



Mosquito molecular taxonomy oligonucleotide primer characteristics

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Genus	Species	#	Mosq-F (generic)			Mosq-RAE2 (Aedes)			Mosq-RCX (Culex)			Mosq-R2 (generic)		
			Mewara A, 2018			Jurado-Sánchez N, 2022			Jurado-Sánchez N, 2022			Jurado-Sánchez N, 2022		
			BC ¹	Seq ²	Exten ⁴	BC	n/%	Exten ⁴	BC	n/%	Exten ⁴	BC	n/%	Exten ⁴
Aedes	abserratus	2		Unknown ³		All bp	All seq	Yes	None	All seq	No	All bp	All seq	Yes
Aedes	aegypti	19	All bp	Some seq ³	Yes	All bp	All seq	Yes	None	All seq	No	All bp	All seq ³	Yes
Aedes	albopictus	166	Mostl bp ³	All seq ³	Yes	All bp	All seq	Yes	None	All seq	No	Mostl bp ³	All seq ³	Yes
Aedes	atlanticus	2	Mostl bp ³	All seq ³	Yes	All bp	All seq	Yes	None	All seq	No	All bp	All seq	Yes
Aedes	atropalpus	1		Unknown ³		All bp	All seq	Yes	None	All seq	No		Unknown ³	
Aedes	atropos	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	aurifer	1		Unknown ³		All bp	All seq	Yes	None	All seq	No	All bp	All seq	Yes
Aedes	campestris	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	campitorhynchus	8	Mostl bp ³	All seq ³	Yes	All bp	All seq	Yes	None	All seq	No	All bp	All seq	Yes
Aedes	canadensis	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	cantator	1		Unknown ³		All bp	All seq	Yes	None	All seq	No		Unknown ³	
Aedes	cataphylla	3		Unknown ³		All bp	All seq	Yes	None	All seq	No	Some bp ³	All seq ³	Likely ³
Aedes	cinereus	4	All bp	Some seq ³	Yes	All bp	All seq	Yes	None	All seq	No	All bp	All seq ³	Yes
Aedes	dorsalis	1		Unknown ³		All bp	All seq	Yes	None	All seq	No		Unknown ³	
Aedes	earlei	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	exrucians	1		Unknown ³		All bp	All seq	Yes	None	All seq	No		Unknown ³	
Aedes	flavescens	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	fulvus	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	grossbecki	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	hensilli	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	hespernotius	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	infirmatus	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	intrudens	1		Unknown ³		All bp	All seq	Yes	None	All seq	No		Unknown ³	
Aedes	japonicus	5		Unknown ³		All bp	All seq	Yes	None	All seq	No	Mostl bp ³	Mostl seq ³	Likely ³
Aedes	kochi	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	melaminon	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	mitchellae	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	nigromaculis	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	notoscriptus	25	All bp	All seq ³	Yes	All bp	All seq	Yes	None	All seq	No	All bp	All seq	Yes
Aedes	polynesiensis	2	All bp	Mostl seq ³	Yes	All bp	All seq	Yes	None	All seq	No	Some bp ³	All seq ³	Likely ³
Aedes	solicitans	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	squamiger	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	sticticus	3		Unknown ³		All bp	All seq	Yes	None	All seq	No		Unknown ³	
Aedes	taeniorhynchus	1		Unknown ³		All bp	All seq	Yes	None	All seq	No		Unknown ³	
Aedes	territans	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	triseriatus	2	All bp	Mostl seq ³	Yes	All bp	All seq	Yes	None	All seq	No	All bp	Mostl seq ³	Yes
Aedes	tritvattus	0	--	--	--	--	--	--	--	--	--	--	--	--
Aedes	vexans	5	Mostl bp ³	Mostl seq ³	Yes	All bp	All seq	Yes	None	All seq	No	All bp ³	Mostl seq ³	Yes
