

This file contains the tables detailing the number of individuals capture in each trap type specie per county per season. Also details the species of larvae captured by manual collection and the breeding habitat that they were found.

Table S1. Mosquitoes captured with EVS traps in Cuajiniquil. DO: Domiciliary, PE: Peridomiciliary, PN: Animal Pen, FO: Forest.

Mosquito Species	Season										Total
	Rainy					Dry					
	DO	PE	PN	FO	Total	DO	PE	PN	FO	Total	
<i>Anopheles</i> sp.	0	0	3	0	3	0	0	0	0	0	3
<i>An. albimanus</i>	1	21	9	18	49	0	0	0	0	0	49
<i>An.apicimacula</i>	0	1	0	0	1	0	0	0	0	0	1
<i>An. pseudopuctipennis</i>	4	0	3	5	12	0	0	0	5	5	17
<i>An. neomaculipalpus</i>	1	0	1	1	3	0	0	1	0	1	4
<i>An. punctimacula</i>	3	5	1	4	13	0	0	0	0	0	13
<i>Ae. squamipennis</i>	0	2	0	0	2	0	0	0	0	0	2
<i>De. costaricensis</i>	0	0	0	0	0	0	1	0	0	1	1
<i>De. pseudes</i>	7	25	9	15	56	2	10	14	49	75	131
<i>De. epitedeus</i>	0	4	0	0	4	0	0	0	0	0	4
<i>Culex</i> sp.	13	0	2	16	31	1	0	0	1	2	33
<i>Cx. restrictor</i>	15	4	9	24	52	0	0	0	0	0	52
<i>Cx. coronator</i>	23	0	5	24	52	1	0	0	1	2	54
<i>Cx. chiresteri</i>	0	1	0	0	1	0	0	1	0	1	2
<i>Cx. nigripalpus</i>	0	0	8	1	9	0	0	0	0	0	9
<i>Cx. quinquefasciatus</i>	63	5	12	69	149	0	1	2	2	5	154
<i>Cx. mollis</i>	1	0	0	1	2	0	0	0	0	0	2
<i>Cx (Carollia)</i> sp.	0	0	0	0	0	2	0	0	1	3	3
<i>Cx (Meanoconion)</i> sp.	2	1	2	5	10	0	0	0	2	2	12
<i>Cx. (Mel.) taeniopus</i>	1	0	0	1	2	0	0	0	0	0	2
<i>Cx. (Mel.) theobaldi</i>	4	8	0	16	28	0	0	0	0	0	28
<i>Cx. (Mel.) erraticus</i>	1	0	0	1	2	0	0	0	0	0	2
<i>Haemagogus</i> sp.	0	0	0	0	0	0	0	2	1	3	3
<i>Psorophora</i> sp.	0	1	1	1	3	0	0	0	0	0	3
<i>Ps. cilipes</i>	1	0	0	1	2	0	0	0	0	0	2
<i>Ps. confinnis</i>	1	2	4	1	8	0	0	0	0	0	8
<i>Sabethes undosus</i>	1	0	0	1	2	0	0	0	0	0	2
<i>Tricoprosopon digitatum</i>	0	0	0	0	0	1	0	0	0	1	1
<i>Uranotaenia coatzalcoalcos</i>	1	0	2	1	4	0	0	0	0	0	4
Total	143	80	71	206	500	7	12	20	62	101	601

Table S2. Mosquitoes captured with EVS traps in Talamanca. DO: Domiciliary, PE: Peridomiciliary, PN: Animal Pen, FO: Forest.

