogenetic tree of Acrididae based on ITS2 nucleotide nuclear sequences of 96 Acrididae species reconstructed using Maximum likelihood and Bayesian methods. Clade support values shown as follows: ML aLRT support/UF-bootstrap Bayesian inference. Only the clusters with statistical support values higher than 80/85 0.85 are shown. The tree was rooted with three Pamphagidae species. Phylogenetic groups are marked by grayscale colored blocks on the right, and additionally denoted with roman numerals (I-III). Arabic numerals denote different lineages of the subfamilies that are polyphyletic in the present analysis. Accession numbers for the sequences are presented in Supplementary Table 1.