

Table S1. Abbott-corrected sentinel adult *Ae. aegypti* mosquito percent mortality at 1, 4, and 12 hr post-spray following the 29-30 October aerial applications over the MOUT South site. Doors and windows were propped open at all structures unless indicated; Wax Candle and Bread Market structures had no doors or window shutters present and were left open. Percent mortality at 1 hr marked in bold with dagger indicates ants present at time of sentinel cage pickup.

MOUT South location	Type	Position	29 October			30 October		
			1 hr	4 hr	12 hr	1 hr	4 hr	12 hr
Wax Candle	outdoors	inside box	5.0	4.5	8.6	0	35.2	51.2
		on pole	40.0	100	100	100	100	100
	indoors	inside box	0	0	13.7	0	2.6	7.3
		on floor	0	24.6	39.1	0†	100	100
Bread Market	outdoors	inside box	5.0	4.5	8.6	0	100	100
		on pole	100	100	100	100	100	100
	indoors	inside box	0	0	0	0	79.5	79.4
		on floor	5.0†	79.9	84.8	68.0†	100	100
Bazaar (closed up)	outdoors	inside box	0	74.9	89.8	0	2.6	2.1
		on pole	0	100	100	0	100	100
	indoors	inside box	0	24.6	69.5	0	0	0
		on floor	0	34.7	69.5	0	74.4	74.2
Meat Market	outdoors	inside box	0	0	3.5	0	2.6	7.3
		on pole	0	100	100	0.0	100	100
	indoors	inside box	0	0	0	0	0	2.1
		on floor	0	39.7	64.5	0	100	100
Bridge	surface	inside box	95.0†	95.0	94.9	0	69.2	79.4
		on pole	100	100	100	100	100	100
	underneath	inside box	0	89.9	94.9	0	2.8	2.4
		on pole	100	100	100	100	100	100
Holiday Hotel	outdoors	inside box	10.0	59.8	64.5	0	54.4	77.1
		on pole	100	100	100	100	100	100
	indoors (1 st floor)	inside box	0.0	4.5	3.5	0	48.7	74.2
		on floor	0.0	0	3.5	0	100	100
	indoors (2 nd floor)	inside box	5.0	4.5	3.5	0	89.7	89.7
		on floor	5.3	4.8	9.1	4.1	83.8	89.2
American Hotel (closed up)	outdoors	inside box	5.0	49.7	74.6	0	100	100
		on pole	90.0	100	100	100	100	100
	indoors (1 st floor)	inside box	0	4.5	3.5	0	12.8	27.9
		on floor	0	0	0	0	0	7.3
indoors (2 nd floor)	inside box	0	0	0	0	0	63.9	
	on floor	0	27.4	60.5	0	7.7	17.6	
Fruit Market (closed up)	outdoors	inside box	0	0	0	0	100	100
		on pole	90.0	100	100	100	100	100
	indoors	inside box	0.0	0	23.8	0	94.3	94.3
		on floor	0.0	0	3.5	0	94.9	100.0
Jose Cantina	outdoors	inside box	0.0	4.5	8.6	0	100	100
		on pole	90.0	100	100	100	100	100
	indoors	inside box	0.0	4.5	3.5	0	0	22.7
		on floor	0.0	0	3.5	0	43.0	59.9

Table S2. Abbott-corrected sentinel adult *Ae. aegypti* mosquito percent mortality at 1, 4, and 12 hr post-spray following the 29-30 October aerial applications over the Village site. All structures were unmodified with windows and doors completely open. Percent mortality at 1 hr marked in bold with dagger indicates ants present at time of sentinel cage pickup.

Village Location	Type	Position	29 October			30 October		
			1 hr	4 hr	12 hr	1 hr	4 hr	12 hr
Roundabout	outdoors	inside box	15.0	100	100	13.9	74.4	74.2
		on pole	100	100	100	100	100	100
Main Structure	outdoors (courtyard)	inside box	0.0†	19.6	69.5	0	24.4	34.9
		on pole	60.0†	100	100	87.3†	100	100
	indoors (1 st floor)	inside box	0†	0	0	3.8	2.6	2.1
		on floor	0†	29.6	54.3	0	65.8	65.7
indoors (2 nd floor)	inside box	0	0	0	0	2.6	2.1	
	on floor	10.0	74.9	94.9	8.9	100	100	
Building #1 residence	outdoors	inside box	95.0†	95.0	94.9	0	0	0
		on pole	75.0	100	100	89.3	100	100
	indoors	inside box	0	0	0	0	0	0
		on floor	0	68.3	78.6	0	89.7	94.8
Building #2 residence	outdoors	inside box	50.0†	49.7	59.4	0	0	0
		on pole	95.0	100	100	60.6	88.6	100
	indoors	inside box	0	100	100	0	2.6	7.3
		on floor	0	84.9	100	9.4	100	100
Building #3 residence	outdoors	inside box	0†	0	0	0	0	0
		on pole	100	100	100	94.7	100	100
	indoors	inside box	0	0	8.6	0	0	0
		on pole	0	29.6	39.1	0	78.4	83.7
Building #4 residence	outdoors	inside box	0	0	13.7	0	0	0
		on pole	0	100	100	94.4	100	100
	indoors	inside box	0	0	8.6	0	0	2.1
		on floor	25.0	89.9	94.9	8.9	84.6	94.8
Building #5 residence	outdoors	inside box	10.0†	29.6	44.1	84.0†	94.6	94.6
		on pole	0	100	100	100†	100	100
	indoors	inside box	0	0	0	0	7.7	27.9
		on floor	20.0	95.0	79.7	71.9	94.3	100
Building #6 outdoor market	outdoors	inside box	95.0†	84.9	84.8	0	0	2.1
		on pole	68.4	100	100	100	100	100
	indoors	inside box	0	0	0	0	0	12.4
		on floor	0	69.8	69.5	94.7†	100	100
Building #7 outdoor market	outdoors	inside box	0†	100	100	0	12.8	17.6
		on pole	5.0	100	100	100†	100	100
	indoors	inside box	0	0	13.7	0	13.6	29.5
		on floor	0	29.6	44.1	89.9†	100	100
Building #8 residence with courtyard	outdoors	inside box	0	14.6	59.4	0†	0	0
		on pole	80.0	100	100	79.7†	100	100
	indoors	inside box	0	54.8	84.8	0	0	2.4
		on floor	0†	54.8	74.6	68.0	100	100