Mosquito Species	Season										Total
	Rainy					Dry					
	ID	PE	ES	BO	Total	ID	PE	ES	BO	Total	
<i>Ae. aegypti</i>	0	0	2	0	2	0	0	0	0	0	2
<i>Anopheles</i> sp.	1	1	0	3	5	0	0	1	0	1	6
<i>An. aquasalis</i>	0	0	2	0	2	0	0	0	0	0	2
<i>An. apicimacula</i>	0	0	0	3	3	0	0	0	0	0	3
<i>An. neivai</i>	0	0	0	0	0	0	0	0	1	1	1
<i>An. neomaculipalpus</i>	0	0	0	0	0	1	0	0	1	2	2
<i>An. vestitipennis</i>	0	0	1	0	1	0	0	0	0	0	1
<i>De. pseudes</i>	0	0	0	0	0	0	0	0	1	1	1
<i>Co. nigricans</i>	1	0	0	0	1	0	0	0	0	0	1
<i>Culex</i> sp.	4	2	3	28	37	1	1	0	6	8	45
<i>Cx. declarator</i>	0	0	0	0	0	1	0	0	1	2	2
<i>Cx. coronator</i>	5	4	8	73	90	0	0	0	2	2	92
<i>Cx. lactator</i>	1	0	0	0	1	0	0	0	0	0	1
<i>Cx. nigripalpus</i>	1	1	0	5	7	1	1	3	9	14	21
<i>Cx. quinquefasciatus</i>	95	89	4	13	201	104	34	18	3	159	360
<i>Cx. stigmatosoma</i>	0	2	0	0	2	0	0	0	0	0	2
<i>Cx. pseudostigmatosoma</i>	40	1	11	12	64	0	0	0	0	0	64
<i>Cx. pleuristratus</i>	0	0	2	0	2	0	0	0	0	0	2
<i>Cx. secundus</i>	0	0	0	1	1	0	0	0	0	0	1
<i>Cx. (Mel.) spispipes section</i>	0	1	0	0	1	0	0	0	0	0	1
<i>Cx. (Mel) sp.</i>	2	1	7	27	37	0	0	0	1	1	38
<i>Haemagogus</i> sp.	1	0	0	0	1	0	0	0	0	0	1
<i>Limatus durhamii</i>	1	1	1	4	7	0	1	0	3	4	11
<i>Li. asolleptus</i>	0	0	0	2	2	0	0	0	0	0	2
<i>Mansonia</i> sp.	1	0	0	4	5	0	0	0	0	0	5
<i>Ma. dyari</i>	1	0	2	3	6	1	2	0	0	3	9
<i>Ma. titillans</i>	2	1	3	10	16	1	0	25	10	36	52
<i>Psorophora. ciciliata</i>	0	0	0	0	0	0	0	0	1	1	1
<i>Ps. ferox</i>	2	2	1	2	7	0	0	0	0	0	7
<i>Ps. lineata</i>	0	0	0	0	0	1	0	0	0	1	1
<i>Shannonia fluvitalis</i>	0	0	0	1	1	0	0	0	0	0	1
<i>Wyeomyia</i> sp.	2	0	5	6	13	3	1	0	3	7	20
<i>Wy. complosa</i>	0	0	0	1	1	0	0	0	0	0	1
Total	160	106	52	198	516	114	40	47	42	243	759

Table S3. Mosquito larvae captured with manual collection.

Breeding Site	County	Capture Species
Araceae	Talamanca	<i>Johnbelkinia leucopus</i>
Rice fields	Cuajiniquil	<i>Anopheles albimanus</i> <i>Culex coronator</i> <i>Culex theobaldi</i>
Bamboo	Talamanca	<i>Haemagogus lucifer</i>
Cattle waterer	Cuajiniquil	<i>Culex quinquefasciatus</i> <i>Culex coronator</i>
Bromelid	Cuajiniquil	<i>Wyeomyia abebela</i>
	Talamanca	<i>Culex pleuristriatus</i> <i>Culex rejector</i> <i>Toxorhynchites superbus</i>
Puddle	Talamanca	<i>Culex coronator</i> <i>Culex nigripalpus</i> <i>Culex lactator</i>
Coconut shells	Talamanca	<i>Limatus durhamii</i>
Dumped plastic containers	Cuajiniquil	<i>Aedes aegypti</i> <i>Aedes septemstriatus</i> <i>Culex quinquefasciatus</i> <i>Culex mollis</i> <i>Culex corniger</i>
	Talamanca	<i>Culex coronator</i> <i>Limatus durhamii</i>
Pond	Talamanca	<i>Culex chidesteri</i> <i>Mansonia dyari</i>
Tire	Cuajiniquil	<i>Culex coronator</i>
	Talamanca	<i>Aedes aegypti</i> <i>Culex coronator</i> <i>Limatus durhamii</i>
Tree Hole	Talamanca	<i>Culex coronator</i> <i>Haemagogus iridicolor</i>
Crab Hole	Cuajiniquil	<i>Deinocerites pseudes</i>
Swamp	Talamanca	<i>Culex aquarius</i> <i>Culex conservator</i> <i>Uranotaenia coatzacoalcos</i>
Seasonal pond	Cuajiniquil	<i>Culex mutator</i> <i>Culex (Melanoconion) sp.</i> <i>Culex conspirator</i> <i>Uranotaenia lowii</i> <i>Uranotaenia coatzacoalcos</i>

Table S4. Regional Chao- Sørensen Index. Similarity index was calculated using the EVS traps data. CU= Cuajiniquil, TA= Talamanca, R= Rainy season, D= Dry season.