Aedes	vigilax	0	--	--	--	--	--	--	--	--	--	--	--	--
Anopheles	albimanus	8	Mostl bp ³	Mostl seq ³	Yes	None	All seq	No	None	All seq	No	All bp	All seq ³	Yes
Anopheles	apicimacula	10	Mostl bp ³	All seq ³	Yes	None	All seq	No	None	All seq	No	All bp	All seq ³	Yes
Anopheles	crucians	3	All bp	All seq	Yes	None	All seq	No	None	All seq	No	All bp	All seq	Yes
Anopheles	daringi	26	Mostl bp ³	Mostl seq ³	Yes	None	All seq	No	None	All seq	No	All bp	All seq ³	Yes
Anopheles	gambiae	14	All bp	All seq ³	Yes	Mostl bp ³	All seq	Likely	None	All seq	No	All bp	All seq ³	Yes
Anopheles	pseudopunctipennis	2	All bp	Mostl seq ³	Yes	None	All seq	No	None	All seq	No	All bp	All seq ³	Yes
Anopheles	punctimacula	11	All bp	All seq	Yes	None	All seq	No	None	All seq	No	All bp	All seq ³	Yes
Anopheles	quadrifasciatus	5	All bp	All seq	Yes	None	All seq	No	None	All seq	No	All bp	All seq	Yes
Coquillettidia	perturbans	0	--	--	--	--	--	--	--	--	--	--	--	--
Culex	annulirostris	11	All bp	All seq	Yes	None	All seq	No	Mostl bp	All seq	Yes	All bp	All seq	Yes
Culex	erraticus	69	All bp	Some seq ³	Yes	All bp	All seq	Yes	Some bp	All seq	Unlikely	All bp	All seq	Yes
Culex	erythrothorax	2	All bp	All seq	Yes	None	All seq	No	All bp	All seq	Yes	All bp	All seq	Yes
Culex	nigripalpus	6		Unknown ³		None	All seq	No	Mostl bp	All seq	Yes	All bp	All seq	Yes
Culex	pipiens	23	All bp	Mostl seq ³	Yes	None	All seq	No	All bp	All seq	Yes	All bp	All seq	Yes
Culex	quinquefasciatus	59	All bp	Mostl seq ³	Yes	None	All seq	No	All bp	All seq	Yes	All bp	All seq	Yes
Culex	restuans	6	All bp	All seq	Yes	None	All seq	No	Mostl bp	All seq	Yes	All bp	All seq	Yes
Culex	salinarius	6	All bp	All seq	Yes	None	All seq	No	All bp	All seq	Yes	All bp	All seq	Yes
Culex	tarsalis	4	All bp	All seq	Yes	None	All seq	No	Mostl bp	All seq	Yes	All bp	All seq	Yes
Culiseta	inornata	0	--	--	--	--	--	--	--	--	--	--	--	--
Culiseta	melanura	0	--	--	--	--	--	--	--	--	--	--	--	--
Culiseta	morsitans	0	--	--	--	--	--	--	--	--	--	--	--	--
Deinocerites	cancer	0	--	--	--	--	--	--	--	--	--	--	--	--
Deinocerites	mathesoni	0	--	--	--	--	--	--	--	--	--	--	--	--
Deinocerites	pseudes	0	--	--	--	--	--	--	--	--	--	--	--	--
Mansonia	dyari	0	--	--	--	--	--	--	--	--	--	--	--	--
Mansonia	signipennis	0	--	--	--	--	--	--	--	--	--	--	--	--
Mansonia	titillans	0	--	--	--	--	--	--	--	--	--	--	--	--
Psorophora	ciliata	0	--	--	--	--	--	--	--	--	--	--	--	--
Psorophora	ferox	1		Unknown ³		All bp	All seq	Yes	None	All seq	No	Mostl bp ³	All seq	Yes
Uranotaenia	lowii	0	--	--	--	--	--	--	--	--	--	--	--	--
Uranotaenia	sapphirina	0	--	--	--	--	--	--	--	--	--	--	--	--
Wyeomyia	mitchellae	0	--	--	--	--	--	--	--	--	--	--	--	--
Wyeomyia	smithii	0	--	--	--	--	--	--	--	--	--	--	--	--
Wyeomyia	vanduzeei	0	--	--	--	--	--	--	--	--	--	--	--	--

- Notes:
- 1.- Base complementarity, number of oligonucleotide primer bases annealing to mosquito sequences (All if ≥90% bp, Most if between 75%-90% bp, Some if between 50%-75%)
 - 2.- Number of mosquito sequences (Seq) annealing with described BC to oligonucleotide sequences (All if ≥90% seq, Most if between 75%-90% seq, Some if between 50%-75%)
 - 3.- Nucleotide sequence present in NCBI's GenBank database is not informative of oligonucleotide annealing site.
 - 4.- Likelihood of oligonucleotide primer being extended (Yes, No, Likely, Unlikely, Probably)
 - 5.- Culex erraticus will paradoxically amplify with Mosq-RAE2 but not with Mosq-RCX.