

**Table S1. Species names and gene list**

Species name	Nuclear genes				Mitochondrial genes			
	28S	18S	Enolase	Arg-kinase	16S	CoxI	CoxII	NAD4
<i>Aedes (Stegomyia) aegypti</i>	MG242540.1	MG232525.1	MG232460.1	MG232457.1	EU352212.1			
<i>Aedes (Scutomyia) albolineatus</i>	KF687500.1					KF564650.1	KC913592.1	
<i>Aedes (Stegomyia) albopictus</i>	MG242543.1	X57172.1	MG232463.1	MG232454.1	AY072044.1			
<i>Aedes (Stegomyia) dybasi</i>	DQ397943.1				DQ397925.1	DQ397913.1		
<i>Aedes (Stegomyia) flavopictus</i>	DQ397936.1				DQ397929.1	DQ397907.1		
<i>Aedes (Diceromyia) furcifer</i>	MG242572.1	MG232557.1	MG232487.1	MG232431.1		KU187185.1	AY645287.1	
<i>Aedes (Huleocoetomyia) koreicus</i>	GU229913.1					KT962063.1	GU229897.1	KT945239
<i>Aedes (Stegomyia) luteocephalus</i>	MG242581.1	MG232566.1	MG232495.1	MG232424.1		AY645234.1	AY645300.1	JX427527.1
<i>Aedes (Rampamyla) notoscriptus</i>	MG242585.1	MG232570.1	MG232499.1	MG232420.1	KM676218.1			
<i>Aedes (Stegomyia) palauensis</i>	DQ397942.1				DQ397924.1	DQ397896.1		
<i>Aedes (Stegomyia) subalbopictus</i>	KF687510.1					EU259301.1	KC913583.1	
<i>Aedes (Diceromyia) taylori</i>	MG242596.1	MG232580.1	MG232508.1	MG232411.1		AY645228.1	AY645295.1	
<i>Aedes (Tanakayus) togoi</i>	GU229910.1		LC026054.1			LC025711.1	GU229895.1	GU229922.1
<i>Aedes (Aedimorphus) vexans</i>	MG242602.1	AM071382.1	MG232513.1	MG232406.1		AY645243.1	AY645304.1	
<i>Anopheles gambiae</i>	GCA_000005575.1 (genome)				MG753708.1			
<i>Armigeres subalbatus</i>	MG242607.1	MG232591.1	MG232516.1	MG232402.1	AY439688.1	KM497419.1	HQ398972.1	AY440746.1
<i>Bironella</i> _sp.		AF417796.1	GQ906881.1	GQ906808.1	MF381612.1			
<i>Calliphora vomitoria</i>	MF281681.1	MF992252.1			KT444440.1			
<i>Aedes (Catageiomyia) argenteopunctata</i>	MG242545.1	MG232530.1	MG232464.1	MG232453.1		MG242468.1		
<i>Chagasia</i> _sp.	AF417831.1	AF417797.1			MF381717.1			
<i>Chrysomya megacephala</i>	KY197787.1	FJ025483.1			KT272787.1			
<i>Coquillettidia crassipes</i>	KF687592.1	AY988454.1	GQ906883.1			KF564770.1	KF687365.1	
<i>Culex quinquefasciatus</i>	XM_001865926.1	XM_001849752.1	XM_001842566.1	XM_001849602.1	GU188856.2			
<i>Culex tritaeniorhynchus</i>	KF687515.1	U48385.1			KT852976.1			
<i>Culiseta</i> sp.	KF687543.1	AY988451.1	GQ906882.1 fla	GQ906809.1		AF425848.1		
<i>Drosophila pseudoobscura</i>	HQ110539.1	XR_053284.1	AF025805.1	XM_015187032.1	FJ899745.1			
<i>Drosophila sechellia</i>		XR_048770.1	XM_002041688.1		AF200832.1			
<i>Drosophila simulans</i>	HQ110541.1	AY037174.1	DQ864222.1	XM_016184539.1	AY518672.1			
<i>Drosophila yakuba</i>	HQ110545.1		DQ864189.1	XM_002093328.2	KF824886.1			
<i>Haemagogus janthinomys</i>	MG242608.1	MG232592.1	MG232517.1	MG232401.1	KT372555.1			

<i>Lucilia caesar</i>	MF694304.1	FJ025492.1				KM657111.1		
<i>Lucilia cuprina</i>	FR719299.1			JQ088101.1		JX913750.1		
<i>Lucilia sericata</i>	KY197804.1 :	KR133393.1				KT272854.1		
<i>Lutzia sp.</i>	KF687516.1					HQ3988 96.1	HQ3989 58.1	
<i>Malaya sp.</i>	KF687541.1			GQ906814.1		EU25929 3.1	KF6873 73.1	
<i>Mimomyia sp.</i>	KF687538.1		GQ906889.1	GQ906816.1			KU3804 47.1	
<i>Aedes (Ochlerotatus) caspius</i>	MG242555.1	MG232540.1	MG232473.1	MG232444.1		KM452934.1		
<i>Aedes (Ochlerotatus) dorsalis</i>	MG242565.1		MG232480.1	MG232436.1	KU8806 57.1	KR69154 4.1	KC9135 69.1	
<i>Aedes (Hulecoetomyia) japonicus</i>	MG242580.1	MG232565.1		MG232425.1	DQ3979 15.1	DQ397889.1 KC913579.1		DQ4701 64.1
<i>Aedes (Ochlerotatus) taeniorhynchus</i>	MG242595.1	MG232579.1	MG232507.1	MG232412.1		KT76653 8.1	HQ8536 80.1	
<i>Aedes (Ochlerotatus) triseriatus</i>	MG242600.1	MG232584.1	MG232511.1	MG232408.1		AF41773 0.1	AF4177 66.1	
<i>Aedes (Ochlerotatus) vigilax</i>	MG242603.1	MG232587.1	MG232514.1	MG232405.1	MK575484.1			
<i>Psorophora ferox</i>	MG242613.1	MG242613.1	MG232521.1	MG232396.1		MF1723 49.1		
<i>Psorophora howardii</i>	MG232599.1	MG232599.1	MG232523.1			MG2425 38.1		
<i>Sabethes sp.</i>				GQ906821.1	NC_037498.1			
<i>Sarcophaga sp.</i>	KU746469.1	AF322419.1			KM881633.1			
<i>Aedes (Tanakaius) savoryi</i>	LC025745.1		LC026055.1			LC02565 6.1		
<i>Toxorhynchites sp.</i>	KC177664.1	AY988455.1	GQ906895.1	GQ906823.1		AF425849.1		
<i>Uranotaenia lowii</i>	AF417833.1	AF417799.1		GQ906826.1		AF41772 8.1	AF4177 64.1	
<i>Wyeomyia smithii</i>			GQ906899.1	GQ906827.1		HM136816.1		