Site 1	Site 2	Chao-Sorensen-Similarity Index
CU_R	CU_D	0,694
CU_R	TA_R	0,536
CU_R	TA_D	0,653
CU_D	TA_D	0,212
CU_D	TA_D	0,795
TA_R	TA_D	0,876

Table S5. Chao- Sørensen Similarity Index. Similarity on species composition of each sampling area per season per county. CU: Cuajiniquil, TA: Talamanca, R: Rainy, D: Dry, 1: Domiciliary, 2: Peridomiciliary, 3:Animal Pen, 4:Forest.

	CU_ D_1	CU_ D_2	CU_ D_3	CU_ D_4	CU_ R_1	CU_ R_2	CU_ R_3	CU_ R_4	TA_ D_1	TA_ D_2	TA_ D_3	TA_ D_4	TA_ R_1	TA_ R_2	TA_ R_3	TA_ R_4
CU_ D_1	1	0.426	0.406	0.848	0.302	0.352	0.264	0.394	0.017	0.043	0	0.323	0.094	0.094	0.243	0.366
CU_ D_2	0.426	1	0.854	0.867	0.352	0.436	0.311	0.638	0.153	0.152	0.137	0.18	0.146	0.152	0.08	0.073
CU_ D_3	0.406	0.854	1	0.868	0.264	0.445	0.304	0.627	0.258	0.179	0.159	0.218	0.3	0.179	0.087	0.079
CU_ D_4	0.848	0.867	0.868	1	0.394	0.592	0.49	0.866	0.092	0.092	0.06	0.476	0.193	0.12	0.158	0.17
CU_ R_1	0.302	0.542	0.542	0.524	1	0.696	0.858	0.754	0.12	0.119	0.11	0.159	0.116	0.119	0.07	0.079
CU_ R_2	0.352	0.436	0.445	0.592	0.696	1	0.818	0.856	0.474	0.452	0.374	0.554	0.556	0.584	0.352	0.577
CU_ R_3	0.264	0.311	0.304	0.49	0.858	0.818	1	0.956	0.196	0.195	0.132	0.373	0.273	0.22	0.228	0.277
CU_ R_4	0.394	0.638	0.627	0.866	0.754	0.856	0.956	1	0.682	0.661	0.414	0.48	0.68	0.781	0.529	0.699
TA_ D_1	0.017	0.153	0.258	0.092	0.12	0.474	0.196	0.682	1	0.97	0.953	0.866	0.784	0.907	0.488	0.491
TA_ D_2	0.043	0.152	0.179	0.092	0.119	0.452	0.195	0.661	0.97	1	0.581	0.697	0.788	0.901	0.445	0.459
TA_ D_3	0	0.137	0.159	0.06	0.11	0.374	0.132	0.414	0.953	0.581	1	0.662	0.764	0.929	0.235	0.271
TA_ D_4	0.323	0.18	0.218	0.476	0.159	0.554	0.373	0.48	0.866	0.697	0.662	1	0.774	0.843	0.644	0.846
TA_ R_1	0.094	0.146	0.3	0.092	0.116	0.556	0.273	0.68	0.784	0.788	0.764	0.774	1	0.961	0.909	0.962
TA_ R_2	0.094	0.152	0.179	0.092	0.119	0.584	0.22	0.781	0.907	0.901	0.929	0.843	0.961	1	0.731	0.855
TA_ R_3	0.243	0.08	0.087	0.06	0.07	0.352	0.228	0.529	0.488	0.445	0.235	0.644	0.909	0.731	1	0.872
TA_ R_4	0.366	0.073	0.079	0.476	0.079	0.577	0.277	0.699	0.491	0.459	0.271	0.846	0.962	0.855	0.872	1

Table S6. Chao- Sørensen Index and NDVI . Correlation between Chao- Sørensen Index and NDVI absolute difference between seasons. R= -0.768. CU= Cuajiniquil, TA= Talamanca, R= Rainy, D=Dry.