Table S3. Abbott-corrected sentinel adult *Ae. aegypti* mosquito percent mortality at 1, 4, and 12 hr post-spray following the 29-30 October aerial applications over the Transect sites. All Transect sentinels were placed outdoors in the open at the top of 48-in high poles.

Road Transect Location	Nearest Area	Description	Spinner Present?	29 October			30 October		
				1 hr	4 hr	12 hr	1 hr	4 hr	12 hr
R 20	MOUT South	1250 ft NE of MOUT	-	30.0	95.0	94.9	59.5	100	100
R 19	MOUT South	1000 ft NE of MOUT	-	63.2	89.4	100	94.9	100	100
R 18	MOUT South	750 ft NE of MOUT	Yes	90.0	100	100	89.9	100	100
R 17	MOUT South	500 ft NE of MOUT	Yes	0.0	100	100	100	100	100
R 16	MOUT South	250 ft NE of MOUT	Yes	70.0	100	100	100	100	100
R 15	MOUT South	250 ft SW of MOUT	Yes	100	100	100	100	100	100
R 14	MOUT South	500 ft SW of MOUT	-	26.3	100	100	100	100	100
R 13	MOUT South	750 ft SW of MOUT	-	35.0	100	100	100	100	100
R 12	MOUT South	1000 ft SW of MOUT	-	0.0	100	100	94.9	100	100
R 11	MOUT South	1250 ft SW of MOUT	-	0.0	100	100	100	100	100
R 40	Village	1250 ft N of Village	-	5.0	24.6	59.4	77.5	100	100
R 39	Village	1000 ft N of Village	-	10.0	89.9	100	62.7	100	100
R 38	Village	750 ft N of Village	-	25.0	84.9	94.9	84.8	100	100
R 37	Village	500 ft N of Village	-	45.0	100	100	69.6	100	100
R 36	Village	250 ft N of Village	-	100	100	100	84.8	100	100
R 35	Village	250 ft SW of Village	Yes	40.0	100	100	100	100	100
R 34	Village	500 ft SW of Village	Yes	100	100	100	100	100	100
R 33	Village	750 ft SW of Village	Yes	100	100	100	100	100	100
R 32	Village	1000 ft SW of Village	-	65.0	95.0	94.9	66.2	100	100
R 31	Village	1250 ft SW of Village	-	95.0	100	100	100	100	100

Table S4. Droplet analysis data from the 29-30 October aerial applications over the MOUT South, Village, and Control sites. The droplet spectrum for each location is partitioned into DV_{10} , DV_{50} (VMD), and DV_{90} . The symbol ρ denotes droplet density in droplets per mm^2 .