First Sample	Second Sample	Chao-Sorensen-Index	Absolute difference NDVI
CU_R	CU_D	0,694	0,096
CU_R	TA_R	0,536	0,061
CU_R	TA_D	0,653	0,054
CU_D	TA_R	0,212	0,157
CU_D	TA_D	0,795	0,096
TA_R	TA_D	0,876	0,007

Table S7. Chao- Sørensen Index and NDWI . Correlation between Chao- Sørensen Index and NDVI absolute difference between seasons. R= -0,619. CU= Cuajiniquil, TA= Talamanca, R= Rainy, D=Dry.

First Sample	Second Sample	Chao-Sorensen-Index	Absolute difference NDWI
CU_LL	CU_SE	0,694	0,077
CU_LL	TA_LL	0,536	0,016
CU_LL	TA_SE	0,653	0,043
CU_SE	TA_LL	0,212	0,093
Cu_SE	TA_SE	0,795	0,027
TA_LL	TA_SE	0,876	0,027

Table S8. Mosquito larvae captured with ovitraps. PE: Peridomiciliary, PN: Animal Pen, FO: Forest.

Mosquito Species	Cuajiniquil						Talamanca						Total
	Rainy			Dry			Rainy			Dry			
	PE	PN	FO	PE	PN	FO	PE	PB	FO	PE	PN	FO	
<i>Aedes aegypti</i>	0	1	0	0	10	0	2	0	2	0	0	0	15
<i>Aedes albopictus</i>	0	1	0	0	0	0	0	0	0	0	0	0	1
<i>Aedes septemstriatus</i>	0	0	5	0	0	0	0	0	0	0	0	0	5
<i>Aedes epactius</i>	0	2	0	0	0	0	0	0	0	0	0	0	2
<i>Culex (Mel.) psatharus</i>	0	0	0	0	0	0	0	0	0	0	0	3	3
<i>Limatus durhamii</i>	1	4	6	0	0	0	39	2	17	1	23	0	93
<i>Limatus asolleptus</i>	0	0	0	0	0	0	5	5	20	0	0	0	30
<i>Toxorhynchites hypoptes</i>	0	0	0	0	0	0	0	0	0	0	0	1	1
<i>Toxorhynchites moctezuma</i>	0	1	0	0	0	0	0	0	1	0	0	0	2
<i>Wyeomyia aporomona</i>	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	1	9	11	0	10	0	46	7	40	1	23	5	153

Table S9. Mosquitoes captured with GT traps. PE: Peridomiciliary, PN: Animal Pen, FO: Forest.

Mosquito species	Cuajiniquil						Talamanca						Total
	Rainy			Dry			Rainy			Dry			
	PE	PN	FO	PE	PN	FO	PE	PN	FO	PE	PN	FO	
<i>Anopheles apicimacula</i>	0	0	0	0	0	0	0	1	0	0	0	0	1
<i>Anopheles pseudopunctipennis</i>	0	0	0	0	0	1	0	0	0	0	0	0	1
<i>Aedes aegypti</i>	0	0	0	0	1	0	0	0	0	0	1	0	2
<i>Culex</i> sp.	1	0	0	1	1	2	5	0	0	1	0	0	11
<i>Culex corniger</i>	0	0	0	0	0	0	18	55	4	7	7	1	92
<i>Culex coronator</i>	0	0	0	0	0	0	1	0	2	0	0	0	3
<i>Culex nigripalpus</i>	2	1	0	4	0	5	0	2	2	1	0	0	17
<i>Culex quinquefasciatus</i>	0	0	0	18	13	11	33	20	1	19	11	0	126
<i>Culex pseudostigmatosoma</i>	0	0	0	0	0	0	0	0	2	0	0	0	2
<i>Culex restrictor</i>	0	0	0	0	1	0	0	0	0	0	0	0	1
<i>Culex restuans</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Deinocerites pseudes</i>	0	0	0	0	3	2	0	0	0	0	0	0	5
<i>Haemagogus iridicolor</i>	0	0	0	0	1	0	0	0	0	0	0	0	1
<i>Limatus durhamii</i>	0	0	0	0	0	0	0	1	1	0	0	0	2
<i>Psorophora confinnis</i>	0	0	1	0	0	0	0	0	0	0	0	0	1
<i>Uranotaenia lowii</i>	0	0	2	0	0	0	0	1	4	0	2	0	9
Total	3	1	3	23	20	21	57	80	16	28	21	1	274