Site	Location	Type	29 October				30 October			
			ρ	DV_{10}	DV_{50}	DV_{90}	ρ	DV_{10}	DV_{50}	DV_{90}
MOUT South	Wax Candle	outdoors	47.8	3.7	5.3	7.8	64.9	4.1	5.9	9.8
		indoors	23.3	3.9	5.5	8.1	52.6	4.3	6.2	10.3
	Bread Market	outdoors	48.9	3.8	5.7	9.5	53.4	4.7	6.8	11.8
		indoors	18.8	4.2	5.8	10.0	35.3	4.7	6.6	12.0
	Bazaar	outdoors	32.9	4.5	5.9	9.0	51.1	4.5	6.9	11.9
		indoors	17.7	4.1	5.7	8.0	19.7	4.2	6.1	9.1
	Meat Market	outdoors	24.5	4.4	6.1	9.6	70.9	4.5	6.5	11.6
		indoors	15.2	4.5	6.3	8.7	40.7	4.9	6.4	9.9
	Holiday Hotel	outdoors	30.9	4.0	5.9	9.2	18.8	5.0	7.1	11.6
		indoors (1 st floor)	17.8	4.5	6.2	8.9	42.8	4.8	6.6	9.8
		indoors (2 nd floor)	19.1	4.2	5.9	8.4	31.4	4.3	6.3	9.6
		outdoors (roof A)	33.6	4.0	5.9	9.0	81.9	4.2	6.4	11.7
	American Hotel	outdoors (roof B)	18.8	4.4	6.4	14.2	65.8	4.0	5.9	10.6
		outdoors	20.3	4.7	6.6	9.5	64.2	4.3	6.5	11.2
indoors (1 st floor)		11.3	4.2	5.7	8.0	23.7	3.7	5.1	7.8	
Fruit Market	indoors (2 nd floor)	11.2	4.6	6.2	9.0	15.5	3.8	5.5	7.9	
	outdoors	33.1	3.8	5.3	8.4	56.7	4.5	6.7	11.3	
Jose Cantina	indoors	12.5	3.5	5.9	8.6	19.3	4.0	5.8	8.9	
	outdoors	22.7	3.8	5.6	10.0	37.4	4.6	6.6	11.4	
	indoors	15.0	4.2	6.0	9.5	32.7	4.1	5.9	9.1	
	Traffic Circle	outdoors	23.2	4.1	6.5	9.5	51.7	4.4	6.7	11.8
Main Structure	indoors (1 st floor)	10.9	4.6	6.5	9.6	46.0	3.9	5.8	9.9	
	indoors (2 nd floor)	11.2	4.4	5.9	9.3	26.7	4.6	6.8	10.3	
	outdoors (roof)	24.8	4.0	5.5	7.9	44.0	4.3	6.4	10.9	
Building #2	outdoors	16.0	4.1	5.7	10.1	34.2	4.5	6.9	11.8	
	indoors	8.3	4.0	5.6	9.6	24.0	4.1	6.1	9.9	
Building #3	outdoors	19.0	4.0	5.6	9.3	34.9	4.3	6.5	11.0	
	indoors	12.0	4.4	5.9	8.3	21.6	4.4	6.7	10.8	
Building #4	outdoors	23.4	4.0	5.7	9.2	35.9	3.9	6.0	10.0	
	indoors	10.6	4.0	5.8	9.2	33.3	4.2	6.4	11.5	
Building #5	outdoors	7.7	4.7	6.5	11.6	40.8	4.4	6.7	11.8	
	indoors	11.7	3.9	5.6	8.4	23.9	4.1	6.2	9.6	
Building #6	outdoors	12.6	4.3	5.9	9.2	47.2	4.1	6.3	11.6	
	indoors	3.4	4.6	6.5	9.7	31.4	4.3	6.6	11.6	
Building #7	outdoors	15.4	3.8	5.4	8.1	5.9	4.4	7.4	12.8	
	indoors	15.3	3.8	5.3	7.8	13.1	5.1	8.4	15.4	
Building #8	outdoors	10.0	4.2	6.0	11.9	38.0	4.3	6.3	9.9	
	indoors	12.1	4.1	5.8	8.2	22.6	4.3	6.7	11.5	
Control	Spinner 1	outdoors	19.1	4.3	6.0	14.1	33.2	4.3	6.4	9.8
	Spinner 2	outdoors	19.3	4.2	5.7	7.5	24.5	4.2	6.3	10.5

Table S5. Droplet analysis data from the 29-30 October aerial applications over the Transect and Control sites (all outdoors). The droplet spectrum for each location is partitioned into DV₁₀, DV₅₀ (VMD), and DV₉₀. The symbol ρ denotes droplet density in droplets per mm².

Site	Location	Description	29 October				30 October			
			ρ	DV ₁₀	DV ₅₀	DV ₉₀	ρ	DV ₁₀	DV ₅₀	DV ₉₀
Road transects adjacent to MOUT South	R18	750 ft E of MOUT	20.4	3.9	5.8	8.8	29.3	4.5	6.6	11.5
	R17	500 ft E of MOUT	12.1	4.0	6.1	8.7	45.6	4.0	6.1	10.0
	R16	250 ft E of MOUT	16.9	3.8	5.2	7.1	25.8	4.4	6.6	11.0
	R16A	0 ft E of MOUT	21.5	4.0	5.4	8.8	34.0	3.8	6.2	11.3
	R15A	0 ft W of MOUT	10.4	4.4	6.4	10.6	28.9	4.0	6.3	11.6
	R15	250 ft W of MOUT	18.6	4.0	5.7	8.4	30.2	4.1	6.3	11.5
Road transects adjacent to Village	R35A	0 ft W of Village	21.0	4.0	5.8	8.7	36.0	4.0	6.4	11.2
	R35	250 ft W of Village	15.1	3.8	5.6	8.7	36.6	4.2	6.4	11.8
	R34	500 ft W of Village	16.4	4.3	6.1	9.9	35.6	4.5	6.9	12.9
	R33	750 ft W of Village	14.9	3.7	5.7	8.3	42.5	4.2	6.5	11.4
Control	Spinner 1	-	19.1	4.3	6.0	14.1	33.2	4.3	6.4	9.8
	Spinner 2	-	19.3	4.2	5.7	7.5	24.5	4.2	6.3	10.5